A STRATEGY TO MANAGE CHANNEL CONFLICT IN A DIRECT SALES ORGANIZATION EXPANDING DISTRIBUTION IN A MATURE INDUSTRY

by

Vincenzo G. Saponaro
M.Eng., University of British Columbia, 2001

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

Master of Business Administration
EMBA Program

in the Faculty of Business Administration

©Vincenzo G. Saponaro
SIMON FRASER UNIVERSITY
August 2004

All rights reserved. This work may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.
APPROVAL

Name: Vincenzo G. Saponaro
Degree: Master of Business Administration
Title of Project: A Strategy to Manage Channel Conflict in a Direct Sales Organization Expanding Distribution in a Mature Industry

Supervisory Committee:

Dr. Ed Bukszard Jr.
Senior Supervisor
Faculty of Business Administration

Dr. Jill Shepherd
Assistant Professor
Faculty of Business Administration

Date Approved: August 10, 2004
Partial Copyright License

I hereby grant to Simon Fraser University the right to lend my thesis, project or extended essay (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this work for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this work for financial gain shall not be allowed without my written permission.

Title of Thesis/Project/Extended Essay
A Strategy to Manage Channel Conflict in a Direct Sales Organization
Expanding Distribution in a Mature Industry

Author: Enzo Saporito

Date August 6, 2004
ABSTRACT

The power tool and fastener industry is highly fragmented and competitive, which is exacerbated by diminishing customer loyalty and the existence of multiple channels providing access to a multitude of products. A vertically integrated high quality tool manufacturer is considering expanding its distributor channels to access new markets. Its goal is to pursue opportunities with non-traditional customers and a distinct product offering, which is somewhat different from the core business. The challenge in such an undertaking lies in maintaining balance while protecting the established business of core products. Two pronged channel strategies can become emotionally charged and destructive to direct sales when contending with account ownership, territory redundancy and remuneration. The proposed channel expansion requires a thorough industry analysis. The firm must evaluate the strategic fit of adding distributors as a method of securing alternative business, and assess whether such actions are complementary or destructive to its over-all strategy and core competencies. Strategies to expand distribution channels appear to be an inviting and lucrative means of efficiently expanding into new markets.
DEDICATION

To my wife Jackie, your support and patience throughout the EMBA program was inspirational. Thank you for helping me achieve this accomplishment.
ACKNOWLEDGMENTS

The faculty and administrators of the Simon Fraser University Executive Masters of Business Administration Program deserve acknowledgement and congratulations. The comprehensive curriculum and depth of instruction created an illuminating and challenging learning environment laying a platform to launch a successful business career. The content was pragmatic and insightful also reflecting on the experiences and management styles of the instructors and classmates. This document utilized many new skills and ideas cultivated from the EMBA Program. Special thanks to Dr. Ed Bukszar Jr., for his dedication and commitment to seeing this project through.
# TABLE OF CONTENTS

Approval ......................................................................................................................... ii  
Abstract ........................................................................................................................ iii  
Dedication ......................................................................................................................... iv  
Acknowledgments ............................................................................................................ v  
Table of Contents ........................................................................................................... vi  
List of Tables .................................................................................................................. viii  
List of Figures ................................................................................................................ viii  
List of Abbreviations ..................................................................................................... ix  

1 Overview of the Firm ................................................................................................... 1  
1.1 Description of the Firm ........................................................................................... 1  
1.2 Focus of the Paper .................................................................................................. 2  
1.3 Description of the Products .................................................................................... 2  
1.4 Target Market ......................................................................................................... 4  
1.4.1 Buyer Behaviour ............................................................................................... 4  
1.5 Degree of Homogeneity ......................................................................................... 5  
1.6 Market Position ....................................................................................................... 5  
1.6.1 Revenue Streams .............................................................................................. 6  
1.6.2 Market Share .................................................................................................... 7  

2 Industry Analysis ....................................................................................................... 10  
2.1 Industry Size and Participants .............................................................................. 10  
2.1.1 Size .................................................................................................................... 10  
2.1.2 Participants ....................................................................................................... 13  
2.2 Five Factor Competitive Analysis ....................................................................... 15  
2.2.1 Industry Analysis .............................................................................................. 15  
2.2.2 Rivalry Among Existing Competitors ................................................................ 15  
2.2.3 Threat of Competitor Entry ............................................................................. 19  
2.2.4 Threat of Substitutes ....................................................................................... 21  
2.2.5 Bargaining Power of Customers ..................................................................... 23  
2.2.6 Bargaining Power of Suppliers ....................................................................... 26  
2.3 Opportunity and Attractiveness ............................................................................ 27  
2.3.1 Opportunities .................................................................................................... 27  
2.3.2 Cautionary Issues ............................................................................................ 28  
2.4 Key Success Factors .............................................................................................. 29  
2.4.1 Success Factor 1: Differentiated Product ......................................................... 29  
2.4.2 Success Factor 2: Account Base Growth ........................................................ 29  
2.4.3 Success Factor 3: Competitive Cost Structure ................................................. 29  

3 Internal Analysis ...................................................................................................... 30  
3.1 Strategies of the Firm ............................................................................................ 30  
3.1.1 Corporate Strategy .......................................................................................... 30  
3.1.2 People Strategy ................................................................................................ 30  
3.1.3 Differentiation Strategy .................................................................................... 30  
3.1.4 Culture ............................................................................................................ 38  
3.2 Financial Analysis .................................................................................................. 41  
3.3 Value Chain Analysis ............................................................................................ 46  
3.3.1 Industry Value Chain ....................................................................................... 46  

vi
LIST OF TABLES

Table 1:  Canadian Construction Activity ................................................................. 12
Table 2:  2003 Consolidated Balance Sheet ............................................................. 37
Table 3:  Financial Ratios ......................................................................................... 42
Table 4:  Channel Pricing ......................................................................................... 77
Table 5:  Estimated Cost of Sales ............................................................................ 85
Table 6:  Benefits of Selective Distribution and Versioning .................................. 91
Table 7:  Example of A/D Selective Distribution ..................................................... 93
Table 8:  Account Manager Compensation Equilibrium ......................................... 95
Table 9:  Strategic Fit Comparison .......................................................................... 101
Table 10: Pricing Template .................................................................................... 103

LIST OF FIGURES

Figure 1:  Hilti Organizational Structure ................................................................. 2
Figure 2:  Revenue Streams ..................................................................................... 6
Figure 3:  Profitability ............................................................................................. 8
Figure 4:  Market Share - Canada .......................................................................... 9
Figure 5:  Participant Map ....................................................................................... 14
Figure 6:  Five Factor Analysis of Competitive Forces .......................................... 16
Figure 7:  Customer Relationships and Strategies ............................................... 24
Figure 8:  Strategic Fit Profile ............................................................................... 31
Figure 9:  Investment into Research and Development ......................................... 38
Figure 10: Hilti Canada Employee Allocation ....................................................... 40
Figure 11: Sales and Expenses ............................................................................. 43
Figure 12: Liquidity ............................................................................................... 44
Figure 13: Performance ......................................................................................... 44
Figure 14: Returns ................................................................................................. 45
Figure 15: Industry Value Chain ......................................................................... 47
Figure 16: Firm Value Chain ............................................................................... 52
Figure 17: Sales Channels ...................................................................................... 63
Figure 18: Channel Patterns .................................................................................. 63
Figure 19: Channel Distribution .......................................................................... 64
Figure 20: Customer Distribution ......................................................................... 65
Figure 21: AGI Location Map ................................................................................ 72
Figure 22: Sales Processes ..................................................................................... 85
Figure 23: Commission Schedule ......................................................................... 87
Figure 24: Benefits of a Stocking A/D ................................................................... 94
Figure 25: Revised Sales Process with Selective Distribution ......................... 105
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/D</td>
<td>Authorized Distributor</td>
</tr>
<tr>
<td>AGI</td>
<td>Acklands Grainger Incorporated</td>
</tr>
<tr>
<td>AM</td>
<td>Account Manager</td>
</tr>
<tr>
<td>AP3</td>
<td>Auto Pricing 3</td>
</tr>
<tr>
<td>BM</td>
<td>Branch Manager</td>
</tr>
<tr>
<td>BOM</td>
<td>Bill of Materials</td>
</tr>
<tr>
<td>BU</td>
<td>Business Unit</td>
</tr>
<tr>
<td>CAD</td>
<td>Computer Aided Design</td>
</tr>
<tr>
<td>CHF</td>
<td>Swiss francs</td>
</tr>
<tr>
<td>COGS</td>
<td>Cost of goods sold</td>
</tr>
<tr>
<td>CPR</td>
<td>Coverage/Penetration/Retention</td>
</tr>
<tr>
<td>CRM</td>
<td>Customer Relationship Management</td>
</tr>
<tr>
<td>CSR</td>
<td>Customer Service Representative</td>
</tr>
<tr>
<td>EAP</td>
<td>Employee Assistance Program</td>
</tr>
<tr>
<td>ERP</td>
<td>Enterprise Resource Program</td>
</tr>
<tr>
<td>GPD/H2</td>
<td>Global Process Data/Hilti 2</td>
</tr>
<tr>
<td>HC</td>
<td>Hilti Centre</td>
</tr>
<tr>
<td>HD</td>
<td>Home Depot</td>
</tr>
<tr>
<td>HCS remote</td>
<td>Hilti Customer Service remote</td>
</tr>
<tr>
<td>ISC</td>
<td>Integrated Supply Channel</td>
</tr>
<tr>
<td>IS</td>
<td>Integrated Supplier</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>JIT</td>
<td>Just in Time Inventory</td>
</tr>
<tr>
<td>MES</td>
<td>Minimum Efficient Scale</td>
</tr>
<tr>
<td>MM</td>
<td>Million</td>
</tr>
<tr>
<td>MO</td>
<td>Marketing Organizations</td>
</tr>
<tr>
<td>PMP</td>
<td>Performance Management Process</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>SAP</td>
<td>The world's largest inter-enterprise software company</td>
</tr>
<tr>
<td>SCP</td>
<td>Standard Contractor Pricing</td>
</tr>
<tr>
<td>STS</td>
<td>Strategic Telemarketing Specialist</td>
</tr>
</tbody>
</table>
1 OVERVIEW OF THE FIRM

1.1 Description of the Firm

Hilti is a world leader in developing innovative products and technologies, manufactured to high quality and marketed for professional customers in the building maintenance and construction industries. Founded in 1941 by Martin Hilti, the Hilti Group evolved from a small family business to become one of the largest privately owned companies in the world. With marketing organizations operating in almost every country, Hilti established corporate headquarters in Schaan, the Principality of Liechtenstein, and generates approximately 3 Billion Dollars (Swiss francs)\(^1\) annually from specialized products and services. Hilti employs over 14,000 people. The company is vertically integrated with numerous manufacturing plants, warehouses, retail stores and head offices throughout the world.

Hilti's organizational structure resembles an inverted triangle. As illustrated in Figure 1, the customer is the primary focus of the Marketing Organizations, Business Units (BUs), Corporate Functions, Executive Board, Board of Directors and Martin Hilti Family Trust. Each Marketing Organization usually represents a country, and is further segregated into multiple BUs. Parallel to corporate functions, these units are structured to manage the respective business affairs and operations of the organization.

Since inception, the accelerated growth of the firm has been attributed to the innovation, application expertise and services delivered to the professional contractor through direct sales and marketing. Throughout its history, Hilti has been able to mitigate recessionary periods and capitalize on growth opportunities during robust construction cycles. This has been achieved through leveraging customer relationships and delivering quality products intended for high productivity and labour savings.

---

\(^1\) Financial Report, 2003. Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein.
1.2 Focus of the Paper

This document concentrates on analyzing the mature and highly competitive power tool and fastener industry in Canada, and develops a strategy to manage channel conflict. Hilti is considering expanding distribution channels to intensify distribution and efficiently access new markets. As the firm evolves to understand the impact of sustaining a direct sales force while managing a distributor network, channel conflicts are becoming more frequent and difficult to resolve. Distribution channels are considered a departure from the ideals of direct sales and marketing organization. The intention is to utilize distributors to reach smaller customers and new markets that are otherwise expensive or difficult to service, while protecting product positioning, branding, profits and minimizing internal competition. The concept of selective distribution and versioning will be applied to the issues to assess the effectiveness of structuring distributors to specific markets and target customers while concurrently sustaining a direct sales force to service the core business and customers.

1.3 Description of the Products

Hilti’s original products were direct fastening tools and consumables. Direct fastening was conceived shortly after the Second World War; it was invented during the construction boom
to rebuild Europe. The technology utilized a power booster charged with gunpowder to drive a hardened nail into steel and concrete. Sometimes referred to as guns, early models were very simple, requiring the user to load the power booster into a combustion chamber and a hardened nail into the fastener barrel. Once the tool was positioned, the user would pull the trigger, engaging a striker pin to activate the booster. The internal explosion generates enough energy to drive the nail into steel or concrete substrates. This technology rapidly penetrated the market, offering high labour savings and productivity in the construction of homes, commercial, and industrial buildings.

Soon after, concrete drilling and anchoring Business Units (BUs) were created. Drilling was revolutionary, automating the process of making holes in concrete. The concrete hammer drill replaced a hammer and chisel by combining them into a mechanical device. These tools delivered the impact force to chip away concrete and, with a rotation, to clear debris from the hole. Once the hole was completed, beams and other structural members were attached to substrates with an innovative line of mechanical and chemical anchors. Mechanical anchors deliver holding power by expanding and wedging into the concrete substrate, while chemical anchors are highly sophisticated adhesives for concrete and steel applications, capable of delivering tension loading greater than 20,000 pounds (force). Drilling designs were also adapted to electric concrete breakers and jackhammers, which complemented the BU with a series of demolition tools.

In subsequent decades, concrete cutting, grinding and coring were added to the mix, forming the diamond BU. Diamond cutting combines the standard circular saw blade with specially formulated diamond matrices, utilizing the hardness of natural diamonds to scratch and cut through concrete. This technology is also used to cut large diameter holes and grind concrete surfaces to smooth finishes.

Next, the Chemicals Division laid the foundation for adhesives, polyurethane foams and firestop. Hilti’s directive was to differentiate and compete through innovation. During the past 20 years, advances in polyurethane foams, adhesives and temperature-sensitive, fire-resistant materials have positioned Hilti as a premier manufacturer of firestop and related chemical products.

Most recently, laser positioning and measuring tools have augmented the product line. These tools have added another dimension to the expertise and breadth of the organization. A
new image is emerging with high tech products refining the brand. The knowledge gained through developing high tech laser and electronic products is creating spin-offs to the other BUs.

Hilti participates in the construction industry by providing power tools and supplying consumables. Most contractors purchase tools to maximize productivity and avoid slack production due to tool shortages. At times, post project periods can be lean, requiring contractors to store their equipment while estimators stoke the fire in pursuit of more projects. When projects are awarded, tool requirements are reassessed, purchased and remobilized, provided they are in good working order. Historically, quality tools have a service life of anywhere between 2 to 5 years. The consumable side of the business represents the anchoring, drill bit, fastener, firestop and diamond product lines, which are consumed during construction.

1.4 Target Market

The target market is narrow, deep and geographically dispersed. Hilti develops and markets its products tailored to the professional contractor in the construction and building maintenance industries. Within the construction industry are many layers of specific trades and professional groups, each with specific needs. To effectively market and distribute products, segmentation is required. This allows us to focus and specialize on the best practices of general construction and carpentry, mechanical and electrical, interior and exterior finishing, steel erection and fire protection. Each of these trades may service large geographies and may have multiple projects underway, thus requiring suppliers to provide the necessary resources to support the projects wherever they may be. However, most projects and the bulk of revenues earned are in highly concentrated metropolitan areas.

1.4.1 Buyer Behaviour

Tool and fastener buyers range from single owner/operators conducting business in almost every trade (carpentry, electrical, plumbing), to extremely large general contractor firms with many employees, including professional buyers. In addition, buyer profiles include end users in the building maintenance and industrial sectors, plus the serious renovator and homeowner. Buyers have easy, immediate, and extensive access to information. Whether through the internet, telecommunications or personal interaction, accessibility to expertise, services and products can be sourced and shipped to almost every corner of the globe.
More recently, 'tangible benefits' and 'value-added' are being outweighed by intangible costs. For example, paying a premium for a tool certainly delivers greater productivity and longevity, however, the likelihood that a client ever completely realizes the value-added may be compromised by theft. Buyers are increasingly analyzing their opportunity costs on a per project/per tool basis to maximize their benefit. In some situations, it might pay dividends to buy low cost tools intended for disposal upon project completion.

Equipment and tool rental is a growing market segment. Contractors are becoming increasingly savvy to the cost of capital and tax incentives of deferring ownership. This growing trend is a sign of the times, and representative of modern buyer sophistication.

1.5 Degree of Homogeneity

Hilti’s mandate is to compete by providing products that bring innovation into the industry. If the firm cannot achieve and sustain a market leadership position of first, second, or third, entry is unlikely or interests will be divested to concentrate on other areas. The success of Hilti hinges on delivering innovation, and demonstrating value-added through differentiated products and services. Customers are willing and expect to pay anywhere from 10% to 50% more to realize returns in value and utility. Nevertheless, differentiation is declining as competitors narrow the product differentiation gap.

1.6 Market Position

Hilti systems and solutions for the professional contractor consist of a comprehensive line of products. Many of the products offered by Hilti’s competitors were once exclusively developed and offered by Hilti. In the past 10 to 15 years, competitors have been able to penetrate some markets by offering adequate quality / low cost products. However for the most part, the Hilti brand has sustained its position of market leadership.

Hilti’s greatest challenge lies in maintaining superiority by offering a comprehensive catalogue of quality products. As a supplier of drilling, fastening and anchoring systems, Hilti competes against manufacturers that simply concentrate and specialize in one category of Hilti’s three core product lines. While there is benefit in using Hilti as a single source supplier of all products and peripherals, specialization has enabled the competition to narrow their field of focus and concentrate their resources in developing products to capture Hilti business.
1.6.1 Revenue Streams

Figure 2 summarizes the contribution of each revenue stream to the aggregate business. Overall, anchoring, drilling and direct fastening contribute 75% of the revenues; chemicals and firestop businesses units are at 9%; and diamond and measuring account for 7% and 4%, respectively. BU Other is a combination of the Hilti screw fastening, battery drills, wood tools and installation systems.

![Figure 2: Revenue Streams](image)

Due to plant location and the complex nature of manufacturing, profitability varies greatly between all BUs and within each product family. Figure 3 presents the revenue contributions of each BU with a profitability index overlay in red. The profitability index is a rating system comparing all other BUs against the highest benchmark score of 100. Not only is anchoring the greatest revenue contributor, it is the most profitable BU, followed by chemicals, and drilling, rated 98 and 97, respectively.

The profitability of the drilling, direct fastening and diamond BUs is attributed to two components: tools and consumables. Tools contribute approximately 23% of total revenues.

---

2 Estimates from internal sales data (2003).
Consumables, consisting of drill bits, diamond core bits, diamond blades, and fastener pins, are more profitable, comprising approximately 77% of revenues. While the drilling and diamond business generates revenues through tool sales, the reverse is true for the direct fasteners. Due to the nature of this business and the necessity of bundling tools with consumable packages, highly discounted tools are often packaged into large consumable orders. For this reason, the revenue contribution and profitability of the direct fastening BU are almost entirely driven by consumable sales.

Chemicals are also highly profitable, rated at 98. Much of this product offering is manufactured internally with very few sourced products.

Diamonds comprise 7% of the revenues while ranking high in profitability. The diamond business is highly diverse consisting of the greatest number of products. Furthermore, two unique models of tools and their consumables are exclusively manufactured and marketed, greatly contributing to profitability in the diamond BU.

Measuring represents only 5% of the revenues and contributes much less in profitability. This is mainly attributed to the high degree of homogenous products manufactured and developed externally. Measuring tool potential has been identified as being extremely high, and Hilti has begun to internalize the research, development, and manufacturing of these products to capitalize on opportunities and bring innovation to the market.

The screw fastening and installation systems BUs are both low in revenues and profitability. This is attributed to a high degree of commoditization. In order to elevate its market position, Hilti wishes to develop and market innovation in the fastening aspect of the business.

1.6.2 Market Share

Figure 4 summarizes the Canadian market share of the various BUs. Market share is based on the total dollars sold over the estimated total market potential. Due to strong brand equity and the fewest number of rivals, the direct fastening business is believed to hold the highest market share. Drilling, anchoring and chemicals have estimated market shares ranging

---

3 Estimates from internal sales data (2003).
from 16% to 13%, respectively. Re-assessing market share by focusing primarily on the professional contractor would yield much higher ratios and deeper penetration.

Figure 3: Profitability

Diamond market share is estimated to be 11%. With the greatest number of rivals, the diamond business is saturated.

Measuring is the most immature BU with an estimated market share of 10%. Over the past 5 years, revenues have grown significantly, resulting in steady incremental market share penetration. This trend is expected to continue into the future.

*Estimates from internal sales data (2003).
*Figures are relative to estimates of market size and competitor market share*
2 INDUSTRY ANALYSIS

2.1 Industry Size and Participants

2.1.1 Size

There are many construction practices and types of materials used in the industry. Architectural design and structural capacity are factors in the choice of material. In Canada, concrete, masonry, structural steel, and wood frame are all materials approved by building codes for their structural capacity, fire resistance and cost.

