

STRATEGIC ANALYSIS OF A MIDSTREAM OIL PRODUCTION SERVICE PROVIDER EXPERIENCING A LABOUR SHORTAGE

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ABSTRACT

Recently, Flint Energy Services Limited announced its objective to double revenue in five years by becoming Service Provider of Choice and Employer of Choice. This paper will look at the challenges facing this organization concerning the current shortage of labour in the oil and gas industry of Alberta. For Flint, to double revenue, a Human Resource Strategy is fundamental. Continued success will depend on retention of its knowledge capital as competition for qualified personnel intensifies. The recommended strategy has three key pieces: outsourcing human resource recruitment function including independent contractors; focusing on retention, especially key personnel; and building programs to successfully recruit and retain employees from the non-traditional labour force, especially Aboriginals. Should Flint choose not to focus on a specific Human Resource Strategy to ensure differentiation, Flint will see its competitive advantages diminish and profit margins decline as competitors increase their capabilities and customer expectations intensify.

DEDICATION

To my husband,

Shane Joseph James Flegel,

without whose support, dedication, and enduring love, this would not have been possible.

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GLOSSARY

Bitumen	A heavy, viscous form of crude oil. At room temperature, bitumen is like cold molasses. It must be heated or diluted before it will flow into a well or through a pipeline.
Conventional Upstream Oil Production	Traditional means of oil extrusion.
Downstream Oil Production	Production sector that consists of refineries, distribution utilities, wholesalers, service stations and petrochemical companies transporting of refined oil to the markets, both wholesale and retail.
DSP	Direct Service Provider, type of independent contractor, a labour force utilized by Flint Energy Services, Ltd.
Employment Rate	Refers to the number of persons employed in the week (Sunday to Saturday) before Census Day (May 15, 2001), expressed as a percentage of the total population 15 years of age and over.
Independent Contractor	Self-employed contract worker.
Labour Force	Refers to either persons who were employed or unemployed during the week (Sunday to Saturday) before Census Day (May 15, 2001).
Midstream Oil Production	Production sector that includes oil and gas pipeline systems that connect production and consumption areas, including the extraction of impurities from the oil, storage and transportation. Transforming crude oil to refined oil.
Oil Sands	Naturally occurring mixtures of bitumen, water, sand and clay that are found mainly in three areas of Alberta - Athabasca, Peace River and Cold Lake. A typical sample of oil sand might contain about 12% bitumen by weight.
Participation Rate	Refers to the labour force in the week (Sunday to Saturday) before Census Day (May 15, 2001), expressed as a percentage of the population 15 years of age and over.

1 INTRODUCTION

As the price for a barrel of oil reaches record highs and the unemployment rate for Canadians hits record lows, organizations in the oil and gas industry of Alberta have to reevaluate the way they conduct business. It is increasingly difficult to find qualified personnel at a reasonable price. Demand for a skilled workforce is out running supply and organizations cannot reasonably expect to avoid rising labour costs under these conditions. Therefore, how can an organization mitigate the impact of a labour shortage on its business? This strategic analysis will examine, both internally and externally, Flint Energy Services, Ltd. (Flint) of Calgary, Alberta, and how this organization should handle the demand for and supply of qualified labour.

1.1 The Issue

Flint is a construction organization in the oil and gas industry of Western Canada. In the past seven years, Flint has experienced rapid growth through mergers, acquisitions, and agreements with over sixteen organizations, growing from 1,600 employees and revenue of \$161 million to over 5,500 employees and revenue of \$744 million. Flint, has recently announced its objective to double its revenue in five years by becoming the Service Provider of Choice and the Employer of Choice to the oil and gas production sector of Western Canada. This objective will substantially increase management's responsibilities. Failure to manage this growth could cause Flint's margins and profitability to decline. Flint must continue to improve its operations and administrative systems to attract and retain qualified personnel who, in turn, will effectively manage the growth. Otherwise, Flint may not be able to capitalize on this growing market, with increasing labour, quality and productivity issues, weakening Flint's marketability and profitability.