Types of Construction

Concrete is the most popular and versatile building material used in Canada. Concrete offers tremendous strength and fire resistance for relatively low cost and can be installed at a rate of approximately one storey per week. It is utilized in many different ways, including 'cast in place' (in-situ), meaning forms are built and concrete is poured in place with the forms later removed and reused. Alternatively, 'pre-cast' concrete is a building practice where the walls are pre-manufactured in a controlled factory, then put in place by large cranes, which forms the shell of the building.

Masonry is a building process where pre-fabricated concrete blocks are laid with a light mortar mixture of concrete. Most often, buildings are constructed with cast in place concrete while difficult to access applications are constructed with concrete blocks.

Structural steel is more popular in the United States than in Canada. The benefits to structural steel are in its flexibility and weight to strength ratio. It is because of these characteristics that steel is the material of choice for the very tall buildings (sky scrapers) more commonly found in the United States. One drawback to structural steel is the issue of fire. In order to provide occupants with enough time to vacate buildings, the fire resistance properties of the material are enhanced. The beams are coated with a cementuous material to thermally insulate and protect them from structural degradation in the event of a fire. Most often, steel structures will install a metal fluted floor deck, adding stability by laying concrete topping to complete the structure.
Wood frame is the most common building material for smaller structures. The term 2x4 is identifiable by almost every person in every age group, even those not familiar with construction practices. Various styles of wood beams and posts are attached to each other with nails or screws to frame and erect the structure. Wood frame buildings have limited structural strength and are restricted to four storeys. Acceptable fire resistance can be achieved if the wood members are encapsulated within gypsum drywall.\(^4\)

**Market Segment**

Each of the aforementioned building materials can be used exclusively or combined for structural or aesthetic purposes. Buildings are usually categorized into 1 of 4 segments: single family residential, multiple residential, commercial and institutional.

Single family residential represents wood frame single, detached and duplex homes. Historically, Hilti specializes in concrete applications and, thus, does not have a strong presence in this market.

Multiple residential consists of multi-storey or high-rise buildings designed for high density residential living. Traditionally, buildings fewer than four storeys are constructed with wood framing; anything higher is usually concrete.

Commercial buildings are designed and equipped to host business activities offering larger open floor spaces. While shorter commercial buildings may be constructed with wood framing, often concrete or steel is the material of choice, offering longevity, stability, noise abatement and better fire resistance.

Hospitals and schools are good examples of institutional buildings. Depending on the region, institutional buildings can be evenly split between concrete, steel and wood. However, partly due to recent high steel prices, preferences are leaning more towards concrete. Industrial buildings are constructed and designed to be rugged with wide open spaces. Industrial facilities are almost always a combination of concrete and steel.

---

Assessing the potential of any target market in the construction industry is difficult. Projects can come to fruition from many directions, often with highly complicated arrangements, and many participants. The first indication of a project is the acquisition of a building or zoning permit. Once the building permit is acquired, and the financing, contractors, and materials secured, the project details are then made public. Table 1 is a summary of the construction starts, square footage, and project values, in Canada from 2000 to 2003, broken down into the four target market segments.

Table 1:  Canadian Construction Activity

<table>
<thead>
<tr>
<th>Total Construction Activity - Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starts</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Multiple Residential*</td>
</tr>
<tr>
<td>Total Commercial*</td>
</tr>
<tr>
<td>Total Institutional*</td>
</tr>
<tr>
<td>Total Industrial*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sq. Ft.(000's)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Multiple Residential*</td>
</tr>
<tr>
<td>Total Commercial*</td>
</tr>
<tr>
<td>Total Institutional*</td>
</tr>
<tr>
<td>Total Industrial*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Project Value(000's)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Multiple Residential*</td>
</tr>
<tr>
<td>Total Commercial*</td>
</tr>
<tr>
<td>Total Institutional*</td>
</tr>
<tr>
<td>Total Industrial*</td>
</tr>
</tbody>
</table>

*Source: Reed Construction Data, 2003 CanaData, 500 Hood Road, Issue: December 2003 4th Floor, Markham, Ontario.

As illustrated in Table 1, Canadian construction activity summed to over 7200 project starts, and totalled over $16 Billion in value and 123MM square feet of building area, in 2003.

Trends in construction volume, structure size, and value have traditionally correlated very well with Hilti revenues. To estimate the size of the target market, sales ratios were calculated, comparing the value of projects to net sales in 2003, and averaged back to 2000. It is estimated
that Hilti earns approximately 0.43%\(^5\) of the project value in the sales of power tools and consumables (fasteners, anchors, chemicals, bits) to these projects. With an estimated net market share of approximately 12\%, the size of the target market equates to approximately $583MM. This figure represents the total potential market size for Hilti and Hilti related products sold in Canada.

2.1.2 Participants

There are two areas of focus in marketing to the professional contractor. The first is power tools and their accessories; the second is the consumables.

**Power Tools**

The range of power and construction tools that any one manufacturer can offer is broad. Few competitors offer the complete range of professional grade products offered by Hilti; however, formidable competitors do specialize in some categories. In the powder actuated tools category, the main participants include ITW (Ramset), Powers, Rawl, Remington and Trakfast. Recently, Powers and Rawl merged to become Powers-Rawl, and now offer a range of tools and features that resemble Hilti models. Each of these participants also manufactures a comprehensive range of consumables (nails and boosters) for their tools that can also be used in a similar class of Hilti tool, however, this is not recommended.

The number of participants in the category of electric tools is much greater. Electric power tools include heavy-duty hammer drills, concrete breakers, and core rigs. Complementing these are a light-duty line of battery and corded screw guns, drills, grinders, laser tools, reciprocating and circular saws. Hilti’s rivals in this category include Bosch, Metabo and Hitachi. The product range is tailored for the professional, specialty and small contractor, and is limited to models designed for extreme abuse and continuous use. While competing in the same market, Bosch and Hitachi offer variations of their tools, intended to capture market share in the carpentry, renovator and homeowner markets. Dewalt, Makita and Milwaukee\(^6\) manufacture power tools for the mid-range of contractor and have specialty models, which do very well in the

\(^5\) Total revenues divided by total project value (2003).
professional contractor market. Ryobi manufactures a comprehensive line of battery and corded tools, mostly marketed to the small carpenter and homeowner category. Ryobi also offers a line of gas and electric grass trimmers. Rigid, the most recent entrant, offers a line of battery-operated and corded tools plus good quality shop vacuums and pipe threading machines. All of the above participants have good penetration into their target markets and have begun to expand their product range into the professional contractor market. Conversely, Hilti plans to market a line of tools for both the smaller specialized contractor, and for carpentry. Figure 5 exhibits the target market starting point and direction that the respective participants appear to be pursuing.

Figure 5: Participant Map

Consumables

Aside from the power tool manufacturers, there is an additional category of participants manufacturing only consumable products. Such companies market various fasteners, drill bits, chemicals, firestop, anchors (light- and heavy-duty), adhesives, diamond core bits and blades. The primary participants are UCAN, ITW, Simpson, Target, 3M and Tremco. In addition to

---

6 Atlas Copco has acquired Kango to complement their Milwaukee brand of tools. It is rumored that Atlas Copco will discontinue marketing heavy-duty tools under the Kango brand to augment their Milwaukee brand and market one comprehensive line of heavy and light-duty tools.
these consumable products, Powers-Raw1 has augmented its product line with various chemical and mechanical anchors, covering most light- and heavy-duty applications.

2.2 Five Factor Competitive Analysis

2.2.1 Industry Analysis

The power tools and fastener industries correlate well with the construction industry. Over the past 5 years, the power tool and fastener industry has shown significant growth. This industry is sensitive to many external influences including the construction and building maintenance markets, interest rates, tariffs and trade barriers, Gross Domestic Product, consumer confidence, natural resources, climate, and politics. While some forces behave independently and others, interdependently, two things are certain to drive industry growth: an aging infrastructure and an increasing global population.

2.2.2 Rivalry Among Existing Competitors

Many aspects influence rivalry in the power tool and fastener industry. Figure 6 illustrates the factors that reduce rivalry are growth and brand equity. Countering this are clustering, lack of a price leader, homogenous products, globalization, and low switch costs, which outweigh the effects of a growing market and branding. This creates a mode of high rivalry among existing competitors.

(-) Growing Industry

The Canadian power tool and fastener industry is growing, correlates well with the construction market and is, to a certain degree, cyclic with some predictability. To say that the industry is predictable implies that what goes up has traditionally come down and vice versa. However, estimating the frequency and magnitude of these cycles presents a great challenge.
Figure 6: Five Factor Analysis of Competitive Forces

- Threat of Entry (Moderate)
  - High costs of distribution
  - Homogenous Products & Slow innovation
  - Bundling
  - Over capacity
  - Highly regulated & bureaucratic
  - Brand equity
  - Product testing and conformance
  - Growing Industry
  - Declining broker/distribution/customer relations & loyalty

- Bargaining Power of Suppliers (Low)
  - Homogenous products (i.e., commodity inputs)
  - Concentration and clustering of suppliers
  - Low switching costs
  - Unskilled Labour
  - Skilled Labour & Management
  - Rapid IT and automation development

- Rivalry Among Existing Competitors (High)
  - Growing Industry
  - Brand equity
  - Cyclic Industry
  - No dominant price leader
  - Homogenous Products
  - Globalization
  - Low switching costs

- Threat of Substitutes (Low)
  - Specifications
  - Environmental, codes and regulations
  - Homogenous products
  - NAFTA & Offshore supply
  - Low switching costs
  - Vendor Clustering & Concentration

- Bargaining Power of Customers (High)
  - Strict regulatory conformance
  - Asset specificity
  - Ongoing public and private research

Narrowing the scale of this analysis to within one calendar year reveals seasonality. Because winters in Canada can be quite harsh, construction activity and thus power tool and consumables sales, are generally slower in first quarter and build momentum during the spring, summer and fall months. Another series of cyclic behaviour trends correlate with holiday and vacation periods. Sales tend to dip during the Christmas holiday season and spring break, while significant sales anomalies are often experienced during the peak summer vacation periods from July to August.

Recessionary periods quickly generate over capacity, thus, increase rivalry. Historically, the recessionary impact on vendors is out of phase with the number of project starts. This is primarily attributed to the time that most projects require for completion. If an unforeseen event negatively influences investor confidence, vendors may not feel the immediate impact for up to 2 years. Conversely, up-swings in construction starts tend have an effect within 3 to 6 months. Overall, the tool and consumable industry is growing, decreasing rivalry, however, low cycle market activity can increase rivalry for periods up to 18 months.

(-) Branding

Brand equity provides some relief from intensifying rivalry. Even with increased commoditization and offshore supply, competitors are able to leverage their brand equity to capture business and earn modest premiums. In this industry, brand equity is built from years of strong performance, safety and reliability. To the construction market, optimization of slack resources or any reduction in operator down time is paramount. When factoring in the price point of tools, high quality tools pay huge dividends in increased productivity and labour savings.

Consumable branding is established when professionals specify products. With frequent engineer and architect product endorsements, the perception is created that the specified product must be of high quality and reliability. Such optics build high confidence and familiarity with the brand, which is eventually established as the incumbent, thus, reducing price pressure and rivalry.

(+) No Dominant Price Leader

With over 10 power tool manufacturers active in Canada, no single vendor commands dominant market share nor does any firm dictate market price. Each firm establishes its pricing
based on the value-added and what the market will bear. With no dominant price leader to establish a benchmark, rivalry is increased.

Similarly, there are more than 25 manufacturers of consumables active in Canada, no single producer has dominant market share nor does any firm dictate market price, thus, rivalry is increased.

(*+) Homogenous Products

Although many products maintain superiority with value-added delivered through unique features and benefits, the perception is that each manufacturer offers a similar basket of goods. With this trend becoming more evident, products are becoming homogenous, increasing rivalry amongst competitors.

(*+) Globalization

Globalization is also responsible for increased rivalry. Many vendors have restructured manufacturing to produce offshore; and high price erosion has resulted from such products. Firms manufacturing and privately labelling products have further complicated this situation. Standardization of components and products will limit differentiation and increase homogeneity as these trends become more common.

(*+) Switching Costs

For consumables, the switching costs are low. Many contractors already possess a wide variety of interchangeable consumables. It has been the strategy of almost all competitors to rapidly clone products and flood the market with low cost substitutes upon patent expiry. Consumers commonly purchase power tools and use competitors’ consumables when convenient. Without proprietary consumables, low switching cost results in high rivalry.

Many construction firms manage a veritable fleet of tools. To maintain high productivity and take advantage of tax benefits, larger firms set up subsidiary tool rental companies that rent tools to the parent companies.

In order to maintain high tool usage, rental firms choose to standardize on one brand of tool, stock repair parts, and internalize the repair and maintenance of those items. For such firms,
switching costs are higher. However, it would be presumptuous to assume that they would never switch. Tools have a life span of only a few years and are regularly replaced. It would be reasonable to assume that any firm could completely switch manufacturers within 2 to 3 years, provided the savings are justified.

2.2.3 Threat of Competitor Entry

The threat of a competitor entering the power tools and fastener industry is moderate. Referring to the aspects that contribute to high rivalry amongst competitors, perhaps the most significant deterrents for a vendor entering this market are: high entry and distribution costs, homogenous products, bundling, overcapacity, regulations and brand equity of the incumbents. Entry is encouraged as a result of industry growth and declining distributor and customer loyalty.

(-) High Cost of Distribution

To enter this market successfully without product exclusivity or a low cost advantage is difficult. The entrant must endure the high costs of distribution to multiple locations (market access) in order to achieve some degree of scale. Whether competing on a regional or national basis, the vending of tools to the construction and building maintenance markets is highly sensitive to timely delivery and access to supplies.

(-) Homogenous Products

Products in this industry tend to be homogenous. With declining differentiation becoming more apparent, increasingly homogenous products present a significant barrier for new entrants unless they can deliver distinct cost advantages to the market.

(-) Bundling

Bundling is another deterrent to entry. Bundling requires entrants to compete in multiple product categories. This significantly increases entry costs.

(-) Overcapacity

Overall, the capacity to support a new entrant is marginal. In order to quantify where market opportunities exist, I will briefly explain the power tool market.
Light-duty tools include, battery-operated and corded versions of various drills and handheld wood tools designed for homeowners, small contractors and renovators. Medium-duty tools include, larger and more rugged high speed, multi geared drills, a smaller class of hammer drills and concrete breakers, plus large compound mitre saws and threading machines designed for specialty contractors, mechanical and electrical trades. Heavy-duty tools include large combination hammer drills and breakers and gas powered cut off saws for demanding work on steel and concrete applications.

Within this spectrum of tool categories, it is estimated that the light and heavy-duty classes of tools can support a new entrant while the medium-duty class is over capacity. Light-duty tools can support new entrants because of the high growth rate and shift to battery-operated tools, whereas, there are only two significant participants offering a comprehensive line of heavy-duty tools. Recently, the industry has seen Dewalt shift into heavy-duty tools to compete against Hilti and Bosch, while Rigid, a new entrant, is rumoured to have acquired a light-duty class of battery and corded tools.

Unit sales of light-duty tools are increasing. Recent tool designs appear focused primarily around ergonomics, while compromising performance and longevity in order to keep costs down. A shorter life span, low cost, and the consequent disposable characteristic, is creating higher replacement turnover, stimulating interest amongst new entrants.

(-) Regulations and Bureaucracy

The ability to innovate and differentiate to capture market share is hampered by strict building regulations, codes and standards. These are slow to change and lengthy to endure. In some instances, the process of submitting new products, building materials or practices could take up to 10 years and be extremely expensive. One benefit to enduring this process comes from having building codes or standards mandate utilization of the new product. If the innovator holds strong patents or exclusivity, a strong command of the market is theirs until competitors are able to bridge the gap.

(-) Brand Equity

Some relief from the threat of entry exists with brand equity. Even with increased commoditization and offshore supply, incumbents continue to leverage their brand equity
Branding is acquired through years of good performance, safety and reliability. To the construction market, any reduction in down time or optimization of slack resources is paramount. For new entrants to break this barrier requires either, a unique and innovative line of products designed to save contractors significant time and money, or good quality tools at low cost.

**(-) Product Testing**

Before products are introduced to the standards and regulatory boards for review and consideration, extensive research and certification must take place. This testing can be preemptive, or requested by standards, codes and regulatory agencies, to either meet requirements or demonstrate that products are safe to use in the work place. Power tools, for example, require appropriate electrical shock resistance measures, while chemical products must undergo chemical reactivity, poison and carcinogen evaluations. Chemical products must also document first-aid treatment in the event of an accident. Testing and certification can take years. These processes are lengthy and costly to endure. Ultimately, they result in a decrease in the threat of entry.

**(+) Growing Industry**

A growing industry is expected to be able to support new participants and, therefore, increases the threat of entry. As mentioned earlier, the risk hinges on whether the industry is at capacity. Entering a growing industry to compete against competitors possessing excess capacity could be a significant barrier to overcome and may cause new entrants to reconsider.

**(+) Declining Relationships and Loyalty**

Declining relationships and customer loyalty increases the threat of entry. This can be attributed to the high number of participants and product homogeneity. With strong relationships and loyalty breaking down, the opportunity for a new entrant to infiltrate the market, given a competitive advantage, increases.

**2.2.4 Threat of Substitutes**

The threat of substitutes in the power tool and fastener industry is low. It is important to qualify what constitutes an acceptable substitute. In the context of this analysis, a substitute is a building material, product or construction practice that provides an alternative to the way things
are presently done. An example of this would be to attach common materials with adhesives instead of nails of screws.

(-) **Strict Regulatory Conformance**

Two forces that limit the threat of substitutes are highly regulated and bureaucratic standards and construction industry codes. Strictly applied through codes and enforcement, regulations are designed to limit liability and ensure public safety. More recently, environmental issues have limited the ability of some substitutes to enter the market, effectively erecting barriers for new technologies. Furthermore, regulations and enforcement also restrict the globalization of professional services. For example, an owner may wish to retain a renowned architect in the United States to create an architectural layout. However, regulations require architectural design, engineering and enforcement professionals to be commissioned locally. Ultimately, plans to introduce or suggest substitutes for presently accepted materials and practices must first be accepted by professional, regulatory and governmental agencies.

(-) **Asset Specificity**

Asset specificity also limits the threat of substitutes. With millions of tools sold throughout Canada, introducing new substitutes requiring contractors to undertake a complete retooling to acquire a proprietary line of consumables would be challenging. Unless the substitute offers significant cost savings or resolves historically problematic applications, the adoption rate will be slow.

(+)** Public and Private Research**

Public and private research is ongoing and increases the threat of substitutes. Government agencies and private firms are constantly searching for new materials to address increasing resource scarcity and environmental concerns. Historically, when such materials have been developed, governments respond to public pressure to either consider the option or mandate adoption of the new technology, and the approval process is expedited. An example of this was the recent “leaky condo” crisis. After much debate, the construction industry imposed changes and exterior building envelopes were built according to a new standard of rain-screen construction. The construction of rain-screens introduced new practices, tools, fasteners and materials. These were fast-tracked through the approvals system and were immediately adopted.
2.2.5 Bargaining Power of Customers

Overall, the bargaining power of customers in the power tool and fastener industry is high; however, construction specifications and strict regulations can reduce that power. Aspects that strengthen customer bargaining power include low switching costs, bundling, concentrated distributors, homogenous products. These factors will be discussed in the following sections. It should be noted, however, that each may influence different classifications of customers in different ways.

Customers can be classified into 1 of 3 categories listed below, each interacting with another and serviced by slightly different business strategies (see Figure 7). The greatest probability of a successful strategy comes through the identification of, and marketing to, these different classifications of customers.

1. End user/contractor sold direct
2. Professional engineer, architect or specifier
3. Distributor with intent to resell

(-) Specifications

Specifications reduce the bargaining power of customers. Engineers and architects are an invaluable proponent, specifying products and materials to be used in all forms of construction. As discussed earlier, it is seldom that a power tool will be specified unless the project requires specific noise abatement (hospitals are a good example); or in the case of the critical location of seismic braces, holes must be drilled through rebar reinforcing, requiring a specific drill[^8]. More often, consumables, such as fasteners, mechanical and adhesive anchors, are firmly specified and enforced. When specifications detail the products of a manufacturer, the end user can submit alternates for review and consideration; however, most contractors follow the recommendation of the professionals. Specifications also standardize project tenders as all bidding contractors price and submit estimates based on the same tools, fasteners and anchors.

[^8]: A difficult task for most common hammer drills.
**(-) Strict Environmental, Codes and Regulations**

Strict environmental, codes and regulations influence the bargaining power of customers. The reason for this, as discussed earlier, is that codes, standards and regulations have been legislated to establish a minimum set of guidelines by which the construction and building maintenance markets must govern themselves. Variety and the number of alternatives are limited to those approved for use in construction applications. Because customers must conform to and work within guidelines, and products, materials and practices are limited, bargaining power is reduced.

**(+) Homogenous products**

Homogenous products and commoditization greatly contribute to increasing customer bargaining power. Although many products maintain superiority and value-added through unique features and benefits, declining differentiation is becoming more apparent. Today, customers are more educated and knowledgeable, easily acquiring all the necessary information to make the best purchasing decisions.
**(+) Offshore Products**

With increasing variety and quantities of offshore products entering Canada, the bargaining power of customers is increased. Customers explore options in sourcing materials from not only local vendors, but if lead times and schedules permit, from offshore manufacturers directly. In fact, many organizations already benefit from offshore products through bulk purchases; however, lengthy delivery and lead-time are quite common. Whether through direct or indirect channels, low cost offshore products are increasingly becoming available in Canada.

**(+) Low Switching Costs**

For professional customers, the cost of learning, re-issuing drawings and specifications are high while the switching costs for distributors and end users are lower.

Distributors greatly outnumber manufacturers. They tend to be reasonably knowledgeable with varying degrees of sophistication and market strategies. They represent an efficient and low cost channel though which to market products. The primary objective of most distributors is to generate profits through high inventory turnover. The bargaining power of distributors is proportional to how important they are to the manufacturer. The greater the desire of a manufacturer to partner, the stronger the negotiating position of the distributor. The trade off between the two lies in leveraging volume, retail space and retail promotion against pricing, support and exclusivity. Because switching costs are low, distributors tend to carry many competing brands. Loyalty to any one manufacturer is marginal unless the product line represents significant revenues or market position. In such a scenario, the balance of power shifts to a neutral position. Declining prices and lower margins force distributors to demand shorter lead times in order to save on inventory costs. Manufacturers depend on distributors to supply products to the market. There is a trade off between the two. Those supplying products with the shortest lead times earn ‘top of mind’ status.

For end users and contractors, the switching costs are low. Many contactors possess and manage a fleet of tools often through subsidiary tool rental companies. To maintain high tool rotation, these firms choose to standardize on one brand of tool and to look after the repair and maintenance of those items. For these firms, switching costs are higher.
(+) Vendor Clustering and Concentration

Customer bargaining power is increased due to the efficiency gained through close proximity and availability to products. Often, customers journey to locations where vendors cluster. They then engage in price comparisons and negotiations intended to increase rivalry between competitors, thereby gaining better pricing or services. Price erosion ensues and a cut throat market evolves, increasing the bargaining power of customers.

2.2.6 Bargaining Power of Suppliers

Most inputs to power tool and fastener production are commodities such as steel, copper, aluminium, rubber, plastic resins, paper and energy. These products are homogenous, partially comprised of recycled or reused materials and switching between supplies is easy. While some suppliers to this industry have substantial bargaining power, most crucial suppliers are less powerful, ranking this factor as low.

(-) Homogenous products (i.e., Commodity inputs)

Declining supplier differentiation, and the resulting increasingly homogenous products, limits the bargaining power of suppliers.

(-) Concentration and clustering of suppliers

Vendor clustering increases rivalry by presenting opportunities for customers to easily shop around for the best pricing and services. Suppliers to those vendors also cluster near their customers making it increasingly convenient to compare supplier prices and services.

(-) Low switching costs

Suppliers to the power tool and fastener industry include many different specializations, these range from janitorial to health and benefits. Suppliers specializing in vehicle and fleet management, Information Technology (IT), utilities, security, temporary labour, customs brokers, warehousing, raw materials, shipping and transportation services are crucial for daily operations, however, they are often in abundance and easy to switch. Low switching costs reduce the bargaining power of suppliers.
(-) **Un-skilled Labour**

Many of the manufacturing and warehousing processes utilize basic and low skilled labour. Although firms are becoming more demanding with regard to qualifications and company fit, most regions have an abundance of adequately qualified labour.

(+) **Skilled Labour and Management**

Skilled labour and management are crucial for optimum operational performance. Specialists are highly sought after and in continuous demand, thus, increasing their bargaining power.

(+) **Information Technology and Automation Development**

The rapid development of IT and qualified staff to implement advanced Enterprise Resource Program (ERP) and sales force automation has created a huge demand for adaptive technicians to implement and support these systems. Since network architects are already in low supply, increasing demand and rapid development of such products and their support staff shifts the bargaining power of IT suppliers in their favour.

2.3 **Opportunity and Attractiveness**

Canada’s power tool and fastener industry is saturated with homogenous products, which are offered through numerous channels by many undifferentiated vendors. The consequences of this are moderate to high pressures in competitor rivalry, threat of entry and bargaining power for customers. Furthermore, high distribution and low switching costs compounded by increased vulnerability to offshore products renders the overall attractiveness of this industry as unfavourable.

2.3.1 **Opportunities**

The immense size of the Canadian construction, building maintenance and home renovation markets, along with recent and projected growth trends, suggest that there is
opportunity in this industry. Since 2000, the growth rate has averaged 5.6% with a high in 2001\(^9\). With continued low interest rates, strong consumer confidence and a good political environment, new construction is expected to continue single digit growth. Power tool and fastener sales are positively correlated with this trend. Furthermore, while building maintenance and facilities upgrades are expected to be near flat, home renovations are expected to grow as well.

In the power tool industry, there are opportunities in the heavy-duty class of tools where few competitors offer complete and comprehensive product lines. In addition, demand is high for light-duty and battery-powered tools, which also present the greatest opportunity in the area of innovation.

For commodity consumables and fasteners, low cost products manufactured offshore present opportunities for those who can establish a reliable distributor network and expedite the approvals and standards processes.

### 2.3.2 Cautionary Issues

Although the primary markets are growing, this industry is difficult to penetrate. End users perceive the industry as being saturated with increasingly homogenous products. Research and development (R&D) is costly with high break even points and limited patent protection, therefore, innovation is hindered. Unless it is break-through technology, innovation seldom commands much of a premium though it is appreciated and adopted where possible.

Increasing shipping efficiencies and globalization makes vendors more vulnerable to commodity items manufactured offshore. Distributing such products locally will provide short-term relief and opportunities to increase market share. However, exclusivity is uncommon and such strategies are not sustainable, as more competitors will soon join in. Competing against distributors of offshore products is difficult. Most will leverage services and strong relationships to maintain customer loyalty.

Developing a distribution infrastructure and network is costly. To compete nationally requires representation in most urban and thriving regions. Such networks require partnering

---

\(^9\) *Reed Construction Data, 2003 CanaData, 500 Hood Road, 4th Floor, Markham, Ontario. Issue: December 2003.*
with large multinationals distributors such as Home Depot or Rona, however, manufactures lose much control over the marketability and profitability of their products with such partnerships.

2.4 **Key Success Factors**

Key success factors are the competencies, competitive advantages and critical milestones involved in achieving industry objectives. The prime objective is profit maximization. The key success factors to achieve this relate to efficiently accessing markets through innovation and differentiation while maintaining competitive costs, but not necessarily a low-cost strategy.

### 2.4.1 **Success Factor 1: Differentiated Product**

Differentiation is the remedy to an industry increasingly saturated with homogenous products. It is achieved in two ways: through innovation and branding. Innovation and exclusivity offer great opportunities to penetrate markets, command premium prices and increase account bases. Additionally, innovation builds brand equity and market awareness for both the firm and product. Branding can be costly yet, traditionally, markets have responded well to highly profiled products and services, thereby establishing some separation from the competition.

### 2.4.2 **Success Factor 2: Account Base Growth**

Gaining access to markets is essential to survival and growth. The focus for direct sales and marketing firms is to increase coverage, penetration and retention. To ensure success, firms must focus on account growth, increasing sales, and ensuring that existing accounts continue to purchase.

### 2.4.3 **Success Factor 3: Competitive Cost Structure**

It is crucial to achieve economies of scale and a competitive cost structure. This might be achieved through developing innovation at a competitive cost, but not necessarily a low-cost strategy. Given that differentiated products are becoming increasingly challenged to command a high price tag, innovators will need to become more cost conscious especially when considering that a cost-based strategy is a viable strategy in this industry.
3 INTERNAL ANALYSIS

3.1 Strategies of the Firm

3.1.1 Corporate Strategy

Champion 3C is Hilti’s corporate strategy. It guides and adds clarity to the Hilti vision. That vision is: to be the leading vendor of high-quality tools and fastening systems for professional clients in the construction and building maintenance industries. The 3Cs are Customers, Competency and Concentration.

Hilti’s philosophy is that the Customer is its best partner, therefore, customer needs become Hilti’s priority. To identify opportunities for improvement, self-assessment, customer satisfaction, and total quality management programs are regularly administered and analyzed.

Competency stands for commitment to excellence. Here, the focus is on innovation, direct sales, marketing, asset management and IT. These are evaluated through productivity figures and employee opinion surveys. They are components of any business, which could become substantial financial burdens if not managed effectively or, alternately, can accrue competitive advantages if fully exploited.

Concentration focuses on specific innovation delivered through direct sales and the lowest cost channel to various market segments. Hilti is committed to leading the industry in product development, settling for nothing less than a top three leadership position.

3.1.2 People Strategy

The People Strategy is a global initiative derived from the Champion 3C Strategy. It is comprised of nine specific team-related principles, focusing on recruiting, remuneration, leadership and values. The intent is to further develop knowledge, skills and competencies for human growth.

3.1.3 Differentiation Strategy

Hilti’s strategy has been to provide value-added and lead the industry with high quality/adequate cost innovative products. However, Hilti has restructured and optimized
manufacturing components in response to increasing globalization and competitive pressures. Hilti intends to move from a high quality/adequate cost manufacturer to a high quality/low cost manufacturer by 2008. It is expected that reduced manufacturing costs will position Hilti to increase market share and to aggressively increase revenues and productivity.

In figure 8, the strategic fit of Hilti is analysed by investigating nine business components and ranking them. Scores below 5 favour a cost based strategy while scores between 7 and 10 suggest a differentiation strategy. The Hilti business model is considerably weighted and favours the strategic profile of a Differentiator.

**Figure 8: Strategic Fit Profile**

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost Based</th>
<th>Hilti STRATEGIC FIT</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Cost / Adequate Quality</td>
<td>Commodity Vendor</td>
<td>Neutral</td>
</tr>
<tr>
<td>Product Strategy</td>
<td>Rapid Follower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D Expenses</td>
<td>Low R&amp;D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>Centralized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Making</td>
<td>Less Autonomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Economies of Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>Mass Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>Comparative / Push</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Profile</td>
<td>Low Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Structure</td>
<td>Leveraged</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Product Strategy**

Hilti is a strong innovator and therefore is heavily weighted toward differentiation. Innovation can be timely, slightly ahead of market demand or disruptive. Disruptive innovation changes the way things are done or makes things possible where previously they were not. A recent example of disruptive innovation was the EC-1. This revolutionary diamond drilling system enables customers to drill holes in concrete and cut through steel reinforcing with a hand held unit.

Hilti has always been regarded as an innovative company possessing numerous patents and product exclusivity. It was largely due to this, that Hilti realized consistent double digit growth and high profit margins up to the late 1980s. Since then, product cloning has been rapid, while disruptive innovation has declined considerably. Although, Hilti has been able to introduce some disruptive innovation during the last decade, most of the innovation has come through
incremental features and benefits, developed in response to market demand and changing industry practices. In the context of strategic fit, the prime product directive of a Differentiator is innovation. Hilti ranks high in this category.

**Research and Development Budgets**

To support the commitment to innovation, a steady stream of new products and technology must come from R&D. In 2003, development of sales came in at $3.013 (CHF) Billion, Net Income totalled at $186 (CHF) Million and R&D expenses were $137 (CHF) Million. Recently, R&D budgets increased to maintain the flow of innovation and industry supremacy, however, the laws of diminishing returns are demonstrating that the returns from the R&D investment are declining.

**Structure**

Economies of scale are maximized in a centralized organization, through specialized groups in engineering, personnel, production, R&D and marketing. Ideally, a high degree of synergy develops between these departments. This is most effective in organizations that represent a limited number of closely related product lines.

Conversely, decentralized organizations manage autonomous BUs empowered to address market demands and make decisions with minimum bureaucracy. The goal is to expedite product development, thereby complementing the commitment to innovation. Each department is empowered to develop marketing strategies and make decisions in response to market demands. Departments, such as finance, customer service, human resources and sales, are administered and shared across all BUs. When assessing the strategic fit of a centralized versus decentralized organization, Hilti favours the decentralized differentiator.

**Decision Making**

Within their jurisdiction, each BU, team or individual is empowered to make decisions in the best interest of the company and customer. For example, Account Managers (AM’s) are

---

10 Adapted from Buksz, 2004 class notes.
responsible for developing business as representatives of Hilti. In conducting business, they have considerable latitude to negotiate and establish market pricing for their customers. However, they also must consider how their decisions will affect their colleagues and the market, now and into the future. It is part of Hilti’s corporate culture to encourage creative thinking and to align actions with values. Hilti empowers its employees with the concepts of “Worthwhile Work”. This emphasizes the importance of the individual’s contribution suggesting that individual actions can make a difference. The concept of “Being in Control of Achieving the Goal” stresses that the objectives are clear and that, if values guide creative thinking, success will follow.\footnote{Blanchard, Ken & Bowles, Sheldon (1998) *GUNG HO: Turn on the people in any organization*, William Morrow & Company Inc., New York.}

**Manufacturing**

Manufacturing and Labour are difficult to assess at Hilti. Throughout the world nine plants supply aggregate demand and establish economies of scale and scope. For example, tools, chemicals, metric drill bits and select nails are manufactured in Kaufering, Germany. Commodity anchors and generic items are manufactured in a new plant in Beijing, China, while fractional nails and drill bits are manufactured in Tulsa, Oklahoma which is scheduled to be decommissioned in 2004. Lost production capacity will be distributed to Kaufering, reducing the minimum efficient scale (MES) and increasing scope effects.

The Kaufering plant is structured to economies of scope and cost complementaries, converting raw material inputs into many finished and unrelated products. For example, chemical manufacturing and packaging lines fulfill demand for construction sealants; then, due to flexible manufacturing, are easily reconfigured to produce chemical anchors (two unrelated products). Concurrently, commodity and mass-produced products (e.g., concrete nails) are manufactured on dedicated lines geared for maximum output and economies of scale. Tools are manufactured on flexible lines intended to capitalize on scope effects. Due to high quality standards, this labour intensive process prevents Hilti from realizing the same scale effects as its competitors.

\footnote{Financial Report, 2003. Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein.}
Labour

Hilti employs labour of various types and qualification levels. For positions in manufacturing and warehousing, moderate skill levels and education are required. Positions in technical sales, customer service, repair, R&D, engineering, finance, human resources and IT, require advanced education and skill levels. When assessing how the majority of the labour is positioned, Hilti favours the highly skilled work force of a Differentiator.

Marketing

Differentiators often utilize “pull” marketing strategies. A pull strategy induces customers and stimulates demand directly through mass advertising and consumer promotion. It is especially effective when brand loyalty and recognition are high. Hilti adopts pull marketing strategies and relies on a direct sales force to sell products directly to customers\(^\text{13}\). This has proven to be an effective marketing strategy, it successfully differentiates the features and enhances the brand. These features are best promoted through on-site demonstration and direct personal consultation with end users. This strategy reinforces the value proposition at premium prices.

“Push” marketing involves heavy promotion, directed at intermediates, to carry, promote and sell products. Many of Hilti’s competitors rely on push marketing to access markets through distributors. As Hilti continues to expand its product line and diversify into new markets, push marketing is being considered. The objective is to efficiently access new markets and non-traditional customers who prefer to purchase products through distributor channels.

Risk Profile

Risk can be assessed from two perspectives. First are risks associated with product development and second are the risks associated with improving operations and Customer Relationship Management (CRM).

Hilti has pushed the envelope in innovation. One recent example is the development of the GX 100. This fastening tool is a departure from the traditional powder actuated propellant,

using combustion from a butane fuel cell to drive the nail into the substrate. This was one of the most expensive innovation projects in Hilti’s history. Direct risks to Hilti were incurred through developmental costs, and the investment associated with manufacturing and production line tooling. High investment costs were to be recovered through rapid market penetration and immediate revenue generation, lowering the break-even point. The strategic objective was to capture market share from competing gas tool equivalents, however, the risk of cannibalizing the existing powder actuated business had to be considered. Careful implementation of the marketing strategy was critical. Sales of this new product could have resulted in existing customers replacing the old and profitable powder technology with the new gas version. This outcome would have been detrimental to the strategic objective of the GX 100. Failure of the initiative would have set Hilti back, but not catastrophically.

More recently, corporate risk is associated with operational enhancements and investment in IT. Project GPD/H2 is the implementation of SAP. This project is budgeted to be the most expensive in Hilti history at $250MM. In the mid 1980s, Hilti converted to Oracle in an attempt to enhance inventory and process management. For many reasons, implementation was less than successful; technical difficulties in invoicing, inventory management, order entry, and shipping occurred. If not for the strong cash position of the parent company, the ramifications would have crippled the business.

**Capital Structure**

Hilti’s capital structure is conservative in order to finance operations, projects and safeguard future business development. Scrutinizing the 2003 consolidate balance sheet (see Table 2), Hilti carries $762.5 (CHF) Million in cash and marketable securities, which contributes to $2.604 Billion (CHF) in total assets. With total equity in the order of $1.362 Billion and $315.7 (CHF) Million in short-term bank borrowing, $685 (CHF) Million in long-term bank borrowing, accrued liabilities and deferred income round off the difference at $240 (CHF) Million. Being a private company with an increasing current ratio of 3.4 from 2.0 and 0.7% sales growth over 2002, suggests less efficient use of trade capital. The year 2003 also saw reduced long-term and short-term borrowing (approximately $70 (CHF) Million). Also of note is that Hilti pays a very low corporate tax expense, ($37.3 (CHF) Million in 2003) from the Principality
of Liechtenstein. In general, Hilti finances projects and the operation of the business with cash and income.

**Strategic Fit**

Hilti’s profile emphasizes the strategic fit of a differentiation strategy supported by a strong innovation directive. Expenditures in R&D have increased marginally during the past several years, and are not fixed to revenues or profits. This budgeting is intended to maintain R&D and the creation of innovation. However due to increased competitiveness in the industry, there is conflict between the goals of R&D and cost optimization. Hilti’s intention in shifting production capacity to low cost manufacturing, is to lower costs, be more competitive and earn higher profits. However, could profits be increased by reducing expenditures in R&D? Figure 9 illustrates the development of sales from 1999 to the present, and expenditures into R&D. From 1999 to 2000, a substantial increase in R&D spending correlated well with a high growth period. From 2000 to 2002, R&D expenditures were marginally reduced as the global economy began to slow. In 2003, R&D expenditures were marginally increased in an attempt to reverse the declining sales trend from 2000 to 2002 and expedite product development. 2003 resulted in positive sales growth of 0.7%.

---

14 Financial Report, 2003. Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein
Table 2: 2003 Consolidated Balance Sheet

<table>
<thead>
<tr>
<th>Hilti Consolidated Balance Sheet at December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
</tr>
<tr>
<td>Other receivables</td>
</tr>
<tr>
<td>Inventory</td>
</tr>
<tr>
<td>Accrued income and prepayments</td>
</tr>
<tr>
<td><strong>total current assets</strong></td>
</tr>
<tr>
<td><strong>Fixed Assets</strong></td>
</tr>
<tr>
<td>Intangible fixed assets</td>
</tr>
<tr>
<td>Tangible fixed assets</td>
</tr>
<tr>
<td>Financial investments</td>
</tr>
<tr>
<td><strong>total long term assets:</strong></td>
</tr>
<tr>
<td><strong>Total Assets:</strong></td>
</tr>
<tr>
<td><strong>Liabilities &amp; S/H Equity:</strong></td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
</tr>
<tr>
<td>Short term bank borrowing</td>
</tr>
<tr>
<td>Trade accounts payable</td>
</tr>
<tr>
<td>Other short term</td>
</tr>
<tr>
<td>Accrued liabilities and deferred income</td>
</tr>
<tr>
<td><strong>total current liabilities:</strong></td>
</tr>
<tr>
<td><strong>Long term liabilities:</strong></td>
</tr>
<tr>
<td>Provisions</td>
</tr>
<tr>
<td>Bonds</td>
</tr>
<tr>
<td>Long term bank borrowing &amp; Other</td>
</tr>
<tr>
<td><strong>total long term liabilities:</strong></td>
</tr>
<tr>
<td><strong>total Liabilities</strong></td>
</tr>
<tr>
<td><strong>Equity</strong></td>
</tr>
<tr>
<td>Share capital</td>
</tr>
<tr>
<td>Participant capital</td>
</tr>
<tr>
<td>Capital reserves</td>
</tr>
<tr>
<td>Net income</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
<tr>
<td><strong>total S/H equity</strong></td>
</tr>
<tr>
<td><strong>total Liabilities &amp; S/H Equity</strong></td>
</tr>
</tbody>
</table>

*Source: Financial Report, 2003, 2001 & 2000. HILTI Group of Companies proposed by the Executive Board of HILTI, Schaan, the Principality of Liechtenstein*
Hilti is presently undertaking cost optimization measures. These measures should be limited to production processes of commodity items. Factoring inflationary cost adjustments, and the increasing cost index of developing technology, R&D budgeting should be increased to enhance the innovation directive of the company and preserve the differentiation strategy.

Innovation can come in many different forms including management and manufacturing processes. By directing funds towards innovation in manufacturing and inventory processes, cost optimization and innovation are harmonized and the strategic position as differentiator is balanced.

### 3.1.4 Culture

The culture at Hilti is representative of a sales organization that encourages empowerment, teamwork, fun, and professional development. Recently, Hilti has embraced the philosophies of Ken Blanchard as exemplified by his *GUNG HO* principles. *GUNG HO* is derived from the Japanese business model, emphasising working together. The *GUNG HO* journey is epitomized by three basic concepts:

---

1. Worth While Work
2. Being in Control of Achieving the Goal
3. Cheering Each Other On

\textit{Worth While Work} conveys to all employees that, regardless of the position or duties they perform, their contributions are invaluable; and further that, guided by Hilti’s values, their plans, decisions and efforts are part of the shared goal, which emanates throughout the organization and leads to exceptional customer service.