Flint has concentrated on establishing itself as a large construction organization focused on the four key success factors of project management: safety, schedule, quality and cost. Flint successfully tenders and completes projects with outstanding safety performance, strict adherence to schedule and top quality work. However, Flint has recently begun to refuse projects due to a

shortage of labour. Continued success will depend on the retention of its knowledge capital as the competition for qualified personnel in the industry intensifies.

The increasing demand for qualified labour is ultimately increasing the costs to Flint. More than sixty percent of Flint's direct costs are labour related. As labour prices increase over time, it will affect Flint's profit margins in the short term, until the project managers can present to the customers the justification in rising costs. Some of Flint's agreements range from twelve to thirty-six months, while others are for a shorter duration, ranging from days to months. Although the entire industry is being faced with these challenges, a successful organization will need to respond quickly to the changing dynamics to ensure sustained profitability.

Flint engages in projects in one of two ways, either lump sum payment or cost plus. Lump sum is a fixed cost contract while cost plus is a gross margin contract; both have their advantages and challenges. Twenty percent of Flint's contractual agreements with customers are on a fixed cost or lump sum basis. Therefore, if Flint's labour costs rise due to competition for qualified personnel, in 20% of its contracts, Flint is not able to pass these increases on to its customers. This increase then becomes a direct operating cost and is calculated into Flint's overhead, directly affecting its bottom line. As for cost plus arrangements, Flint is in a competitive market and must ensure that its pricing is low enough to win the bid, but high enough to generate a profit.

1.2 The Industry

The province of Alberta, the focus of Western Canada's oil and gas industry, is subject to the economic cycles of North America: the demand for oil, the supply of oil, and the construction industry directly related to it. Alberta's economy is directly tied to that of the United States as 90% of Alberta's exports are across the American border. Therefore, as the United States economy has grown over the past 20 years, Alberta has had the strongest economy in Canada, with an average real rate of growth of 3.4% per year. Consequently, Alberta has had the lowest unemployment rate in Canada for over a year reaching a rate of 3.2% in October of 2005. (Alberta Economic Development Authority, 2005)

These economic cycles can create huge imbalances between the supply of new apprentices and the demand of hiring organizations. There is a lag between economic cycles and apprentice enrolment cycles creating an economic loss that occurs when apprentices cannot find

work or employers cannot find workers. Similar to the violent commodity cycles that can push markets to booming excess and then precipitate deep recessions, a particularly harsh reality of the construction and energy industries is the extreme volatility of the workforce requirements. Seasonal fluctuations can double or cut employment in half for many trades during the course of each year. This volatility in employment makes it difficult to attract and retain employees, as well as expensive to sustain systems that require investment in equipment and materials only to be faced with extended periods of under-utilization.

This volatile market with strong competition forces Flint to recruit individuals for its peak project times and maintain low overheads for its low project times, thus requiring Flint to have innovative human resource strategies to ensure manpower flexibility. Innovative hiring practices can be a key performance indicator for such an organization. Strategic human resource management requires that organizations engage in activities that enhance the contributions of individuals to the organization's productivity and effectiveness as well as meet larger societal and individual goals. As the implications of a changing competitive environment become clear and companies try to reduce costs while improving performance, attraction of people with critical skills will be the challenge and the industry will need creative solutions to develop and implement human resource programs to foster attraction and retention.

1.3 The Process

By completing a strategic analysis on Flint Energy Services, Ltd., this paper will acknowledge the issues that Flint is challenged with and identify strategies for reaching its objectives, by both controlling its risks and exploiting its opportunities. How can Flint manage its human resources to maximize profits during this time of significant growth and tight labour market? Flint needs to develop strategies to maximize flexibility and profitability for the company, minimize risk, and allow for growth. The challenge facing Flint is balancing the requirement to save money with the need to meet workforce expectations. A new more innovative human resource strategy is required if this company is to achieve continued success.