\textit{Being in Control of Achieving the Goal} is about empowerment. It inspires management to let employees who know the work, do the work, while maintaining leadership positions from the sidelines. Effective empowerment results in less monitoring, and more creativity and productivity. \textit{Worth While Work} defines the playing field and the rules of the game. Managers decide on who plays what positions. \textit{Being in Control of Achieving the Goal} pulls the manager (coach) off the field allowing the players to play the game.

\textit{Cheering Each Other On} is exactly what it says. Seeing team members doing great things or maximizing their potential and letting them know it. Supporting team members when they are struggling and celebrating successes through positive reinforcement and adherence to the values.

\textit{GUNG HO} is producing positive changes throughout Hilti and having a positive impact on business. Employees work closely together with little monitoring and are empowered to make discretionary decisions based on corporate values and regularly communicated goals. The impact of \textit{GUNG HO} resonates throughout Hilti and contributes to the bottom line. This is demonstrated through employee opinion surveys and increased customer satisfaction.

Hilti has always had a culture that encourages personal development. Whether through ongoing education or job rotation, Hilti aspires to continually move team members around the globe giving them exposure to new cultures, challenges and opportunities, which inevitably gives the company more depth and productivity.

Working at Hilti is both challenging and demanding, with incentives, recognition and rewards for high performers. In Canada, a majority of the 237 employees are stationed in Ontario, working in various capacities ranging from customer service at headquarters, to field personnel. Figure 10 illustrates the number of employees in each department. A majority of the staff are employed in sales and work from their home offices, while other employees staff
warehouses, customer service, repair centres and Hilti Centres (HC’s). Working from home has many advantages including autonomy and flexibility.

Figure 10: Hilti Canada Employee Allocation

Hilti offers bonus incentives to employees aligned to corporate strategies, objectives and values. Approximately 90 different compensation programs are maintained to ensure that each employee is motivated and rewarded to deliver high performance.

Performance is evaluated quarterly with a year-end review to assess the employee’s contribution. This process is called the Performance Management Process. It begins by transferring the corporate 1-year compensation plan into a customized business plan for the employees. Employees set both individual and team goals. They indicate their future aspirations regarding, education, personal development and advancement in a formal document, which is discussed and assessed each quarter. The performance management process (PMP) offers management an opportunity to recognize outstanding employee achievements and award merit increases.

Throughout Hilti, a consistent company image is delivered with the focus on customer service. The organization offers high flexibility in daily operations, however, it is very clear

17 Telephone conversation with Human Resources – Hilti. July 26, 2004
about the values, policies and ethics, which must be upheld. To ensure that all departments and regions adhere to the same corporate principles and values, flexibility is occasionally limited.

Hilti invests considerable resources in employee opinion surveys. These surveys are conducted each year and are analyzed to ensure that employee satisfaction is high. By acting on employee concerns, a relationship of trust and respect has developed, and lead to a positive and secure working environment.

Hilti also maintains a universal rewards and recognition program called *Planet Hilti*. Each year employees receive three tickets, which they award to team-mates who have gone beyond the call of duty. Selecting from various gifts in the Planet Hilti catalogue, employees can redeem these award tickets. Additionally, an annual contest called *Presidents Council* is held; here the best contributor from each department competes. The reward is an all-expense-paid vacation for two to the destination choice of that year. Approximately 300 members throughout North America earn this honour and participate in the events. Finally, three additional candidates earn a spot on the Presidents Council via the *leadership award*. Colleagues nominate the candidates for this award as recognition of their outstanding leadership and commitment to the organization.

*GUNG HO* is being phased-in throughout the world but is slower to take hold in some places. Hilti Europe is much more regimented, linear and bureaucratic. When interacting with European colleagues, *GUNG HO* does not appear to create any discontinuity or disruptions, however, it is likely a culture shock for Europeans to contend with the “let’s go and get them – no holds barred” enthusiasm that exists in North America.

### 3.2 Financial Analysis

Table 3 summarizes key financial ratios from 1999 to 2003. The table is broken down to emphasize the development of sales and expenses, liquidity, performance and returns to the firm.
Table 3: Financial Ratios

<table>
<thead>
<tr>
<th>Financial Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development</strong></td>
</tr>
<tr>
<td>Development of Sales</td>
</tr>
<tr>
<td>Profit</td>
</tr>
<tr>
<td>COGS</td>
</tr>
<tr>
<td>Sales Growth</td>
</tr>
<tr>
<td>Expense Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liquidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
</tr>
<tr>
<td>Quick Ratio</td>
</tr>
<tr>
<td>Inventory turns</td>
</tr>
<tr>
<td>Collection Period</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGS / Sales</td>
</tr>
<tr>
<td>Productivity (Expenses / Sales)</td>
</tr>
<tr>
<td>Profit / Sales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Turnover</td>
</tr>
<tr>
<td>Debt / Equity</td>
</tr>
<tr>
<td>Payout Ratio</td>
</tr>
<tr>
<td>ROA</td>
</tr>
<tr>
<td>ROE</td>
</tr>
</tbody>
</table>

*Source: Financial Report, 2003, 2001 & 2000. HILTI Group of Companies proposed by the Executive Board of HILTI, Schaan, the Principality of Liechtenstein

Figure 11 illustrates sales, profits and cost of goods sold from 1999 to 2003. It reveals that sales increased significantly from 1999 to 2000. Sales then declined, to stabilize around $3 Billion (CHF) in 2003. During this period, the ‘cost of goods sold’ (COGS) remained relatively flat, while profits demonstrated a decreasing trend from 1999 to 2002 with a recovery in 2003. Of particular importance is productivity. The red and black lines, illustrating the development of expenses and sales, represent these trends.

Between 2000 and 2001, a critical transition motivated Hilti to refocus on cost optimization. The primary concern was that expenses were increasing at a greater rate than sales. Where expenses out grow sales, margins are compromised and profits suffer. To reverse this trend, cost optimization, has been aggressively pursued. It is forecasted that in 2004 the two lines will converge and may even intersect. Once the two lines intersect, sales will be increasing at a greater rate than expenses, thus, improving the bottom line.
Figure 11: Sales and Expenses

Figure 12, illustrating the liquidity position of the firm, generates some concern. Although the current and quick ratios have increased substantially since 2001, the reduction in inventory turns may suggest opportunities to optimize slack resources and inventory management. The increasing collection period is also concerning. In 1999, the average time to collect was calculated at 66 days. Since then, the average days to pay dropped to a low of 61 and then soared to 75 days in 2003. Time to pay is choking cash flow and increasing the probability of incurring bad debt. This appears to be an industry trend. Customers are demanding longer payment terms to better reflect the payment schedules of the construction industry and smooth their cash flow cycles.

Figure 13 focuses on the performance of the firm. Ideally, COGS/Sales demonstrate a declining trend as scale effects and efficiency are realized. This was experienced from 1999 to 2000; however since then, it has marginally increased, becoming relatively stable through 2003.
With a differentiation strategy focusing on innovation and quality rather than cost optimization, it might be acceptable to have a flat to marginally increasing trend. However, Hilti
is fully focused on cost optimization, and therefore expecting this ratio to decline. Profits over sales have declined due to the productivity trends discussed earlier but are still quite healthy for a manufacturer.

Figure 14: Returns

![Returns graph]

Figure 14 summarizes returns from 1999 to 2003. The data reveals many interesting trends beginning with asset turnover. From 1999 to 2003, the asset turnover ratio has steadily increased, suggesting that Hilti requires fewer assets to generate sales. The payout ratio has been relatively steady over the past 5 years with a dramatic exception in 2002. In 2002, the board of directors separated the financial investment business from the sales and manufacturer entity. In doing so, a special dividend of approximately $633MM was paid to establish a private family trust company. The debt to equity and the payout ratio are low enough to support the growing needs of the company.

The return on equity (ROE) and return on assets (ROA) exhibit some interesting activity. In 1999, both ROE and ROA are within norms at 14% and 10% respectively. However, in subsequent years, both declined steadily to under 2% in 2002 and then simultaneously begin an upward recovery in 2003. Since the net income of the group was extremely low at only $27MM\textsuperscript{19}in 2002, the ROE and ROA would also yield low results during this period. The degree of leverage was relatively stable over the 5-year period, and ROE and ROA immediately recovered in 2003 as the net income of the group increased. This figure remains low in comparison to the net incomes reported in 1999 through 2001, but supports an increasing trend.

Overall, Hilti’s financial condition is improving. With marginal growth in 2003 and much higher projections in 2004, positive sales development justifies the incremental investment into R&D and people development. Furthermore, expenses have been optimized, improving the profitability and productivity of the firm, and generating more cash for reinvestment into critical aspects of the business. Investment into H2/GPD (SAP Implementation) will certainly have an impact on the net income of the group; however, improved efficiencies and inventory management systems are critical to reducing operating costs and improving profits.

3.3 Value Chain Analysis

3.3.1 Industry Value Chain

Figure 15 represents the Industry Value Chain, grouped into six activities. These activities are ranked relative to where Hilti is positioned in the industry (adequate to best), and labelled to indicate outsourced activities, then quantified to estimate the value created in each activity.

Beginning with R&D, Hilti invested $137MM\textsuperscript{20} to maintain and extend its technological and performance superiority. The investment into R&D is not only critical to safeguard future operations, it is Hilti’s core competency. Conservatively, Hilti was ranked as ‘good to best’ in this activity, to acknowledge that some competitors are also quite active in R&D and generate

\textsuperscript{19}Financial Report, 2003. Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein.

\textsuperscript{20}Financial Report, 2003. Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein.
good results. Hilti consistently ranks as number 1, 2, or 3, with as many as nine rivals competing against any particular BU (i.e., DeWalt for Battery Drills, UCAN for Anchors).

Figure 15: Industry Value Chain

<table>
<thead>
<tr>
<th>Industry Value Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Supplier</td>
</tr>
<tr>
<td>Best</td>
</tr>
<tr>
<td>Good</td>
</tr>
<tr>
<td>Adequate</td>
</tr>
</tbody>
</table>

Manufacturing is the largest creator of value in this analysis, with $1019MM\(^2\) in personnel and material costs. Unlike R&D, manufacturing is ranked as ‘good’ to recognize that Hilti is a flexible manufacturer, but perhaps has been caught flat-footed with respect to driving costs down. Hilti might, in fact, be considered a “fat” manufacturer, complacent with the success of the past, now weathering a crisis in order to compete against products manufactured in Asia. Hilti is highly focused and motivated to manufacture quality in a market steering towards disposable tools.

Next, firms cannot be all things to all people. Supply of ancillary equipment such as machinery and services is most efficiently outsourced, freeing resources to focus on core competencies. This $444MM component of Hilti business is ranked, ‘good’ as there does not appear to be any sustainable advantage over the competition when outsourcing ancillary equipment.

Finally, marketing, personal selling and retail are all interrelated at Hilti. Beginning with Marketing, this $155MM value generator brings advertising, market research and support to

personal selling. Here, Hilti is ranked as ‘adequate to moderate’ recognizing the historical trend of being a product leader rather than market leaders. This is changing. Personal selling through a direct sales force is a key component to this strategy. Building $619MM in value, Hilti invests heavily in training, and supports team members closest to the customer. Hilti is considered as ‘best’ when it comes to personal selling in the construction industry. Retail services are an extension of personal selling. Hilti has invested heavily in supplementing the sales force by creating ‘Hilti Centers’ (specialty outlets) throughout the world. Customers can visit these stores and experience the same high level of service they have come to expect from the established sales force. In addition to the $155MM in the ‘customers’ group, Hilti Centers throughout North America are currently being relocated and enhanced, increasing value and exposure.

3.3.2 Firm Value Chain

A ‘value chain’ is a tool to help firms identify activities which build value for the customer. There are nine distinct value creating activities, categorized as either Supporting or Primary activities. The value chain makes the costs and performance of key value creating activities visible. We are then able to compare these against competitor or industry benchmarks. This provides an opportunity to assess, and ultimately to maintain or improve performance.

A firm’s success depends on building value in areas of core competencies and competitive advantage. It also depends upon how well each of these activities integrates into the overall flow and operation of the firm. Customers buy products that have the highest perceived value. This can be expressed as, the difference between the products, performance, longevity, labour savings, personnel and service minus the customer cost of the product. Sellers can build value by offering superior performance and services or through low cost. Whether a differentiator or rapid follower, the value chain shows where value is created. It also indicates the level of alignment to the strategic fit of the organization.

Figure 16 is a visual representation of the Hilti Value Chain. It is broken down into four Supporting Activities and five Primary Activities. Furthermore, each activity is color-coded. Activities are labelled as either an ‘out sourced activity’ (blue), ‘internal activity’ (black) or ‘core

All supporting and primary activities are listed and comply with ISO 9001 standards for a manufacturing organization.

**Supporting Activities**

The top half of the value chain in Figure 16 represents the four supporting activities. These activities include firm infrastructure, human resources, procurement technology and development.

*Firm infrastructure* covers the costs of the financial and accounting services, property management, IT, legal, vehicle fleet, travel and general management services in specialized departments. Of the seven items listed above, costs for property management are allocated to regional cost centers, while vehicle fleet and travel expenses are allocated directly to the cost center of the individual who incurred the expense. As a result of their ability to develop strategies, implement the plan, lead by example and reassess and preserve the culture of the organization with a certain degree of humility, general management is Hilti’s core competency in this activity.

*Human resources* is more complicated in that half of their activities are administered through corporate while the balance are administered at the department level. For example, compensation, health, payroll, people development, Employee Assistance Program (EAP), Employee Self Service, custom software and general administration, are managed directly through corporate. In order to stay above industry standards, Hilti retains consultants in the compensation, health benefit and people development areas. This helps in creating high quality, motivated, happy team members and this translates into high morale reflected in a positive company image.

Other services, such as recruiting, training and education (highlighted in green), are supported by human resources but left to the individual departments. Recruiting begins by placing advertisements into any of the numerous on-line agencies. Candidates who demonstrate repeated high performance and continuing personal and professional development are short-listed for interviews. The primary objective of the personal interview is to assess the overall

---

motivational fit of the candidate to the organization. One final note, all new employees are sent to corporate headquarters for an intense 3-week program to ensure that all team members have a firm understanding of business principles and Hilti technology. Account Managers are subjected to more rigorous training including defensive driving, sales force automation, formal sales training and planning. People development and training are core competencies.

*Technology and development* builds value in a variety of ways including: custom fabrication of new designs, testing and calibration to sustain high quality control and performance, custom software and computer aided design (CAD) services, and contracted and internal R&D.

Contracted R&D is utilized when the design objective cannot be achieved by the available technology. This occurs often where firms push cutting edge innovation. Hilti does this by investing in universities, private and public firms in order to develop technologies specific to its purposes, later to be patented and incorporated into core products. Outsourcing development of technology not within Hilti’s expertise is better developed by specialist firms. Value to customers is built through patents, which allow development costs to be recovered.

Specific to specialty tools, anchors and construction chemicals, R&D is Hilti’s primary core competency. With specialty tools, value is created through enhanced electric motor efficiency, gearing improvements and ergonomics. These result in lighter, more powerful tools, reducing labour costs and increasing productivity. Anchor development has been quite extensive over the past few years.

Innovative mechanical and chemical anchor advancements are changing construction practices, enabling users to exploit new frontiers of construction, which were once not feasible. In chemicals, primarily firestop, advances in polyurethane foam have resulted in a new generation of fire resistant foam products that seal around and in between penetrations passing through fire rated assemblies.

The support that R&D provides to customers and field staff is enhanced by technical support services. Marketing research and repair and performance feedback is processed to better understand customer needs and areas of dissatisfaction. This information provides the opportunity to develop new technology for the future.
Procurement is the last component of the supporting activities framework. Hilti relies on this department to service the five primary activities. This is accomplished through supply chain management, bargaining, and supplier quality and conformance ratings. Other value-building services provided by procurement include specific vehicle fleet services for field staff as well as communications and IT hardware for the direct sales force, and management members.

Primary Activities

Primary activities consist of three processes or stages, converting raw materials to finished goods through manufacturing, generating revenues through sales and marketing and supporting the products with customer service. These components are further broken down into the five primary activities of the Value Chain, Inbound Logistics, Operations, Outbound Logistics, Marketing and Sales, and Service. The process begins with the first activity, Inbound Logistics, which brings in materials such as steel and chemicals for Operations to develop and manufacture into products. Next, Outbound Logistics ship products to the distribution nodes. Marketing and Sales facilitate transactions between the customer and Hilti and Service supports the first four activities through customer service departments such as repair and warranties. Each primary activity is analyzed to quantify the value created. While it is important to understand where Hilti builds value, it is also essential that each process efficiently transfer value to the next, maintaining high operational excellence and building value for the customer and margin for Hilti.

Inbound Logistics

Inbound Logistics acquires materials and funnels them to Operations. As mentioned earlier, firms can build value through high performance and services or through cost controls. A utopian business would realize benefits from both high performance and low cost, however, this is seldom reality. The focus in this activity is to keep costs to a minimum and this is achieved through cost effective “just in time” (JIT) inventory management.
<table>
<thead>
<tr>
<th>Firm Infrastructure</th>
<th>Financial &amp; Accounting Services</th>
<th>Legal Services</th>
<th>General Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Property Management Services</td>
<td>• Vehicle Fleet Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• IT Services</td>
<td>• Travel Services</td>
<td></td>
</tr>
<tr>
<td>Human Resources Management</td>
<td>• Compensation Consulting</td>
<td>• Temporary Help</td>
<td>• Custom Software</td>
</tr>
<tr>
<td></td>
<td>• Health Services &amp; Consulting</td>
<td>• Recruiting (agencies &amp; web)</td>
<td>• EAP services</td>
</tr>
<tr>
<td></td>
<td>• Payroll</td>
<td>• Training &amp; Education</td>
<td>• ESS &amp; Administration</td>
</tr>
<tr>
<td>Technology Development</td>
<td>• People Development Consulting</td>
<td>• Tech Support Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Custom Fabrication Services</td>
<td>• Custom Software</td>
<td>• Marketing Research</td>
</tr>
<tr>
<td></td>
<td>• Contracted R&amp;D Services</td>
<td>• CAD Services</td>
<td>• Repair &amp; performance data collection</td>
</tr>
<tr>
<td></td>
<td>• Testing &amp; Calibration</td>
<td>• R &amp; D</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Process Innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement</td>
<td>• Supplier Rating Services</td>
<td>• Utility Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supply Chain Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bargaining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>• (JIT) Inventory management</td>
<td>• Fleet Vehicle Services</td>
<td>• Installation &amp; Testing Services</td>
</tr>
<tr>
<td></td>
<td>• International Shipping Services</td>
<td>• Field Personnel IT &amp; communications</td>
<td>• Repair &amp; Overhaul Services</td>
</tr>
<tr>
<td></td>
<td>• Warehousing Services</td>
<td></td>
<td>• Communications</td>
</tr>
<tr>
<td></td>
<td>• Outsourced Mfg. &amp; Assembly Services</td>
<td></td>
<td>• Extended Warranty</td>
</tr>
<tr>
<td></td>
<td>• Material testing &amp; QLTY Control</td>
<td></td>
<td>• Information Processing</td>
</tr>
<tr>
<td></td>
<td>• Resource allocation</td>
<td></td>
<td>• Field reviews, testing &amp; Inspection</td>
</tr>
<tr>
<td></td>
<td>• Skilled labour</td>
<td></td>
<td>• Logistics F/U</td>
</tr>
<tr>
<td></td>
<td>• Material handling equipment &amp; automation</td>
<td></td>
<td>• Trade In</td>
</tr>
<tr>
<td></td>
<td>• Economies of Scale</td>
<td></td>
<td>• Parts Inventory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Theft Protection</td>
</tr>
<tr>
<td>Customer Service</td>
<td>• Product Testing</td>
<td>• Shipping Services (land/sea/air)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• QLTY Control</td>
<td>• Transport (TDG) consultants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Engineering</td>
<td>• Warehousing Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Process Innovation</td>
<td>• Information (ERP) Processing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Flexible mfg &amp; Scope effects</td>
<td>• Packaging Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Modularization – cost complements &amp; systems</td>
<td></td>
<td>• Credit Reporting</td>
</tr>
<tr>
<td></td>
<td>• Assembly / Kitting</td>
<td>• Customs Broker Services</td>
<td>• Courier services</td>
</tr>
<tr>
<td></td>
<td>• Labelling</td>
<td>• Container Bundling &amp; consolidation</td>
<td>• Retail Services</td>
</tr>
<tr>
<td></td>
<td>• Skilled labour</td>
<td>• Multi location inventory / transfers &amp; management</td>
<td>• Engineering Spec's</td>
</tr>
<tr>
<td></td>
<td>• Building</td>
<td>• Container Bundling &amp; consolidation</td>
<td>• MO Fact Base &amp; Data</td>
</tr>
<tr>
<td></td>
<td>• MTCE &amp; Repair</td>
<td>• Multi location inventory / transfers &amp; management</td>
<td>• Literature/ brochures</td>
</tr>
<tr>
<td></td>
<td>• Security</td>
<td>• Multi location inventory / transfers &amp; management</td>
<td>• Code consulting</td>
</tr>
<tr>
<td></td>
<td>• Custom equipment</td>
<td>• Multi location inventory / transfers &amp; management</td>
<td>• AP3 &amp; HCS Remote</td>
</tr>
<tr>
<td></td>
<td>• Calibration &amp; custom software</td>
<td>• Multi location inventory / transfers &amp; management</td>
<td></td>
</tr>
</tbody>
</table>

Net Revenues $3013 MM

<table>
<thead>
<tr>
<th>INBOUND LOGISTICS</th>
<th>OPERATIONS</th>
<th>OUTBOUND LOGISTICS</th>
<th>MARKETING AND SALES</th>
<th>SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1060MM</td>
<td>$530MM</td>
<td>$119MM</td>
<td>$1018MM</td>
<td>$168MM</td>
</tr>
</tbody>
</table>

In house Core Competency Outsourced

Key Success Activities
At Hilti, inbound logistics account for approximately $1.060B in value, attributed to various aspects of this activity including cost of raw materials and personnel. In 2003, raw materials and outsourced manufacturing (~ $19.1MM) totalled to $941.5MM, therefore, opportunity for cost savings exists through efficient supply chain management, bargaining power and economies of scale. Because cost of materials is highly weighted in this activity, portions of the inbound logistics and manufacturing are presently being relocated to Asia. The balance of the inbound cost structure ($119MM) is comprised of shipping and warehousing services, material handling, personnel, material testing and quality control.