First, this strategic analysis will look internally at an overview of Flint. This segment will describe the history, the specific strategies used in the last seven years, and the organizational structure of today, including the latest strategic objective to double revenue by becoming the Service Provider of Choice and the Employer of Choice. Second, this analysis will look at Flint's environment. This segment will examine the industries that directly affect Flint's operations, use

a business model to understand the supply chain, and discuss the external forces at a macro and microeconomic level. Third, this analysis of Flint will summarize the internal and external studies, compile the current strategies, and question where the areas of possibility are to control risks and exploit opportunities. The fourth part of this strategic analysis will explore specific strategies for Flint. The fifth segment of the analysis will evaluate the specified strategies, examining the costs and benefits of such strategies to ensure that Flint can reach its objectives. Finally, this analysis will conclude with a recommendation of the strategy that best suits the overall objectives of Flint.

2 INTERNAL ANALYSIS

The main purpose of this section is to analyse Flint internally to identify the existing and potential sources of sustainable competitive advantage (the ability of firms to earn above average economic profits over a long period of time). The first step is to understand Flint's chronological history; what were Flint's previous strategies that led it to this current position? The second step is to analyse Flint as an organization. Who are the decisions makers and what are their objectives? What is the financial health of the organization enabling it to take advantage of or control situations within the market? The third step is to analyse Flint's current strategy, both from a corporate level and from a business level analysis. The key to an effective strategy is to understand the internal characteristics of Flint. (Boardman, Shapiro & Vining, 2004, p15)

2.1 History of Flint

C.W. Flint, Sr. established the Flint Company in the United States in 1908 supplying oilfield equipment, lumber, and rig timbers for oil derricks in Oklahoma during the oil boom in the early 1900's. When the construction boom of the post war 1950's created an unprecedented demand for general contracting services, the company expanded with new locations to meet the needs of the growing communities. (Appendix 1 – Chronological History)

Throughout the 1970's and 1980's, the Flint Company, which grew into the Flintco Group of companies, a family run and privately held organization, looked for further growth and diversification to protect the investments made by the organization for the well-being of the family's future generations. The organization followed the oil and gas growth, north across the Canadian border, and Flint Energy Services, Limited was developed from the Flintco Group.

In April of 1998 an investment firm, SCF Partners (Simmons Company Funds), which at the time was a major shareholder in the Flintco Group, invested the capital needed to finance the acquisition of the Edmonton based firm called HMW Group. SCF Partners is an investment group, located in the Southern United States that strategically focuses on the oil and gas industry looking for opportunities for profit growth through consolidation. The midstream sector

(transforming crude oil to refined oil) of Western Canada was seen as a growth opportunity starting with the HMW Group.

The HMW Group was a construction service provider that was developed in 1981 to support the oil and gas industry in Western Canada. Subsequently, after the investment by SCF Partners, HMW was acquired and as a whole changed its name to Flint Energy Services, Ltd (Flint), moving the Canadian head office to Calgary, Alberta.

Since that time, Flint has grown significantly by acquiring established companies, consolidating the market of suppliers, and expanding its services and geographic presence. In 2000, Flint amalgamated with Reid's Construction Company for further growth into the Cold Lake, Alberta region. In 2001, Flint bought out the publicly traded shares of IPEC Ltd. and avoided the costly initial public offering to emerge as one of a few publicly traded construction organizations in the oil and gas industry of Alberta. It then acquired Titan Electric to expand its electrical capacity, as well as Hawke Safety to grow its safety services. To date, there have been sixteen acquisitions by Flint in all facets of the oil and gas service industry. (Appendix 2 - Current Flint Organizational Chart)

2.2 Current Organizational Structure

Today, Flint is one of North America's leading, integrated providers of construction services to the energy industry, with field services in 43 locations offering a broad range of services that help connect oil and gas production to the retail market. (Appendix 3 –Geographical Map of Flint) Flint is a publicly traded company with its corporate office based in Calgary Alberta and employs 5,500 people. Flint has the largest production equipment fleet in northern and western Canada with over 1,600 pieces of heavy equipment and 550 pieces of light equipment, in its North American operations.

Through strategic alliances with several key customers in the oil and gas industry, Flint is an integral part of its customers' ongoing businesses. In 2004, Flint's top ten customers were Suncor Energy, Imperial Oil Resources Ltd, Husky Energy, Encana Corporation, Shell Canada, Canadian Natural Resources, ExxonMobil, Nexen Petroleum Canada, ConocoPhillips, and Talisman Energy Canada.