Hilti recognizes opportunities for cost savings and is presently in mid-stride of globally implementing SAP to streamline many aspects of the business. Of particular interest is the ability to greatly improve shipping efficiencies and material handling by reducing the number of transactions and processes involved in bringing materials to the manufacturing floor. Finally, a core competency in this activity is material testing and quality control. Hilti can only deliver high quality outputs with high quality inputs; thus, raw materials must be tested and scrutinized for defects, non-conformance and consistency. This is an opportunity to build value on two fronts. This first is in delivering high quality materials to save time and money in the manufacturing process, minimizing waste and equipment abuse; the second, through reducing the probability of manufacturing defects, thereby, reducing costs to Hilti and its customers. The objective of this initiative is not to bypass or mitigate material testing, but consolidate some of the processes, accelerating flow to manufacturing.

Operations

The Operations activity, highlighted in yellow, is an important value-building engine for Hilti, representing a total of $530MM. Through Operations, value to customers is built, with contributions of $134.9MM to capital equipment, $88.9MM in operational activities, $137MM in R&D and $168.8MM in production personnel. As well as a key value-building driver, R&D is Hilti’s aggregate core competency and competitive advantage. In 2003, investment into R&D was increased by $2MM in order to maintain and safeguard future operations.

Although R&D contributions are allocated to Operations, they offer invaluable benefit to the other four primary activities. With inbound logistics, R&D will assist in specifying the grade and nature of raw materials, which then migrate to Operations where they oversee conversion to finished products, contribute to design and process innovation and take advantage of modularization and cost complementarities. Next, through outbound logistics, R&D will likely get involved with shipping, packaging and labelling issues (i.e., air/land/sea shipment issues with gas cell discharged tools...), and then support the direct sales force in training and marketing. Finally R&D relies heavily on feedback for performance and service issues with new products, to ensure that we are delivering products consistent with customer expectations, and keep the cost of warranty liabilities to a minimum.

Quality control is necessary for successful Operations. This is the final stage of hands-on inspection prior to shipping; each product must pass through a series of tests to ensure that design specifications and manufacturing quality are within both Hilti and ISO 9001 conformance. It is difficult to quantify how much value is directly built into quality control. Using visual observation, as well as time consuming semi-manual operations, quality inspections are frequent. In Hilti’s European manufacturing facilities, these operations may not demand as much rigour, presenting an opportunity to expedite manufacturing. However, with Asian operations, persistent quality controls are used, saving the customer and Hilti time and money in contending with manufacturing defects.

Hilti builds value through internal engineering, the process innovation team, flexible manufacturing, scope effects, modularization and custom equipment and software packages. In order to be a first mover, engineering must work closely with R&D to develop manufacturing and quality control processes. This requires liaison with process innovation teams, taking advantage of their manufacturing expertise to either identify equipment that could be modified to manufacture new components or to consider other options, such as whether to construct jigs internally or to outsource the process.

Flexible manufacturing and scope effects are invaluable practices with new product introductions. Innovation presents risk, with uncertainty as to whether or not the product will be successful. Hilti will introduce new products by constructing them with as many existing components possible, internally modifying others and outsourcing the balance. Historically, Hilti will persist with this form of manufacturing until sufficient volume is achieved to dictate full vertical integration with a dedicated line or to abort the product all together.
Modularization and cost complementarities add value. To drive costs down, standardize components, and leverage proven reliable parts, new product designs incorporate as many currently manufactured components as possible. Examples of this are electric motors and peripherals. One style of motor may be in two different categories of drills. Through flexible manufacturing, the same motor could be scaled up or down for other models. It could also be manufactured with slightly different connection ends, and shipped to another plant, to be housed in a circular saw or battery tool.

Finally, customers see high value in systems, kitting and labelling. With systems, all products are designed around each other. For example, a contractor may have to fasten a railing to a concrete wall. Hilti can supply a drill with a long extension cord or, alternatively, a battery equipped with a tolerance matched drill bit. The bit is perfectly sized to accept an anchor which is easily installed using an accessory, attached to the drill to expedite the installation. In many circumstances, Hilti also supplies or manufactures the item being installed (such as a cable tray trapeze or other installation system). All of these items are manufactured with pre-drilled holes and labelling stamped onto the fixtures with instructions and part numbers.

Kitting is popular because Hilti assembles construction kits containing everything, including outsourced items, labelled and itemized under one part number. These are tailored to minimize procurement of multiple items, thus, accelerating production.

**Outbound Logistics**

In 2003, Outbound Logistics represented $119MM\textsuperscript{27} in value. This figure primarily represents fixed warehousing and personnel costs and expenses accrued through shipping, custom brokers, transportation of dangerous goods consultants, container consolidation and information processing.

To create value, firms will focus on driving shipping costs down while accelerating delivery time to market. Hilti, services international demand through nine plants located throughout Asia, Europe and North America. Currently, these are being networked into one Enterprise Resource Program (ERP) by SAP. The decision to invest $250MM into SAP during the 2003/2004 fiscal years was made to expedite order fulfillment and to support JIT inventory
management. The objective is to build a platform to facilitate faster and seamless information processing and data transfer. It is also meant to make product availability, sourced from anywhere in the world, visible. This will have a positive impact on all primary and supporting activities.

To best understand this IT revolution, consider the following examples. A Canadian customer needs a tool that is not available, locally. Traditionally, a special order is placed and supplied via normal manufacturing and shipping channels, with delivery taking up to 6 weeks. Now, we can search global inventories for the product and have the item shipped direct to the customer, with the potential of expediting order fulfillment to 2 or 3 days. This is made possible by having access to the inventory in all stocking locations throughout the world. Integral inventory management allows for pulling items from various locations simultaneously, and having them delivered to the nearest distribution node for consolidation and final transfer to the end user. Container consolidation also creates value by saving time and money in shipping and redistributing inventory, expediting customs and broker services.

**Marketing and Sales**

Like operations, Marketing and Sales is highlighted (see Figure 16) because it is a critical engine in building value. $930MM\textsuperscript{28} or 75% of the total personnel costs are allocated to Marketing and Sales. Hilti's core competency is excellence in direct sales and marketing to customers throughout the world, regardless of location. The Hilti sales force is trained to visit customers, on the jobsite or in the office. The success of Hilti direct marketing begins with personal interaction with customers. The industry has proven to be very sensitive to receiving on-site technical and application consultation. Mandating that sales people travel to construction sites saves customers the inconvenience of leaving the site. Hilti’s sales people are trained to conduct detailed and focused interviews in order to understand customer needs and to specifically tailor a package to the application and budget.

Well-trained and knowledgeable sales people can do more than assist customers with product selection, they often become instruments for Hilti customers to make money, expanding

\[\textsuperscript{27} \textit{Financial Report, 2003}. \text{Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein.}\]
their specialities through training seminars and on-site demonstrations of new trends and best practices. In fact, Hilti often participates in relaying changing practices or new building code requirements to the customer, complete with instruction and consultative services to assist in the transition.

Direct sales and marketing is not an easy or inexpensive method of promoting products. Compared to competitors, Hilti maintains a much higher profile and personal contact with all levels of customers. Often demonstrations are conducted on-site, dealing with supervisors and seeking feedback from the end users, however, most of the purchasing decisions are administered through their head offices. There, Hilti is the conduit, communicating what end users prefer, translating that feedback and demonstrating cost savings, such as labour, tool life, material savings or repair costs to purchasers. Customers respond well to these tactics. They appreciate vendors taking the time to fully understand their businesses and contributing in a constructive way. AM’s are empowered with the autonomy to negotiate pricing reflective of the market segment and volume potential of the account.

Accessing construction sites is permitted through the acting general contractor or safety office and is at their discretion. It is considered a privilege to have unencumbered access to job-sites. Hilti is often more welcomed and respected on sites than most competitors because of the value-added and professionalism delivered through AM’s. For example, walking through sites often uncovers incorrect use or application of tools and fasteners. Whether it is because incorrect products were supplied or tools require servicing, personal interaction with end users quickly remedies any problems. Staff can also perform on-site servicing and repair of tools or coordinate the sourcing of specific products.

Direct marketing of this nature is grand in scale, extremely expensive but highly valued and expected from Hilti customers. Alternate channels have been established to reach customers unable to take advantage of field AM’s. These customers could include smaller or highly specialized accounts that do not require frequent and on-going servicing or contractors working in remote locations. For these, Hilti products and some services can be acquired through retail stores (Hilti Center), Home Depot Pro-Shop (Hilti store within a Home Depot, US only), E-

business, Customer Service/Order Entry or through select Authorized Distributors (A/Ds) and resellers in rural areas.

The sales and marketing divisions are the most supported teams within the organization. Hilti invests heavily in field specialists and engineers to visit architects and engineers, providing code consulting, educational seminars, literature and expertise about the correct application and use of products. Personal interaction and consultation with professional customers often leads to product specifications in construction plans, saving customers the burden of having to source and specify products themselves. By having product and applications specified, all potential contract candidates fully understand the minimum requirements, costs, quantities and installation procedures, ensuring high standards of safety to the general public. This reduces costs and production is accelerated. This pro-active approach to construction management is re-enforced by the professional customer, avoiding the costs for product reviews and approvals, as well as having to contend with deficiency inspections and the delays that may result.

Hilti also builds value by distributing sales literature and product testing reports. During design and approvals, construction projects are notorious for immense paper trails of highly detailed technical information, necessary to demonstrate compliance and design performance. Creating detailed and easy to understand documents builds value and confidence for all customers.

Within corporate headquarters, internal credit services add value by financing customers during the cumbersome and complicated payment schedules of modern construction projects. Often contractors are only paid when they have achieved milestones, therefore, cash flow becomes an issue. This puts contractors behind the payment terms offered by vendors, thus, flexible payment terms are valued by customers trying to meet demanding project and payment schedules.

Services that add value for customers are often instruments of the IT departments. IT adds value by giving all related and non-related departments of Hilti access to information. This facilitates making informed decisions affecting both the company and customer. Efficient repair and shipment tracking, account status and pricing algorithms build value for customers. Sales force automation and price harmonization enhancements through AP3 are two recent improvements. AP3 is an automated pricing program, administered in the field, and providing all customer service agents access to the account history and pricing schedules. Traditionally, it was
very difficult for Hilti to relay accurate and consistent pricing information from field representative to customer service. That has changed and customers appreciate the substantial reduction in pricing anomalies. AP3 is also one component of HCS Remote.

HCS Remote (sales force automation) is a Customer Relationship Management (CRM) program displaying real time account information, account contacts, buying history, product preferences and transaction summaries for any customer. HCS remote builds value for customers through enhanced real time access to account information, regardless of location. Often customers may have offices in one city but work in many others. In these circumstances, customers may have to conduct business with many different AM’s operating in different regions. IT such as AP3 and HCS remote enable AM’s to research customer preferences, buying habits, pricing and credit information, reducing the chance for errors and quickly orientating sales people to the account history. This translates into giving customers a seamless transition and confidence in dealing with Hilti regardless of where their projects take them.

Service

Service is an after sales customer and technical support totalling approximately $119MM in value. This figure is accumulated through the direct costs of personnel and support tools (communications, vehicles) required in fulfilling their tasks. Hilti builds value in service by providing on-site inspections and testing services to determine if anchors have been set correctly or for firestop systems conformance. These inspections are conducted by Hilti field engineers to provide some reasonable assurance that the installed products will deliver reliable performance. Customers are enthusiastic about this no-charge service that builds tremendous value and entices customers into selecting Hilti as their preferred supplier of construction fasteners.

Returning full circle to R&D, quality control and manufacturing, Hilti tools outlast and outperform competitors by more than a factor of 2. Hilti can therefore offer the longest and most comprehensive full service warranties, unmatched in the industry. This creates value for customers by minimizing down time and delays in productivity. For unforeseen repairs, service centers throughout the world carry an inventory of parts and Hilti technicians to repair and service tools. All repairs or servicing is recorded in a Customer Relationship Management system to provide information about the frequency and costs of repair. If any tools have frequently visited a service center for unusual repairs, a lemon exchange awards that customer a
new unit up to two years after purchase. Furthermore, the history of tool repairs is relayed to R&D and manufacturing to analyze potential design flaws and opportunities for improvement.

Another value creating proposition offered by service is logistical and delivery tracking, account information, purchase and theft history. Hilti embeds serial numbers in every tool sold. If a stolen tool were reported to Hilti, when those models come in for repair, service technicians can run the serial numbers through the database to identify a stolen tool for return to its rightful owner. The customer highly values this program, but it has not significantly deterred thieves. Later in 2004, tools will be equipped with radio frequency keys and locators, which have been proven to deter theft.

**Margin**

2003 witnessed slight growth in sales of 0.7% totalling $3013MM\(^{29}\) and a return to normal profits. Hilti always strives for double-digit growth in sales and proportional increases to profits. Margin rounds off the value chain at $168MM in value, summing all the components in the value chain to $3013MM in 2003. Historically the margin has been much higher in the order of $300 to $400MM CHF. Hopefully, a better understanding of the Hilti value chain can provide some insight for opportunities to streamline performance, cut costs and build higher value in core competencies.

**Summary**

Hilti has done well to align resources, culture and management styles to enhance its core competencies. Hilti customers expect high quality products, direct sales consultation and innovation. The three highest percentages of value are appropriately weighted to those primary activities. To excel at competencies which build value and outsource the others, is the cornerstone to Hilti’s strategy. The Hilti culture was cultivated from a strong tradition for excellence in engineering through sales and service. Management’s role to enhancing core competencies works in conjunction with the culture. Both stimulate empowerment and encourage creative thinking with little monitoring. Low monitoring costs translate to higher value.

\(^{29}\) Financial Report, 2003. Hilti Group of Companies proposed by the Executive Board of Hilti, Schaan, the Principality of Liechtenstein.
Internationally, Hilti is regarded as the industry leader in direct sales and innovation. Much of the value in marketing and sales is attributed to personnel. R&D totals approximately $137MM annually. Perhaps an opportunity for improvement includes reallocating resources from sales and marketing to R&D. This challenges Hilti’s traditional approach of adding sales representatives to generate more sales, however, the additional resources may be sufficient to break through technological barriers and lead to more highly innovative products.

Additional opportunities for improvement focus on reducing the administration between and within activities. Given that ISO standards require consistent quality control measures and processes, Hilti has organized itself into an intense hierarchy of ‘checks and balances’ which greatly reduces the flow of business and creates costly delays. These measures may have created an over proportionate amount of administration. Heavy administration often develops into a burden for customers and Hilti.
4 EXPANDING INTO DISTRIBUTOR NETWORKS

4.1 Channel Expansion

The power tool and fastener industry is a highly fragmented and mature market. The competition is intensifying their marketing campaigns and infiltrating Hilti’s core business. Hilti has retaliated by expanding into their traditional markets, such as light-duty tools and wood frame construction.

Opportunities to enter new markets and increase market share may come through an expanded partnership within the existing, independent distribution networks. The proposed channel expansion is a departure from Hilti’s ideals as a direct sales and marketing organization. Hilti direct sales have traditionally competed against distributors and this has proven to be a very effective strategy when marketing differentiated products. The proposal to access new market by selling secondary products through distribution channels requires a thorough impact analysis to assess all facets of the strategy and the potential impact to Hilti. Each channel is considered, focusing on the benefits they will bring and the issues surrounding them. This analysis concludes with recommendations regarding present strategies. Figure 17 illustrates the various channels available and the proposed expansion into urban alternative business channels.

4.2 Channel Patterns

Figure 18 represents the channel patterns and business flow of Hilti Canada. Hilti segments customers into their trade specialization, size and geographic origin. Separating rural customers from urban customers recognizes the high cost of servicing these customers. Personal consultation and demonstrations build relationships, promotes innovation, and helps increase sales. Rural sales people may have to travel for hours between meetings, and the return on such meetings is usually less than those in urban areas. Therefore, prices in rural areas are marginally higher to compensate for higher costs.
Figure 17: Sales Channels

Figure 18: Channel Patterns
Figure 19 represents each channel based on revenue estimates. Approximately 86% of the revenues are administered through direct channels including the AM, HC, CST and STS with the balance of 14% coming through alternative business channels\(^{30}\). Data for the integrated supply channel is not available; it is anticipated to be insignificant. E-business will go live in 2005.

Figure 19: Channel Distribution

![Channel Distribution Graph](image)

Figure 20 illustrates the distribution of revenues collected from all customers. The significance of this distribution reveals that the AM is responsible for approximately 63% of the revenues, while the balance of sales to small accounts is intended to be administered though the STS, HC or alternative business channels. Classifying customers according to size offers benefits to them and Hilti. Customers benefit by being directed to the channel which can best address their needs. For Hilti, channelling customers will reduce transaction costs for small customers and maximize the utility of the AM’s.

\(^{30}\) Estimates from internal sales data (2003).
4.3 Existing Channels

4.3.1 Account Manager

Traditionally, large and medium size\textsuperscript{31} customers have been channelled through the AM\textsuperscript{32}, Hilti Centre (HC) or Customer Service Representative (CSR). The AM is the most expensive channel through which to conduct business, followed by the HC and, finally, the CSR. AM's are highly trained and specialized outside field representatives, charged with the responsibility of developing sales in specific geographic regions. Their daily responsibilities include account administration, product demonstrations, on-site technical support, specialized product selection, relationship management, marketing, pricing, order processing and some order fulfillment. The AM is the most expensive channel with respect to the costs incurred through vehicle leasing and maintenance, fuel, demonstration inventory, telecommunications, travel meals, travel accommodations, benefits and total compensation, divided by the time actually spent in front of the customer. Across Canada, the total average amount of face-to-face time that AM's spend with customers is approximately 45 minutes throughout an 8-hour day. However, effective AM's generate high returns and revenues. It is important to note that AM's are not able to process orders directly. To process an order, it is necessary to phone or fax the HC or CSR.

\textsuperscript{31} Large customer $> \$50K$, Medium customer $> \$10K$, Small customer $> \$5K$, mini customer $< \$1K$ annually.

\textsuperscript{32} Territory Sales Person or Sales Representative.
This duplication of effort is costly and inefficient. The AM is most effective when focusing on the sales development of large and medium sized accounts and channelling any transactional business or small accounts to the lower cost HC and CSR channels. This frees time to visit accounts and develop sales. However on their own discretion, AM’s will administer some small account transactions. This allows them to maintain contact with accounts that could develop into medium and large customers.

Pricing is one of the most important responsibilities of the AM. In the past, a customer could call the AM, the HC and the CSR, and be quoted three different prices for a product. More recently, Hilti has developed pricing templates to achieve consistency across all internal channels. Today, AM’s use a program called Auto-Pricing (AP3) to attach a pricing template to an account, regardless of the channel the customer chooses or the location of the account. It is the responsibility of the AM to assess and negotiate the pricing and upload the templates into the Customer Relationship Management system. This makes the appropriate pricing information available to the CSR and HC so, regardless of the direct channel, the pricing follows the customer. If at any time a discrepancy requires an override, a spot change can be initiated with the authorization of the AM. However, any permanent changes will require that the AM upload a revised template, reflecting the new account pricing.

4.3.2 Hilti Centres

Hilti Centres (HC’s) serve a middle ground, providing a retail space, inventory, sales consultation and demonstration capacity for those customers who prefer shopping in a retail environment. HC’s service smaller accounts, new customers and cash sales that have traditionally been costly and difficult for AM’s to cover. In each of the sales channels, there is always some leakage. For instance, it is common for the AM to provide sales consultations to smaller accounts and for large customers to conduct business through HC’s. Often this is simply a matter of personal preference.

HC’s have become an important component of Hilti’s marketing strategy. They provide opportunities to showcase feature products and promote new products to emerging markets. HC’s enhance exposure and build brand equity with new and existing customers.

The HC is equipped to place orders, directly by-passing the CSR, and is able to follow and trace the various stages of order fulfillment. They also serve as a stocking and small
distribution hubs, and provide elementary tool repair services, routing the more difficult problems to the repair centre.

HC pricing is influenced by two factors. Auto Pricing is the principle factor. If a customer chooses to purchase through the HC, they are quoted the price established by the AM. The account number is entered into the Customer Relationship Management system along with product item numbers. This system identifies the account and applies the template set by the AM. If a product has not been Auto Priced, the HC representative has two options. First, contact the AM and make a recommendation to award pricing based on purchasing history; the alternative is to default to Standard Contractor Pricing (SCP).

SCP is a national pricing template. It reflects the prices offered to a small account without any volume discounts. SCP is in the order of 20% to 30% greater than the average price for a volume-buying customer. Customers who object to SCP or consider it uncompetitive, are re-assessed for volume potential. The final pricing decision resides with the AM.

4.3.3 Customer Service Representative

The CSR group is essentially an order entry and processing call centre with access to all account information, Auto Pricing, inventory availability and shipping details. The CSR is an intermediary between the customers, AM and HC, and the electronic processing systems.

Phone or faxed orders reach the call centre and are distributed electronically to the next available CSR. Electronic instructions from the CSR begins a chain reaction of events necessary to process the order, ship the product, update accounting and track the sales history. Most business is channelled to the CSR, however, this channel also serves in a much greater capacity. An effective CSR team is well-trained, versed in construction practices and applications, and is able to assist customers with product selection in the same fashion as AM's do in the field.

The CSR is a low cost channel; a high volume of call traffic and revenue is handled without having to travel between meetings. When it is established in Canada (slated for 2005), E-business will become the lowest cost order fulfillment channel.
4.3.4 **Strategic Telemarketing Specialist**

The Strategic Telemarketing Specialist (STS) provides increased contact with remotely located smaller accounts and customers. This specialist's role is similar to an inside sales position; the STS is trained to conduct business like an AM, but from a central office. The program has been very successful in re-establishing relationships between Hilti direct sales and dormant customers. This channel is effective in increasing coverage, penetration and retention\(^{33}\); also, loyalty is enhanced through direct sales consultations. The STS account base is comprised of small customers redirected by the AM. The specialist and AM have a unique partnership; they share accounts and, to a certain degree, compensation. In this partnership, the AM is awarded the sales that the STS's generate, and collects the commissions. The telemarketing specialist is also awarded the sales, and earns a bonus based on achieving sales growth milestones. The STS has access to account information, inventory and shipping details, and has the ability to process orders with some latitude on pricing.

Resembling centralized AM's, STS's are empowered to set prices for their accounts based on the segment and volume potential. Usually, the STS will consult with the AM to standardize a pricing strategy for the territory; however, Auto Pricing to STS accounts is primarily the responsibility of the specialist. In the event that an STS account chooses to purchase through the HC, pricing will reflect Auto Pricing as standardized by the STS. If at any time products are not auto-priced, the options are to default to SCP or override the pricing with the authorization of the STS. Any sales through the AM, HC or STS channel will pay a commission to the AM.

4.3.5 **Shipping**

Once an order has been entered and all account parameters have cleared, shipping documentation is electronically transmitted to the servicing distribution centre. Here, materials are packaged for shipping, tagged and released to the preferred carrier. Often orders can consist of multiple products, which become part of a Bill of Materials (BOM). If any products are not available from the closest distribution centre, alternate shipping locations complete the BOM. Minimal shipping fees are charged or, with orders greater than $400.00 CDN, are prepaid.

\(^{33}\) This is a key success factor as outlined in section 2.2.8.
Alternate modes of shipping include delivery to the HC for customer pick-up or personal delivery from the AM. Personal delivery is discouraged given the opportunity cost.

4.4 Alternate Business Channels

Established to access difficult to service customers, alternate business is a new series of independent distribution channels. Traditionally, Hilti has discouraged reselling through distributors. The perception has been that reselling is a departure from Hilti’s marketing strategy, that it creates customer confusion and channel conflict.

It was found that customers prefer to purchase from single source suppliers. In response to this preference and, given the cost of access to rural customers, Hilti established alternate business channels. Alternate business channels consist of A/Ds, Integrated Supply partnerships and Rental outlets. Most purchases from alternative business are facilitated through the CSR channel, with occasional transactions being written by the AM.

Hilti has quickly identified the opportunities that lie in alternate business and distributor channels. While these channels represent both partners and competitors, the sales generated through these channels have grown to become a substantial contributor to revenue.

4.4.1 Authorized Distribution

*Authorized Distributor* is a status awarded to distribution partners, who contractually agree to market and promote Hilti as a premium brand and carry inventory as a standard offering in their retail and warehousing outlets. Acklands Grainger Incorporated (AGI) was the first national partnership established in rural areas of Canada. The customer benefit in sourcing Hilti products from rural AGI locations is realized through immediate access to products, versus shipping to the site a minimum of two days later.

The strategic move into alternate business channels limits the geographic location to areas where Hilti does not support a segmented sales force or HC. These locations are represented by the red dots in Figure 21, while the blue push pins represent AGI locations not participating in the authorized dealer program.

The strategic planning and geographical placement of these locations has been critical to the success of the program and to Hilti’s continued growth through direct channels. Brand
recognition and awareness is enhanced through the increased availability of Hilti products to customers in the most remote parts of the country.

The product mix and inventory are independently determined for each outlet by the AGI Branch Manager (BM) and Hilti AM. This consultation facilitates the selection of inventory based on local market needs and target customers. For instance, outlets in the far north may be structured to supply small construction contractors and government accounts, whereas other outlets may have a core industrial market to service.

The AM is not responsible for pricing, although sales through rural AGI outlets are awarded to the hosting AM. AGI pricing is established and maintained by an alternative business channel manager. Auto pricing is harmonized to be consistent for all participating AGI locations. Since each branch purchases independently through a corporate Master Card, a national Auto Pricing template is necessary. This ensures that the correct pricing is awarded to any location, regardless of the channel through which it was sourced. Price discounting to AGI is greater than that offered to end users. This enables AGI to cover its costs and earn profits consistent with other product lines. For non-participating AGI outlets (urban), the ability to resell Hilti products is available, however, their auto-prices are much higher than those of participating outlets, requiring them to charge more in order to cover costs. Because each branch is responsible to manage and purchase their inventory of Hilti products, coordinating the pricing between participating and non-participating outlets is easily managed by separate Auto Pricing templates.

AGI price strategies resemble those of Hilti. When prices are advertised, they are consistent across all outlets and usually represent a promotion or suggested retail price. Often, AGI will extend further discounts to customers based on volume potential. Regardless, AGI selling prices of Hilti products could range from par with what the hosting AM is charging, up to a 25% premium.

AGI maintains its head office in Richmond Hill, Ontario, and has over 200 branches across Canada (see Figure 21), generating revenues in excess of $600MM in the maintenance, repair and operating industries sectors. It carries over 60,000 different items amounting to
$125MM and has access to much more. It purchases from over 1600 suppliers and service over 85,000 customers through a staff of 2,000 employees34.

Industry specific distributors are another form of authorized dealer. In some instances, access to industries is most efficiently achieved through partnerships with serving distributors. In these circumstances, Hilti has established industry specific A/Ds to service those accounts under a formal agreement. One example of an authorized dealer would be a distributor who services the movie and film industries.

4.4.2 Integrated Supply

Many industrial and government customers have established single source supply contracts to cut transaction costs incurred by purchasing various items from numerous suppliers. By consolidating purchases through fewer suppliers, firms hope to significantly reduce the number of purchase orders and active suppliers to only those that are most important. This trend potentially threatened Hilti's position in government and industrial accounts as many of the established single source suppliers marketed competing brands to the same accounts. To maintain penetration in industrial and government accounts, Hilti decided to collaborate with leading single source suppliers and establish a unique classification of alternate business called the Integrated Supply channel (IS). Hilti targeted those distributors that maintained the deepest penetration and had the most potential for specific integrated supply partnerships to service its largest government and industrial accounts.

An integrated supply partnership is different from ADs. An integrated supply partner is an intermediate handler who accepts an order from a contracted customer, places an order with the manufacturer and consolidates the shipment and invoicing to the end-user. Usually, the decision to buy Hilti products is initiated by the customer and is the result of a direct sales consultation with an AM or field specialist. The customer and Hilti establish the price of the products and the sale is channelled through the integrated supply partner. The integrated supply partner collects a service fee and earns profits on the value of the transaction through special integrated supply discounting. Integrated supply partners do not carry any inventory or promote Hilti products.

Figure 21: AGI Location Map

4.4.3 Rental

Rental firms earn profits by purchasing tools and equipment and subleasing these items to customers. Much of Hilti’s success in the rental industry stems from the longevity and high performance of its tools, which allows rental customers to keep them in rotation. Rental firms regularly rotate their inventory by selling vintage tools at high discounts, or create some form of rent-to-own program to recover the residual value of the tool. Hilti does not consider this as a significant threat to new tool sales: The quantities are marginal and Hilti continues to capture the consumable business associated with these tools.

Originally, the strategy was to sell new tools to rental houses, while end users sourced the consumables from Hilti. However, this strategy experienced substantial leakage because rental houses were unable to supplement their Hilti tools with the proprietary consumable items. Due to the lack of consumables available, rental firms were finding it increasingly difficult to rent Hilti tools and market share erosion resulted in Hilti’s rental segment. Once the extent of the leakage was realized, rental firms were informally permitted to resell consumables in proportion to approximately 20% of their tool acquisitions.

In the mid 1990s, we considered rental channels as nuisance resellers. During the late 1990s to early 2000, the rental channel was restructured, positioning them as strategic partners. This included a specialist group of AM’s, whose specific target was rental customers. Since restructuring, this area is generating considerable and consistent revenue.

Today, the fragility of the agreement to resell Hilti tools and their consumables is apparent, as it now represents a substantial threat to revenue, brand equity and the direct sales strategy. Many larger rental firms have begun to establish full distribution capacity and have expanded their outside sales force with the intention of supplying new tools and consumable needs bundled with large machinery and equipment rentals.

4.4.4 Shipping

Each authorized dealer outlet places orders directly with Hilti and is not required to route through centralized purchasing. Upon receiving an order from a dealer, Hilti fill and ships it to the authorized dealer via normal shipping channels. However, complications arise when authorized dealers request that Hilti ship orders directly to the end user.
As noted earlier, A/Ds have been established to service difficult to reach customers in remote locations. The benefit to customers is that authorized dealers carry sufficient inventory of common items to meet customer needs. By carrying inventory, access to Hilti products is immediate and avoids a minimum 2-day shipping delay. If authorized dealers cannot fill an order from their inventory, a stock replenishment order is initiated which takes approximately two days. If this occurs, the benefits of an authorized dealer are negated.

Recently, authorized dealers have initiated inventory optimization programs to significantly reduce any low turnover items in their locations. If the optimization is too severe, limited product availability threatens to defeat the primary purpose of an authorized dealer, and inconvenience the customer with lengthy deliveries. If such circumstances become frequent, Hilti will have to reconsider the agreements in place. To avoid inconveniencing customers, authorized dealers may choose to request that Hilti ship products directly to their customers rather than routing through the authorized dealer.

Hilti actively discourages authorized dealers from placing customer orders to be shipped directly to the end user. When an authorized dealer orders products and deviates from the normal shipping location, an alert is issued by the system. In such circumstances, any preferential price discounting awarded to the authorized dealer is denied and the authorized dealer will be automatically charged non-discounted prices reflective of small customers. The reason for such a drastic penalty is to ensure that the authorized dealer is holding true to its commitment to maintain sufficient inventory to fulfill customer demands. Taking the business directly and circumventing the authorized dealer would provide better service to the customer and Hilti would not have to surrender profits to the authorized dealer.

4.5 New Business Channels

4.5.1 Home Depot

As an extension to authorized distributorships, Hilti has begun to establish specialty “shop in shop” outlets in participating Home Depots throughout North America. The concept of a shop-in-shop is to sell Hilti products in specific section within select Home Depots. Home Depot is an entirely separate channel that can service large, medium and small customers in a retail environment. Although revenues generated through Home Depot are included in overall
regional sales, unlike integrated supply, rental and authorized dealers, they do not earn commissions for AM’s.

These outlets are staffed by Hilti employees who market Hilti products to Home Depot’s walk-in small contractors and homeowners; hence the name shop-in-shop. The success of the program stems from exposure to an entirely new category of customer. Customers benefit by accessing the expertise of Hilti, which is tailored for the small contractor and homeowner, and Home Depot benefits through the increased customer draw for Hilti power tool and fastener purchases. Inventory, pricing, and wages are managed by Hilti, thus, Home Depot does not incur any associated costs and Home Depot administers sales transactions, and collect any credit card fees and/or interest on their Home Depot personal line of credit program.

Home Depot pricing is independent of other channels, has been established to be consistent across the nation and closely reflects SCP. If a customer were to compare Home Depot prices with those in HC’s, the variances would be minimal. As discussed earlier, SCP is a default template for those situations where a customer is not auto-priced. AM’s primarily service medium to large customers, their pricing is representative of a high volume potential that often results in a price lower than SCP.

Since Hilti makes the investment in establishing these outlets, the decision to expand, maintain or exit operations is primarily Hilti’s. The key success factors in this program are profits and market penetration into new non-traditional markets. The program is becoming quite successful in the United States, in Canada however, the program has stagnated with only four locations, and it is unlikely that more will be added.

4.5.2 E-business

E-business is the newest and least costly channel through which to process sales. It is scheduled to go live in the 4th quarter of 2004. The program provides appropriate information, such as account status, credit limits, pricing, invoicing history, purchasing history and offers intuitive selection algorithms to reliably place orders and accurately route shipments. Furthermore, all accounts can receive critical milestone confirmations, such as e-mail delivery notifications.

For Hilti customers, the advantage of E-business is that orders can be made quickly and efficiently at any time and from just about any location. The order is placed directly into the
system and SAP initiates all the appropriate operations and provides better visibility into the supply chain. While offering great convenience, E-business will be the most cost effective channel without incurring the costs of AM's, HC's or CSR's.

E-Business will not offer additional discounting incentives to purchase through this channel. Pricing and discounts are assessed and established by the assigned AM and built into the account pricing template.

4.6 Channel Pricing

Table 4 illustrates pricing templates and target markets for the various channels. The yellow highlighted areas represent the target market that Hilti considers to be ideally serviced via the corresponding channel. The AM is best utilized by servicing medium and large accounts, while the HC is primarily intended for small to medium sized customers with some anticipated leakage to large accounts. As the CSR is the least costly processing channel, all accounts are directed to use the CSR for order transactions and customer service inquiries. The STS and Home Depot channel have been established to service small customers, while the Integrated Supplier (IS) remains a third party consolidator for medium to large customers. In 2005, E-business will be capable of processing inquires for all accounts, including alternative business channels. Alternative business channels service small core customers as well as small to large non-traditional customers in new markets. With the exception of Home Depot, any sales of Hilti products will pay commissions to the AM's ranging from 3% to 6% on the net value of the order.

Table 4 also illustrates typical pricing that small to large customers would expect to pay, based on a hypothetical heavy-duty tool with a list price of $1450. Hilti has traditionally rewarded customers with high volume potential, therefore, large accounts show the greatest discount. Regardless of the channel, a small to large customer would expect to pay approximately $1073.00 to $1015.00 for this tool.

Since the STS markets to small customers, it would be inconsistent for pricing to differ from that of the AM, HC and CSR, thus, small customers pay approximately $1073 through the STS for this tool.

The Home Depot price approximates the posted SCP price displayed in the HC. If customers have not been auto-priced or purchased this tool from Home Depot, they would still pay an equivalent SCP of $1334.00.
To allow for a mark-up and resale at a competitive price, price discounting is much
deeper for the authorized dealer and rental channels. Rental firms purchase more tools than
authorized dealers, therefore, rental accounts have traditionally paid slightly less for this
particular tool than authorized dealers. Usually, resellers hope to mark-up tools anywhere from
10% to 30% depending on the account or competitive situation of the sale. This translates into a
buying price of approximately $957.00 and a resale price ranging from $1087.50 to $1247.00 for
a tool that hypothetically lists for $1450.

Table 4: Channel Pricing

<table>
<thead>
<tr>
<th>Channel</th>
<th>Customer Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
</tr>
<tr>
<td>AM</td>
<td>$1,073.00</td>
</tr>
<tr>
<td>CSR</td>
<td>$1,073.00</td>
</tr>
<tr>
<td>HC</td>
<td>$1,073.00</td>
</tr>
<tr>
<td>STS</td>
<td>$1,073.00</td>
</tr>
<tr>
<td>HD</td>
<td>$1,334.00</td>
</tr>
<tr>
<td>IS</td>
<td></td>
</tr>
<tr>
<td>E-Business</td>
<td>$1,073.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Re-sale price range to end-user</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy</td>
</tr>
<tr>
<td>A/D</td>
</tr>
</tbody>
</table>

SCP $1,334.00

4.7 Key Issues

Hilti’s objective is to increase market share and expand into new markets by accessing a
non-traditional account base. The purpose of this initiative is to open a channel for customers
who are difficult to service, and give them immediate and local availability to Hilti products. For
Hilti, the challenge in such an undertaking lies in protecting its core business earned through pull
marketing and direct sales, while pursuing opportunities with non-traditional customers in new
markets through a distributor push strategy. This strategy will capitalize on the rapid growth of
new markets. The goal is to accomplish this while minimizing redundancy and mitigating
channel conflict.
Key issues that threaten alternative business and the possible expansion into urban and segmented areas are:

- Channel Conflict
- Strategic Fit
- Account Manager Compensation
- Profitability

These issues are considered in order to establish: first, whether alternative business channels are providing a benefit and; second, to identify opportunities for improving the program. Additionally, if alternative channels are not delivering the benefits necessary to sustain the program, an exit strategy will need to be considered in order to divest Hilti interests while minimizing lost revenues and the impact to customers.

4.7.1 Channel Conflict

Conflict 1: Account Manager and Authorized Dealer Account Ownership

Channelling is a screening process designed to separate and classify accounts based on their market specialization and sales potential. Firms aim to direct their customers to the channel that can best service them at the lowest costs. Incentives are awarded to the AM for sales growth through their respective channels. Currently, alternative business channels and AM’s consider each other competitors, rather than partners. The main contention derives from account ownership. Many customers maintain accounts with both Hilti and the distributor. When a joint customer (common to both Hilti and authorized dealers) elects to purchase directly from Hilti, alternative business partners regularly see this as a violation of the agreement, and a price-war may ensue. Distributors are accustomed to dealing with manufacturers that do not market to end users and, thus, expect the manufacturer to send customers to them. However, although initially distributors were aware that Hilti will maintain the direct sales strategy, the circumstances were not completely understood. Conversely, conflicts also brew when AM’s believe their business is channelled to authorized dealers. In cases such as these, the potential for price-wars could jeopardize margins and increase rivalry.

It is Hilti’s intention to direct small and specific customer segments to authorized distributors. However, the most lucrative accounts will continue to deal directly with Hilti.
Conflict 2: Customers and Channeling

The primary benefits of collaborating with a distributor network include channelling small and non-traditional customers, and gaining access to new markets and customers. However, these relationships come with the risk of customer alienation and abandonment. For instance, small customers may feel that they will not receive the same level of services. Managing channel conflict requires the segregation of customers into their various sizes and segments, without offending them. It is important that all customers feel their business is appreciated. Small customers can become large customers or, employees of small customers may migrate to larger firms and influence purchasing decisions.

Hilti’s core business has traditionally focused on selling heavy-duty tools to medium and large professional contractors. Recently, there has been innovation directed towards new markets, such as residential wood frame construction. Hilti is expanding into light-duty tools and hopes to introduce these innovations through AM’s, HC’s and STS’s. However, many of these items may be considered a secondary focus by the direct sales force, which reflects the historical incentives that have been geared towards marketing primary products to the professional contractors.

Traditionally, small customers have not considered Hilti as a supplier due to limited access or limited product diversity. To penetrate segmented markets and gain market share, Hilti is initiating push marketing. The direct sales force is the most effective marketing tool Hilti possesses. However, there are no substantial incentives to market secondary product lines to small customers, nor is this an efficient way to use this resource. Therefore, introducing innovation to non-traditional markets is limited to walk-in traffic in the HC and the telemarketing efforts of the STS.

One possible solution to penetrating new markets and minimizing channel conflict is to initiate selective distribution and versioning of secondary products through distributors that specialize in those markets. Selective distribution entails limiting distribution to only non-core products. In versioning, only standard, or basic, models of tools or consumables are available through distributors. With these initiatives, strategically established distributors in various urban and rural market segments could be authorized to market select Hilti products, exclusively or semi-exclusively, to small and non-traditional customers. This would minimize the conflicts between the AM and authorized distributor. Authorized distributors would be limited to only
those products that AM’s do not normally focus on, ensuring that the sales of primary products are channelled, internally. Furthermore, large and medium sized customers require greater variety in consumables and tool options, therefore, they prefer to source products directly from Hilti, ensuring that the best products for their applications are selected.

Selective distribution and versioning can also minimize customer alienation. The strategy to classify customers into various sizes and direct them to appropriate channels benefits the customers and Hilti. Customers’ benefit by being directed through the channel best suited to their needs. For example, small customers tend to pay for items with cash or perhaps credit cards. Contending with cash or credit card sales can be quite cumbersome for Hilti, as the systems are structured to sell large quantities through customer pre-approved accounts. Therefore, channelling small customers would reduce transaction costs and maximize the utility of both the AM and HC in marketing core products. Small customers adapt to purchasing Hilti through A/Ds because those dealers are positioned as vendors of Hilti products, which are specifically targeted to their needs. The tendency is to bundle Hilti products with building materials, which is advantageous to the customer.

This analysis reveals many strengths and benefits of the alternative business platform that may provide a strong foundation upon which to build. By addressing the issues revealed in this analysis, using strategic alliances with distribution partners and establishing a comprehensive strategy to move ahead, Hilti can reach markets and customers that have traditionally been underserved.

4.7.2 Account Manager Compensation

Conflict 3: Lost Income

Strategies with multiple channels can become emotionally charged and destructive when contending with a direct sales force earning commissions on sales. By policy, any product intended for use in a territory, belongs to the hosting AM, as do the commissions earned. If the sales were not allocated to the AM, a price-war could result, pitting AM’s against authorized distributors. This would greatly reduce margins and erode the net market value of Hilti products.

Selective distribution and versioning will protect AM income. Leakage of any core product sales into the territory will be minimized by limiting the variety of products distributed.
through alternative business channels to only those that are relevant to the authorized dealers target market

**Conflict 4: Lost Revenues**

Marketing through alternative business channels may also represent lost revenues for the AM. The reason for this is that any product sold direct to the customer is purchased at market price. If the same sale was directed through the authorized distributor, the AM must sell it to the authorized distributor for less, enabling them to add a mark-up. This further threatens AM incomes because selling products at lower prices translates to lower commissions and incomes. It will be at the discretion of the AM to select which accounts will be directed to the alternative channels and which will remain under their control. The decision greatly hinges on the AM's assessment in determining if accounts can be serviced better and/or sales increased through the authorized dealer.

**4.7.3 Strategic Fit**

Hilti must evaluate the strategic fit of increasing distributors as a way of securing alternative business, and assess whether this hinders or complements its strategy and core competencies. Furthermore, agent/principal relationships must be developed to build brand equity, align customer perceptions and establish market positioning.

As a differentiator, the success of marketing a premium product lies in the ability to demonstrate and reinforce the value-added that Hilti features and benefits deliver. However, it is important that sales people find the balance between up-selling the product and capturing the premiums. Historically, the success of Hilti comes from direct marketing and selling. In-house sales specialists are well-versed and knowledgeable about Hilti products as well as industry practices, and work well matching customer needs with appropriate products. While addressing the requirements of an expanding and diverse market, the introduction of distributors may add an element of confusion for those used to the historical model.

Hilti is somewhat limited in how many direct representatives are available to call on accounts. For this reason, it is relatively inexpensive to collaborate with distributors and pay them a commission (profits earned) for stocking, marketing and closing the sale of its products.
Furthermore, A/Ds already have an established account base that prefers to build on their purchasing power with one vendor.

A critical oversight in collaborating with select distributors is to not pay attention to strategic fit with respect to their strategies. Distributors are structured to carry the products of many different manufacturers. The level of expertise and knowledge in the distribution ranks is not as high as those who directly represent manufacturers. Additionally, distributors may not have the expertise, time or willingness to spend with customers, demonstrating the value-added to the degree that Hilti expects.

High inventory turnover is the usual strategy for distributors. For this reason, it is easier for them to sell on price. Faced with taking a sale on a product with which the customer is familiar, a distributor is not likely to direct the customer to alternatives offering better quality at premium prices. However, branding saves both the vendor and the customer transaction costs, and limits the risk in making a buying decision. Hilti has high brand recognition in the commercial and concrete power tool and fastener industry, but little brand equity in the residential and wood frame market.

In marketing a differentiated product through distributors, both entities must be cognizant of the direction and strategic intent that each chooses to pursue. The outcome of trying to amalgamate two different marketing strategies may have severe consequences. For instance, consider an innovative and differentiated product capable of capturing a premium. This product may never realize its full potential if the distributor initiates conflicting marketing approaches and decides to turn inventory at a low price. A gem can quickly become tarnished if the marketing strategies are not unified and aligned.

It is critical to identify distributors who specialize in Hilti’s type of business and differentiate their brands as well. Aligning a differentiated supplier with a differentiated distributor solidifies customer perceptions and minimizes confusion in the market. Effective advertising could preserve the marketing strategies of both entities. Marketing might be tailored to inform customers that the same great products from Hilti are now available from the local, reliable and clearly differentiated distributor as a result of a partnership between the two organizations.

Brand dilution is a potential hazard in the sense that Hilti is branded as a differentiable product complemented by professionalism, site training and expertise. All of these attributes may
not be offered through a typical high turnover distributor. Secondly, Hilti’s intent has always been to build brand equity in the name. Hilti’s reputation will be affected if distributors engage in unprofessional sales dialogue or conduct.

4.7.4 Profitability

Profitability is a critical key issue when considering channel expansion. This analysis investigates the profitability of the existing alternative business channels. The power tool and fastener industry is mature and highly competitive. To effectively market power tools in new markets, Hilti must intensify distribution through indirect channels. The decision to invest and expand in alternative business channels is contingent upon generating profits consistent with the expectations of the firm.

Profitability Issue 1: Pricing

Pricing has an impact on the profitability of all channels. Many Hilti products have already established a market price. The issue with A/Ds is price stability. Hilti’s success stems from successfully marketing core products and selling innovation through direct channels. The success of future operations is dependent upon this core formula. Hilti core products may be a secondary or tertiary product complementary to alternate business channels. This creates a problem. For example, a lumberyard specializes in the customization and packaging of lumber and building materials. To serve their customers better, they may elect to bundle Hilti power tools and fasteners with the order, to make the package more appealing. The motivation behind this is to earn profits on the lumber and building materials, while bundling power tools and fasteners at low margins. The only way to offer an incentive is by bundling building materials with a non-commodity item. It is common and a logical authorized dealer strategy to leverage power tools and fasteners at low margins (or cost) as incentives to secure business and maintain relationships.

This form of bundling erodes Hilti revenues and profits. Where AM’s have traditionally sold those products at market prices, the customer now will be inclined to purchase these products
through the reseller, at loss leader pricing. While it is the resellers’ prerogative to sell at any price they choose, this can significantly erode the market prices of Hilti products, thus, affecting profitability. Selective distribution is designed to minimize competition between direct and indirect channels, leaving core products and innovation to direct channels, while distributing secondary products through alternative business channels.

Figure 22 illustrates the present sales processes of all channels. The process begins at the left with all Hilti products and the objective is to get products to the end user on the right. In between are the paths that products must traverse in order to reach their final destination. However, before considering the process, it should be noted that customers are able and encouraged to place orders through the CSR. This channel has proven to be the least costly to process orders, and caters to any size of customer or account. Approximately 51% of all orders are processed through the CSR.

Beginning with large and medium size customers, any product can be ordered through direct channels (AM, HC, CSR) or indirect channels (rental, IS and A/D). Table 5 summarizes an analysis of the cost of sales through various direct channels. It is estimated that an order processed through the AM has an average cost of approximately $142.13, while the HC is much less at $55.02 followed by the CSR at $21.30.

---

36 Loss Leader Pricing is an industry term to acknowledge common and commoditized products sold at very low margins to compete. Often a customer’s decision to consider alternative vendors hinges on the vendor’s willingness to sell those products at the lowest price.
Table 5: Estimated Cost of Sales

<table>
<thead>
<tr>
<th>Estimated cost of a sales</th>
<th>AM</th>
<th>HC</th>
<th>CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs*</td>
<td>$170,552.79</td>
<td>$247,570.21</td>
<td>$104,418.51</td>
</tr>
<tr>
<td>Average # of calls per day*</td>
<td>5</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Average # of calls per week*</td>
<td>25</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Average # of weeks annually*</td>
<td>48</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>Total number of calls</td>
<td>1,200</td>
<td>4,500</td>
<td>4,900</td>
</tr>
<tr>
<td>Average cost per call</td>
<td>$142.13</td>
<td>$55.02</td>
<td>$21.31</td>
</tr>
<tr>
<td>Average order size</td>
<td>$450.00</td>
<td>$450.00</td>
<td>$450.00</td>
</tr>
<tr>
<td>Average commission rate</td>
<td>4.8%</td>
<td>4.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Average commission paid</td>
<td>$21.60</td>
<td>$21.60</td>
<td>$21.60</td>
</tr>
<tr>
<td>Average total cost per order</td>
<td>$163.73</td>
<td>$76.62</td>
<td>$42.91</td>
</tr>
</tbody>
</table>

*Based on estimates
These figures were calculated by dividing the total cost of the channel by the average number of calls or transactions each channel facilitates. As revealed in Table 5, the average number of calls varies greatly between the AM, HC and CSR, with the AM averaging 5 sales calls per day, while the HC and CSR are 18 and 20, respectively.37

Figure 23 is an example of a commission rate schedule which is used to determine the percent commission that an AM will be paid on the sale of Hilti products. The percentage is a sliding scale, which varies with discounts applied to the product sale. As highlighted in yellow, 90% of all orders for Hilti power tools and consumables have an average discount range from 63% to 33%, which pays AM’s commissions between 3.0% and 6%.

The average discount rate is estimated to be 52.5% (highlighted in green), which correlates to a commission rate of 4.8% applied to the net value of the sale.38 As mentioned earlier, the average order size processed through any of the direct channels is approximately $450. To calculate the average total cost per order, the average commission rate is applied to the average order size and added to the average cost per call. In this example, $21.60 is added to the cost of all channels, because AM’s are paid commissions on the sales of all products through any channel with the exception of Home Depot.

37 Based on estimates.
38 Based on 2003 internal sales data for Canada.
This translates to an average total cost per order of $163.73 for the AM, $76.62 for the HC and $42.91 for the CSR as listed in Table 5. Ideally, all routine orders should be processed through the lowest cost channel, which is the CSR. Often, customers insist on conducting business directly with AM. In these cases, the AM invests time in collecting the order information and then must call the CSR to relay the order. When the AM and CSR work on one order, the average total cost per order is the sum of the AM and CSR processing costs, estimated at $206.64.

For indirect channels, the ability for ADs to process orders through AM’s incurs unnecessary costs. This is highly discouraged because, when this occurs, the profits evaporate into elevated processing fees. ADs are more familiar with order processing and all orders should circumvent the AM and go directly to the CSR.

Processes for small accounts have been streamlined. The primary difference is that AM’s have been able to direct orders through less costly channels. These channels include the HC, STS and CSR direct channels as well as rentals and authorized dealers. The cost associated with
processing orders applies to the channel and not the customer size, thus, the costs outlined in Table 5, also apply to small customers.

Inefficiencies have been identified in facilitating sales through rental and A/Ds. Since these accounts are managed by an AM, the tendency for indirect channels to place orders through the AM remains possible, thus, increasing sales costs and eroding profits. Ideally, indirect channels should be given incentives to place orders through the CSR channel and ultimately with E-business, when it goes live in 2005.
5 RECOMMENDATIONS

The issues identified in section 4.7 focused on the viability of the Authorized Distributor program in rural areas: In this chapter, the benefits, impact and returns of establishing ADs in urban areas will be explored. Furthermore, the viability of utilizing this channel to enter new markets with an expanded line of light-duty power tools and fasteners will be assessed.

5.1 Channel Conflict

The size, fragmentation, diversity and geography of the industry make it well suited for channel expansion, however, alternative channels cause Hilti some concern. The main points of contention derive from products marketed, account ownership and the process of channelling large, medium and small customers. Both AMs and A/Ds feel that Hilti pays little attention to this issue; the perception is that regardless of the channel, Hilti is in an advantageous position to earn revenue.

5.1.1 AM and A/D Account Ownership

The purpose of channel expansion is to achieve a strategic and systematic progression into new markets. The intention is to cover the widest spectrum with a minimum of distributors, rather than saturate the industry through establishing as many non-selective distribution channels as possible. Hilti’s purpose is to introduce innovation and establish itself as a preferred vendor to non-traditional customers. To achieve this, Hilti must minimize channel conflict and customer confusion by establishing a clear strategy: One that is fair, self-maintaining and well-adjudicated for both multiple distributors and direct sales.

In both rural and urban regions, the present model is to route medium and large customers to direct channels. Although this is more costly to Hilti, these accounts have traditionally generated lucrative returns, which are attributed to the attention and expertise they receive. Also, medium and large customers require a greater variety of products and are eager and early adopters of innovation to maintain their competitiveness. It is now expected that, when an AM visits a customer, some form of beneficial innovation will be demonstrated. Other than ensuring that routine orders are placed through the lowest cost channels, this analysis did not reveal any need to deviate from the direct sales and marketing strategy with regard to medium and large customers.
On the other hand, small customers are generally difficult to access and costly to service; nevertheless, they are a very important part of current and future business. Small customers constitute close to 37% of the revenues and 24% of the account base\textsuperscript{39}. To ensure that this account base is realizing its full potential, multiple channel options have been established. These channels include the STS, HC and A/Ds. Note that small accounts generate disproportionately higher revenues, and because they are serviced by cheaper channels, disproportionately higher profits.

Selective distribution and versioning are the most effective strategies in minimizing channel conflict by redefining the roles of the STS, HC, AM and all ADs. Selective distribution entails limiting distributor access to only the secondary and specific products tailored to the specialization of the distributor and demanded by small customers. In versioning, only standard or basic models of tools or consumables are available through distributors, again, specific to the target markets and specialization of the distributors. If customers require more feature-intensive versions or customization, they should be redirected to the HC or STS. Table 6, lists the benefits of selective distribution as it applies to minimizing channel conflict.

Hilti also segments AM’s and customers into their trade specialties. For instance, electrical AM’s dealing specifically with electrical contractors generates efficiencies. Similarly, urban ADs will have to be segmented to the appropriate AM. If opportunities arise in establishing an electrical A/D in an urban area, that account will be awarded to an electrical AM specialist in the area. Similarly, a general construction A/D will have to be assigned to the appropriate AM. By specifically targeting any trade sales to the hosting AM specialist, any internal conflict regarding sales allocation and commissions will be limited and controlled.

Finally, some customers have been given erroneous information, this implies that the AM channel has been disbanded and the A/Ds have assumed full control with regard to distribution for the industry. Selective distribution will redefine the roles played by each channel and the resulting relationships to the customer. Effective communication through advertising and marketing will ensure that customers understand the structure and intent of each channel as it applies to them.

\textsuperscript{39} Estimates from 2003 internal sales data.
Table 6: Benefits of Selective Distribution and Versioning

<table>
<thead>
<tr>
<th>Channel</th>
<th>Benefits of Selective Distribution &amp; Versioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Segregates small customers from the medium and large. In doing so, protects the core business as marketed by the AM and gives unencumbered pricing privileges to those customers. However, the sales revenues of small customers, regardless of the channel, will have to be awarded to the AM to eliminate any controversy or perceived threats in losing business to small customers. This is most prevalent when project contracts are awarded to small customers that will otherwise be awarded to medium and large customers. With the exception of Home Depot, all sales orders placed through direct and indirect channels pay a commission (approximately 3% to 6%) on the net value of the sale to the AM.</td>
</tr>
<tr>
<td>STS</td>
<td>With selective distribution, the STS has a better understanding of the role that each channel plays and is able to direct customers to the best servicing channel. Incentives to market and differentiate Hilti over the competition should be awarded, regardless of which channel the item was purchased.</td>
</tr>
<tr>
<td>HC</td>
<td>Like the STS, incentives will be geared towards marketing Hilti to small customers and encourage the customers to purchase through whichever channels services them best. Selective distribution benefits the HC by giving them the option to channel customers to the A/D and enabling the HC to focus on core products for more lucrative customers. HC’s will carry a limited selection of secondary products. A/Ds should be structured to carry a greater variety of Hilti secondary products.</td>
</tr>
<tr>
<td>A/D</td>
<td>A/Ds could benefit by selective distribution, because they will be structured to carry secondary Hilti products specific to their customers and specialization. They will not feel threatened by the AM, as the AM will be focusing on medium to large customers. The STS and HC should be given incentives to direct customers to A/Ds.</td>
</tr>
</tbody>
</table>

5.1.2 Customers and Channelling

Ideally, Hilti will service large and medium customers, and will direct small, difficult to access and non-traditional customers to A/Ds, who are better structured to service those customers. However, successful implementation of this program maintains that customer satisfaction is paramount, and the option for any customer to deal directly with Hilti is still available. Whether through Hilti direct channels or ADs, the customer must continue to recognize and regard Hilti as providing high utility, while feeling free to choose any business channel.

Successfully managing channel conflict depends upon understanding the customers’ specialization. Those customers who are considered small, but specialize in concrete or commercialized construction, are inclined to conduct business directly through the STS, HC or AM; while customers specializing in non-traditional markets may prefer alternative channels.
Therefore, the goal is to structure the alternative business model so that customers are automatically directed to the channel that serves them best.

By limiting access to a few core and secondary products, the process through which customers are channelled becomes automatic. For example, a wood frame contractor prefers to do business with their lumber wholesaler and is given the opportunity to buy Hilti tools specific to the application and possibly bundled in a volume package. At the same time, the A/D is also awarded access to only one or two standard versions of heavy-duty tools (core products) and some consumables. If at any time that contractor requires a tool with more features or has specific consumable needs, he/she is directed to the HC or AM for sales consultation. With such a system in place, AM's will be able to continue marketing innovation and core products to medium and large customers with little or no interference from the A/D, while the A/D caters to the specific needs of the wood frame contractor. A/Ds are capable of supplying routine and common applications with the appropriate Hilti products. Because the HC is mandated to carry an inventory of core products, the A/D should be structured to carry a greater range of secondary products.

However for unique and non-standard applications, the customer is always better serviced directly by Hilti. For example, a residential contractor is required to drill a deep hole at a very specific location in a concrete foundation that is heavily reinforced with steel rebar. The challenge is to avoid the steel bars embedded in the concrete and, to complete the project, the contractor requires a longer drill bit. Through direct consultation with Hilti, the customer may learn that a larger tool or enhanced safety features are required; that the density of rebar in the foundation requires an entirely different tool, such as a diamond drill. This highly innovative tool is offered through Hilti, exclusively, and can be used to drill a hole through rebar, to the desired depth in a specific location.

Versioning is also effective in minimizing channel conflict. Here A/Ds are given access to the basic models of select tools. This allows the A/D and Hilti to be more sensitive to the needs and budgets of small customers, while still enabling customers to upgrade or customize their tool specifications by going to Hilti, directly. A/Ds understand the tools they sell as they apply to their specialization. However, any tool enhancements require time and resources in order to become competent with them, therefore, dealing directly with Hilti better services the customer. Table 7 is an example of just a few varieties of tools and consumables that might comprise the standard offering under selective distribution and versioning.
Table 7: Example of A/D Selective Distribution

<table>
<thead>
<tr>
<th>Core Products (Versioning)</th>
<th>Secondary Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-Duty Tool: TE-2 Standard.</td>
<td>All wood cutting, drilling and sanding tools: Reciprocating Saws, Circular Saws &amp; Jig Saws. Relevant consumables as well.</td>
</tr>
<tr>
<td>Heavy-Duty Tool: TE-35 Standard.</td>
<td>All light-duty battery drills and screw guns.</td>
</tr>
<tr>
<td>Hammer Drill Bits:</td>
<td>Screw fastening drills, collated screws and sub-floor adhesives for wood frame construction.</td>
</tr>
<tr>
<td>Sizes 3/16&quot; to 5/8&quot; – one standard length of each.</td>
<td></td>
</tr>
<tr>
<td>Anchor Bolts:</td>
<td>Diamond blades for circular saws.</td>
</tr>
<tr>
<td>Common sizes with customers able to purchase in smaller quantities than standard offering from Hilti.</td>
<td></td>
</tr>
</tbody>
</table>

5.1.3 Cautionary Note

Figure 24 demonstrates the potential and magnitude of a stocked AD versus a non-stocked AD. It emphasizes the importance that an A/D carry sufficient stock to fulfill the needs of the target customer. The red bars signify the benefits for Hilti, while the black bars represent disadvantages as they apply to the categories labelled on the horizontal axis. The magnitude of the benefits is representative of the index scale on the vertical axis. In each category, a value is assigned to Hilti and the A/D. For example in ‘product availability’, Hilti is rated 2, while the A/D is rated at the maximum of 10. Since 10 is 5 times greater than 2, the net benefit in having an A/D fully-stocked with Hilti products is 5 times more advantageous to Hilti. On the other end of the spectrum, Hilti ranks highest in ‘differentiation’, while the A/D is not as proficient, rated 3. This implies that Hilti is at a ‘differentiation’ disadvantage by having ADs market Hilti products.

Two things should be interpreted from the graph. First, Figure 24 illustrates the complete spectrum of advantages and disadvantages as they apply to the category. Noticeably, the physical area of the red bars (including the red/white striped) exceeds the area of the black bars (disadvantages to Hilti). This is a reflection of the substantial benefits earned by having ADs stock Hilti products; also, that product availability and location are a great asset to customers. Typically, any deliveries from Hilti distribution centres could take approximately one day in urban areas, and at least two business days to reach the customers in rural territories. The benefit of the A/D is an immense convenience to customers who prefer to shop for products. This benefit
can only be realized through a commitment from the A/D to carry sufficient inventory enabling customers to acquire products immediately on purchase. Recently, the national A/D announced an inventory optimization initiative; as a result, the issue of product availability has become critical. If inventories are restructured or reduced to the extent that customer delivery time is reduced, the benefits of the A/D program will be substantially compromised. For this reason, it is critical to ensure that ADs carry sufficient Hilti inventory to fulfill demand. Fortunately, inventory is being recalibrated to stock only high turnover items. However, caution must be exercised to ensure that inventory cuts are not deep enough to compromise product availability and high order fulfillment.

Figure 24: Benefits of a Stocking A/D
A second point of interest focuses on the marginality of benefits to disadvantages when stock availability is excluded. By comparing the physical area of black to red bars, the benefits of the A/D program continue to outweigh the disadvantages. This illustrates the merits of the A/D program and reinforces the potential opportunities that lie in this channel, if it can be refined to accommodate Hilti’s best interests.

5.2 Account Manager Compensation

AM compensation issues derive from the way sales are credited and commissions awarded. AM’s are given geographic territories to work within, from which they must extract the maximum potential. The hosting AM earns commissions on any Hilti product revenues delivered within that territory, including those areas which also house an A/D. In order for the A/D to purchase products and add profit margin to cover their costs, products are sold through ADs at increased discounts (i.e., reduced pricing). To put this in context, through collaborating with the A/D, the AM loses revenue due to increased discounts. Higher discounts translate into lower revenues; thus, lower commissions will ultimately erode the AM’s net income. Even with lower transaction costs, increased time savings and incremental business generated by the A/D, the returns have not been seen to sufficiently to recover the initial income losses incurred through higher A/D discounts. Table 8 demonstrates the impact of alternative business on AM income.

Table 8: Account Manager Compensation Equilibrium

<table>
<thead>
<tr>
<th>Channel</th>
<th>List</th>
<th>Discount</th>
<th>Net Selling Price</th>
<th>Commission</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM direct</td>
<td>$5,000</td>
<td>34%</td>
<td>$3,300</td>
<td>6.0%</td>
<td>$198.00</td>
</tr>
<tr>
<td>Alternative Business</td>
<td>$5,000</td>
<td>53%</td>
<td>$2,350</td>
<td>4.8%</td>
<td>$112.80</td>
</tr>
<tr>
<td>Income Parity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM direct</td>
<td>$5,000</td>
<td>34%</td>
<td>$3,300</td>
<td>6.0%</td>
<td>$198.00</td>
</tr>
<tr>
<td>Alternative Business</td>
<td>$10,532</td>
<td>53%</td>
<td>$4,950</td>
<td>4.0%</td>
<td>$198.00</td>
</tr>
<tr>
<td>Alternative Business</td>
<td>$5,000</td>
<td>53%</td>
<td>$2,350</td>
<td>8.4%</td>
<td>$198.11</td>
</tr>
</tbody>
</table>

Percent Revenue Increase | 111%  
Increase AM Commissions by | 4.4%

For instance, if an AM generated a direct sale for $5000.00 and awarded a discount of 34% to the customer, the net value of the sale would total $3300.00. In doing so, this sale

---

40 Commission rates vary according to level of discount and profitability of the product.
would pay a commission of $198.00, based on an average rate of 6.0% as per the sliding commission rate scale discussed earlier in section 4.7.4. Conversely, if the AM determined that this sale should be channelled through the A/D, the discount would have to be higher in order for the A/D to be able to cover its selling costs and earn profits while selling the product to the end user at a competitive price. Table 4 depicts typical pricing as applied to various channels and A/Ds. By increasing the A/D discount from 34% to 53%, the commission paid on this sale was reduced to $112.80, a net loss of $85.20 to the AM.

Two options are available for the AM to recover lost income. First, Hilti could arbitrarily decide to increase commission rates by 4.4% and reward the AM for participating in the A/D program. Table 8 illustrates that an increased commission rate to 8.4% would yield $98.11 in commissionable earnings. However, the feasibility of increasing the commission rates does not make financial sense in that it would unnecessarily increase selling costs and defeat the initial purpose of establishing the A/D.

The second option is to increase sales through working with the A/Ds. According to Table 8, increasing sales by 111% (more than double) will result in net sales revenues of $10,532. With standard commission rates, the AM would be at parity with their current compensation. Furthermore, the territory revenues will increase which also is a deliverable of any Hilti AM.

Further, opportunity costs need to be put into perspective. For instance, the previous argument regarding income parity is credible when contending with products that were historically marketed directly and later channelled through the A/D. However, secondary products represent incremental business to both the AM and A/D. In the example above, the additional sales generated to establish income parity could be attributed entirely to secondary products. Therefore, the AM’s realize additional revenue from sales that were not historically theirs. This fulfills the strategic intent of the A/D program, plus adds revenues onto the AM’s net sales.

Selective distribution and versioning will reduce channel conflict. By targeting non-traditional customers and directing them to lower cost channels. AM’s will also benefit Alternative business offers benefits to the customer through increased convenience and availability of Hilti products. Although selective distribution limits products to only those that are pertinent to specific areas, the range and depth should be sufficient to meet greater than 85% of demand. This requires that the AM and A/D Branch Manager (BM) work together. In
addition, they need to be tuned-in to construction trends and practices and the needs of customers. The product inventory of the A/Ds are open to negotiation between the AM and BM, however, the products stocked will be at the discretion of the AM and limited to non-core and secondary products.

By successfully structuring the product mix available through A/Ds, the AM’s role will be redefined. The AM will provide high level services and specialty products. A productive partnership will evolve between the A/D and the AM positions. The A/D will service selective products used for routine applications and will call upon the AM to service those customers requiring further expertise, knowledge and experience.

This strategy limits customer alienation, preserves the relationship between HILT1 and its A/D partners and emphasizes the value-added that AM’s provide. To some, the level of autonomy given to the AM may appear excessive. However, as discussed earlier, it is part of the Hilti Gung Ho culture to empower individuals to conduct business on behalf of the company. The AM is a highly-trained business representative. If at any time, they feel that issues require more involvement from management, an extensive network of managers and specialists is in place for consultation.

5.3 Strategic Fit

Before expanding distribution into urban areas, Hilti must evaluate the strategic fit of supplementing the urban branches as a viable strategy, and consider whether such actions complement or clash with its strategy and core competencies. Historically, Hilti’s success has been built on selling direct to end-users utilizing a differentiation strategy to market the value-added that its features and benefits deliver. Figure 24 illustrates some of the benefits with respect to strategic issues, such as advertising, access to new markets, penetration, retention, customer service, branding and differentiation. Introducing distributors will have advantages and disadvantages. In order to expand into urban areas, it will be essential to collaborate with organizations that have synergistic potential and reflect Hilti’s differentiation strategy. Therefore, Hilti will need partners structured to complement its differentiation strategy by enhancing and building upon the positive benefits illustrated in Figure 24. Ideally, any partner should demonstrate similarities to the strategic fit analysis (see Figure 8).
5.3.1 Access to New Markets

Hilti is limited by how many representatives it has to call on accounts and, therefore, stands to benefit from instituting the sufficiently stocked A/Ds. Collaborating with distributors is relatively inexpensive. Furthermore, A/Ds already have a well-established account base; one that reflects strong relationships and volume buying as well as a networking capacity in the target market.

Creative marketing is also a factor in ensuring that customers are well-informed and educated. Selective distribution and versioning is an initiative that limits the product range, enabling the A/D to become proficient in promoting specific Hilti products to the target market. Creative marketing messages will position A/Ds as valuable partners established by Hilti to service specific target customers, while relaying that their role as a vendor focuses upon select products.

5.3.2 Advertising

Advertising will reinforce Hilti’s traditional strengths, while highlighting new possibilities. Ideally, the advertising message will preserve the personalities of both partners, while informing customers that Hilti is now available at their local distributors. Traditionally considered an underdeveloped advertiser, Hilti stands to benefit from joint advertising with distributors. Options include cost sharing in advertising expenses and taking advantage of the A/Ds existing marketing methods, which might include catalogues, trade publications, storefronts, websites, promotional advertisements, marked vehicles and big picture ads.

5.3.3 Penetration

Penetration measures how many product lines are sold to a customer. Of a potential nine product lines, Hilti direct channels average 2.29 per customer\(^4\). The A/D program will accelerate Hilti’s penetration into new markets by selling light-duty tools and fasteners to non-traditional customers. The present market share is marginal, therefore, any further penetration realized by Hilti’s A/D partners is purely incremental business.

---

\(^4\) HILTI Internal Sales Data – 2004. We presently offer 9 different product lines.
Another benefit is the A/Ds promotion of non-Hilti-related product lines. For example, imagine a customer who traditionally purchases safety items or building materials from a distributor and, now, needs a power tool. The customer’s search for products will most likely begin at his or her preferred vendor, and it is unlikely the customer will spend the time and effort to search any further. If the vendor does not carry Hilti’s merchandise, the customer will purchase a competitor’s product. This not only represents a lost tool sale for Hilti, it also means the loss of on-going consumable business as well. Conversely, customers who are primarily interested in Hilti products also benefit by the partnership with ADs, through consolidating their purchases and single sourcing other items, such as safety supplies or building materials. Considering that such sales to new markets would have defaulted to the competitor, this represents incremental business for both parties.

5.3.4 Retention

Retention is the ability to generate repeat sales to new and existing customers; however, retention is also a reflection of how important and substantial Hilti products are to the customer’s business in terms of dollars. Referring to Figure 24, the chart reveals that the benefits and the deficits negate each other. This is because Hilti is capable of achieving high retention with large and medium size accounts, while retention with smaller accounts is less. To understand this concept, consider that medium to large customers will have higher overhead and labour costs. Even though, the amount of expenditures on Hilti items may represent only 1 to 2% of their total operational expenses, the value-added that Hilti delivers in saving time, labour costs, and performance has traditionally positioned Hilti as a preferred vendor to many medium and large accounts.

Small customers are more concerned with price and convenience, and less concerned with labour and overhead costs. They rely on single source suppliers, attuned to their needs. For instance, Hilti packages fastener products in quantities of hundreds or thousands. Most medium and large customers can always use whatever product remains on the next project, however, small customers are more resistant to purchasing large quantities. The A/D consolidates and supplies all of the small customer’s product needs, in the quantities required, at competitive prices. Therefore, it is easier and more convenient for small customers to deal with ADs and, by giving customers what they need, ADs offer the best solution in controlling the high retention costs of small customers.
5.3.5 Customer Service

Customer service is the first category where Hilti stands to lose in routing products through A/Ds. This is due to the A/Ds limited capability in matching many of the services that Hilti provides.

5.3.6 Differentiation

It is also important to partner with distributors who are similar in strategic fit and brand differentiation. A differentiated supplier, who is aligned with a differentiated distributor, solidifies customer perceptions and minimizes confusion in the market. Both entities must be cognizant of the direction and strategic intent that the other pursues. To realize the product’s full potential, a differentiated product is paired with compatible distributors. Figure 24 illustrates that ADs have a negative influence in this category. Therefore, the challenge will be to ensure that ADs are capable of differentiating, not only themselves but the products they represent.

Table 9 is a comparison of the strategic fit of Hilti and AGI. Clearly, Hilti is well-aligned to a differentiation strategy, whereas AGI is aligned to a low cost strategy. This is not surprising considering the nature of AGI’s business. AGI is not a manufacturer and does not incur R&D expenses. However, other aspects of the strategic fit profile can be compared and assessed to determine parallels between the two firms.

The most important aspects to consider are innovation directives, marketing strategies and scale effects. Innovation does not necessarily have to come in the form of products. AGI has demonstrated innovation through unique marketing and sales initiatives. For instance, at large industrial customers’ sites, specialized vending machines have been installed to dispense products and simultaneously charge the cost centre account. Discussions to include Hilti products in this initiative are currently underway.

Marketing also draws parallels. Like Hilti, AGI also staff a sales force to directly market all of their products to end-users. By using pull marketing strategies, Hilti benefits from the additional sales force at no further cost, and is able to train staff to distinguish Hilti products. Efforts will continue to educate and train AGI to differentiate Hilti product and sell the value-added. However, it will be up to Hilti to build brand equity, and consumer demand, through advertising and marketing efforts.
The scale effects of both firm’s point to two different strategies. When compared, Hilti is a flexible manufacturer and is more concerned with scope effects rather than economies of scale; on the other hand, AGI relies on high inventory turnover to earn profits. This presents some concern. Hilti prefers to operate at a slower pace, spending time on differentiated products to capture a premium. This misalignment has been overcome by establishing profit parity. For example, if AGI were to sell 10 competitors’ tools and pocket a gross profit of $1000, the same gross profit will be earned by selling 7 Hilti comparable tools. This is achieved by fine-tuning the purchase and selling-prices, and demonstrating the value-added to the customer. Table 4 is an example of typical pricing as offered through the various channels.

Table 9: Strategic Fit Comparison

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost Based Low Cost / Adequate Quality</th>
<th>Hilti STRATEGIC FIT</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commodity Vendor</td>
<td>Neutral</td>
<td>Innovator</td>
</tr>
<tr>
<td>Product Strategy</td>
<td>Rapid Follower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D Expenses</td>
<td>Low R&amp;D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>Centralized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Making</td>
<td>Less Autonomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Economies of Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>Mass Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>Comparative / Push</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Profile</td>
<td>Low Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Structure</td>
<td>Leveraged</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost Based Low Cost / Adequate Quality</th>
<th>A/D STRATEGIC FIT</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commodity Vendor</td>
<td>Neutral</td>
<td>Innovator</td>
</tr>
<tr>
<td>Product Strategy</td>
<td>Rapid Follower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D Expenses</td>
<td>Low R&amp;D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>Centralized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Making</td>
<td>Less Autonomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Economies of Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>Mass Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>Comparative / Push</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Profile</td>
<td>Low Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Structure</td>
<td>Leveraged</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.7 Branding

Hilti has good branding and awareness in professional grade power tools and fasteners. Rather than to any one particular product, Hilti strives to attach customer loyalty to the brand name. The objective is to build brand equity and pull customers into distributors, while clearly conveying the role of the distributor. Effective marketing, advertising and innovation will enhance customer loyalty and brand equity. However, caution needs to be exercised with respect to the customer’s perception of AGI.
Brand dilution is a potential concern. Hilti is branded as a quality product, complemented by professionalism, site training and expertise. AGI may not display these attributes in a fashion that is consistent with Hilti ideals. The objective is to maintain and enhance a reputation for exceptional quality and service and Hilti will not jeopardize this through the A/D program. Continual education, training and commitment to AGI will help to ensure that Hilti’s image is being upheld and enhanced, jointly, with our partners.

5.4 Profitability

The decision to invest in and expand distribution outlets is contingent upon delivering a return and generating profits consistent with the expectations of the firm. Other considerations that affect this decision recognize that the power tool and fastener industry is mature and requires intensive distribution through indirect channels to effectively market power tools in new markets. This analysis investigates the profitability of the existing direct and indirect channels, in order to assess the gross profits from each and identify opportunities to streamline processes and procedures.

5.4.1 Profitability Issue 1: Pricing

Pricing has an impact on the profitability of all channels, and price harmonization is an issue with ADs. Successfully marketing core products and selling innovation is essential for Hilti. If ADs choose to use Hilti core products as loss leaders, Hilti revenues and profitability will be compromised. Though such events seldom occur, safeguards need to be established to ensure that the cannibalization of Hilti core products is minimized. Table 10 is an example of current pricing templates for direct and indirect channels. First, recall that the AM is responsible for establishing pricing for all customers based on volume potentials and the segment into which the customer falls. Customer pricing offered through the HC and CSR is standardized through Auto Pricing. If for any reason a customer is not auto-priced, the price defaults to SCP. SCP is an acronym for Standard Contractor Pricing that, for the first time, is advertised on price tags within all HC’s.

In reviewing the pricing templates in Table 10, prices from small to large customers range from $1073 to $1015, respectively. If a large customer were to shop and compare prices between Hilti and an A/D, the price offered through direct channels would be approximately $72.50 below that of the A/D. With small customers purchasing through direct channels, the sale
price is expected to increase by $58, for a total of $1073. In comparison to the A/D, the price offered to the small customer may not deviate much from that of the large customer and, historically, is estimated to be approximately $1100.

If the aforementioned pricing structure is followed routinely, the relationship and market value of Hilti products will be productive and strong. Issues arise when ADs sell products at, or near, cost. In doing so, this could potentially establish a new floor price of $957. For the most part, ADs realize the earning potential of reselling Hilti products, however, it would be beneficial to develop an additional incentive program that would encourage the A/D to up-sell the value-added of Hilti products.

Table 10: Pricing Template

<table>
<thead>
<tr>
<th>Channel</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>$1,073.00</td>
<td>$1,044.00</td>
<td>$1,015.00</td>
</tr>
<tr>
<td>CSR</td>
<td>$1,073.00</td>
<td>$1,044.00</td>
<td>$1,015.00</td>
</tr>
<tr>
<td>HC</td>
<td>$1,073.00</td>
<td>$1,044.00</td>
<td>$1,015.00</td>
</tr>
<tr>
<td>SCP</td>
<td>$1,334.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A/D</th>
<th>Buy</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>$957.00</td>
<td>$1,087.50</td>
<td>$1,247.00</td>
<td></td>
</tr>
</tbody>
</table>

At present, indirect channels represent approximately 15% of total revenues, with the 85% balance generated by direct channels. Contrary to expectations, the average net discount extended to indirect channels was 2% greater than discounts applied to direct channels. Furthermore, gross margins earned through each channel were estimated to be almost equal.

These results imply two things. First, the discounts extended to A/Ds were not as extensive as perceived by AM’s. It is important to convey this information to AM’s because, if correct, this minimizes the issues involving how much income is sacrificed by selling through the A/D. Second, the present mixture of consumable and power tool products distributed though A/Ds generates profits that are consistent with the aggregate margins. If selective distribution and versioning is implemented, profit margins would be expected to remain the same.
5.4.2 Profitability Issue 2: Processes and Procedures

Profitability is concerned with more than gross margin. Inefficiencies in processes and procedures quickly erode profit margins. Recall that the definition of gross margin is: net revenues less the cost of goods sold. However, gross margin also accurately reflects inefficiencies in selling costs and redundant processes.

Figure 25 illustrates the revised sales processes of all channels using selective distribution of secondary products. The primary difference is the segregation of small customers from medium and large customers, with secondary products emphasized via the STS, HC, A/D, Rental and HD channels. The objective is to channel products to the end user with maximum efficiency.

The process begins at the left with Hilti core products and Hilti secondary products. Beginning with large and medium size customers, the primary variation from the original model (see Figure 22) is the method of processing A/D, Rental and IS orders.

In the original model, orders placed from indirect channels could be processed by either the AM or CSR. However normally, AM’s place orders through a CSR and, in this scenario, transaction costs increase significantly. For instance, the cost for an AM to process an order is approximately $142.13; however, it takes time to process that order and the opportunity costs of not using that time to pursue other new sales are in the order of $45042. When the AM acts as an intermediary, the cost of the order increases, as does the opportunity cost of having both the AM and CSR inactive. Eventually, selective distribution and versioning will limit the variety of products and orders, requiring less attention and involvement from the AM. This will translate into lower processing costs, and extend the revenue generating capacity of the AM. Offering incentives would help to ensure that alternative channels use the lowest cost channel to process orders.

42 Average order size. Estimates from Hilti’s internal sales data. 2003.
Sales processes are being more extensively revised for small customers. Figure 25 assumes that small customers only require secondary products. In reality, they will also require core products, which can be sourced through the HC or STS. In general, the profiling of secondary products should meet most of their needs.

The primary difference for small customers is the selective distribution channel. Replaced by the STS in this model, the AM has increased the time available to focus on large and medium customers. Additionally, the Home Depot channel becomes a viable option for customers. The HD, HC, STS, Rental and A/D represent the lowest cost small customer channels available at this time. Similar to large and medium customers, establishing incentives to ensure that alternative businesses order via the least costly channels will gain efficiencies. In this regard, the CSR is the best alternative until E-business comes online in 2005. By establishing incentives to ensure that the lowest cost channel is utilized for all orders, profitability will increase.
5.5 Recommendations Summary

After careful analysis of the four primary issues involved in deciding whether to maintain, expand or exit A/D channels in Canada, the following recommendations summarize the arguments and results of the analysis.

1. If plans to expand light duty tools continue, Hilti will be well-positioned to continue marketing these products to medium and large customers, through the AM, provided that incentives are awarded for growth. As well, selective distribution and versioning will provide access to new markets and non-traditional customers through A/Ds. A/Ds with differentiator strategic fit specializing in light-duty tools in new markets, will make ideal partners; they should be established to, exclusively or semi-exclusively, sell these tools to the target markets, enabling the AM to focus on primary and innovative products for the core markets.

2. All price discounts, across alternative business channels, should be harmonized to one discount template. This will minimize discrepancies and stabilize pricing throughout all A/D channels.

3. Increase profit margins in Rental. Expand the rental line of consumables and adjust price discounts to reflect the A/D template. Selective distribution and versioning will limit rental channels to consumables relevant to tools rented and re-sold.

4. The discounts applied to ADs were not as high as anticipated. Although the AM will sacrifice some revenues to support the A/D program, the lost income can be supplemented by sales growth through the A/D. AM’s will need to work with ADs to set quarterly sales targets, which are aligned to ensure that the core business is maintained and to capitalize on new business opportunities that are consistent with the Hilti’s expectations.

5. Since the aggregate gross margins are essentially equivalent between direct and indirect channels, perceived lower profits do not factor into the equation. That said, the A/D program continues to be a viable source of profitable revenues. Exiting is unjustified. Maintaining the present program promises to deliver marginal growth. If channel conflicts are kept to a minimum, expanding distribution outlets that are governed by selective distribution and versioning promises outstanding growth opportunities in new markets. Implementation of this expansion could be achieved through a pilot program in an urban market, which would expose any further potential issues or validate the results of this analysis.

This project was initiated to analyze an existing distributor network and consider accessing new markets by expanding the number of outlets into urban areas. Initially, channel conflicts, compensation, strategic fit and profitability were thought to be concerns. This analysis specifically investigated each of the issues. It has been determined that the right authorized distributor will generate benefits and enable Hilti to gain access to new markets and non-
traditional customers. With selective distribution, versioning and incentives, channel conflicts will be mitigated and the profitability increased. If successfully implemented, the company will continue to be successful in a competitive market through a highly regimented channel structure and intensified distribution.
REFERENCES


*Vancouver Building By-Law*, Section 3.1.7. Fire Resistance Ratings, Queens Printer, 1999. This publication contains material that is held by the National Research Council, National Building Code of Canada, 1995.

*Financial report*, 2003. Hilti group of companies proposed by the executive board of Hilti, Schaan, the Principality of Liechtenstein.