Figure 1: Revenue Volume by Flint Segment and Customer

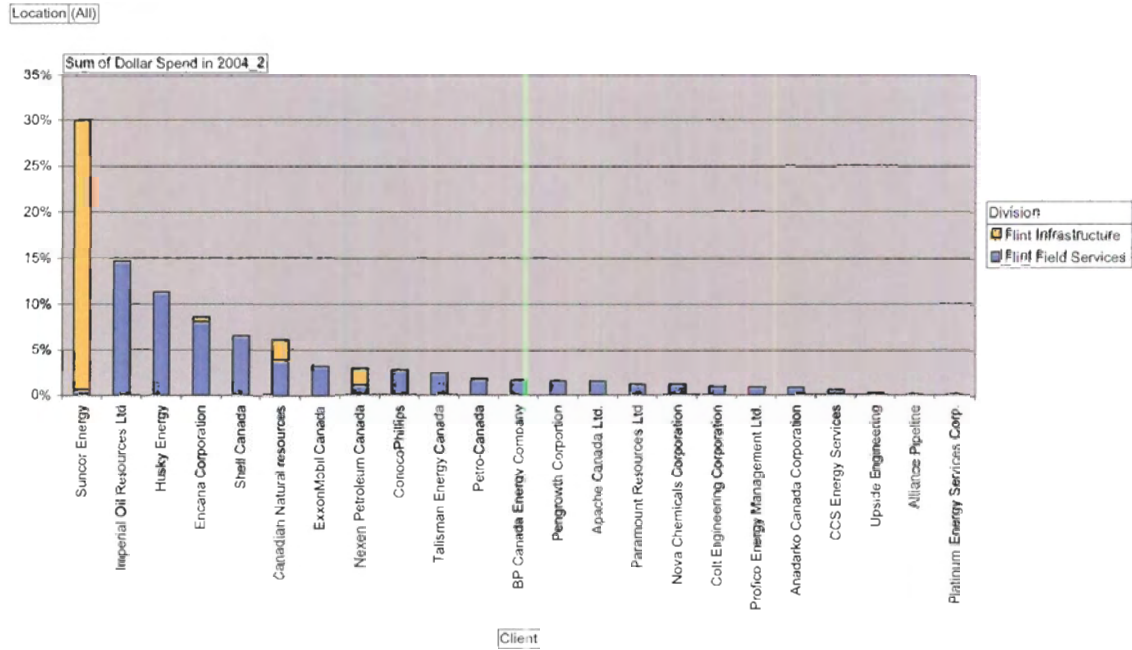


Figure Created by Author
Data Source: Flint Energy Services, Ltd., 2005

Flint is currently divided into two strategic operating segments: Production Services, offering smaller inch pipeline tie-in for oil and gas wells, day to day field facility installation and maintenance services; and Infrastructure Services covering large capital project planning, fabrication, assembly, modularization, and field installation services. The breakdown of revenue from each major customer, segmented between Infrastructure and Production, is shown in Figure 1.

2.2.1 Production Services

Production Services is Flint’s original business unit and continues to realize profits among high industry growth and increasing competition. For this division, Flint has focused on establishing relationships with both oil and gas producing majors for facility maintenance services in four major regions of Western Canada. Flint Production Services provides such services as pressure and vacuum operations, safety services, maintenance, and small capital projects within this division.

Customers in this segment have long standing relationships with Flint, some of which are continuing from the organizations that Flint has acquired. For example, Flint has current

agreements with companies such as: Imperial Oil Resources Limited in Cold Lake, Husky in Lloydminster, Encana in the Rocky Mountain region and Shell in Fort Saskatchewan. Others include general alliances with specific product divisions located throughout Alberta: Canadian Natural Resources Ltd., ExxonMobil, ConocoPhillips, Talisman Energy Canada, Nexen Petroleum Canada and Suncor. As shown in Figure 2, profit from this segment accounted for 66% of Flint's total profit in 2004 with a gross margin of approximately 21%. With Production locations spanning all of Alberta, Northern British Columbia, and Western Saskatchewan, Flint has a large geographical footprint with multiple services creating diversification for its clients.

Figure 2: Flint Operating Profit Volume by Segment

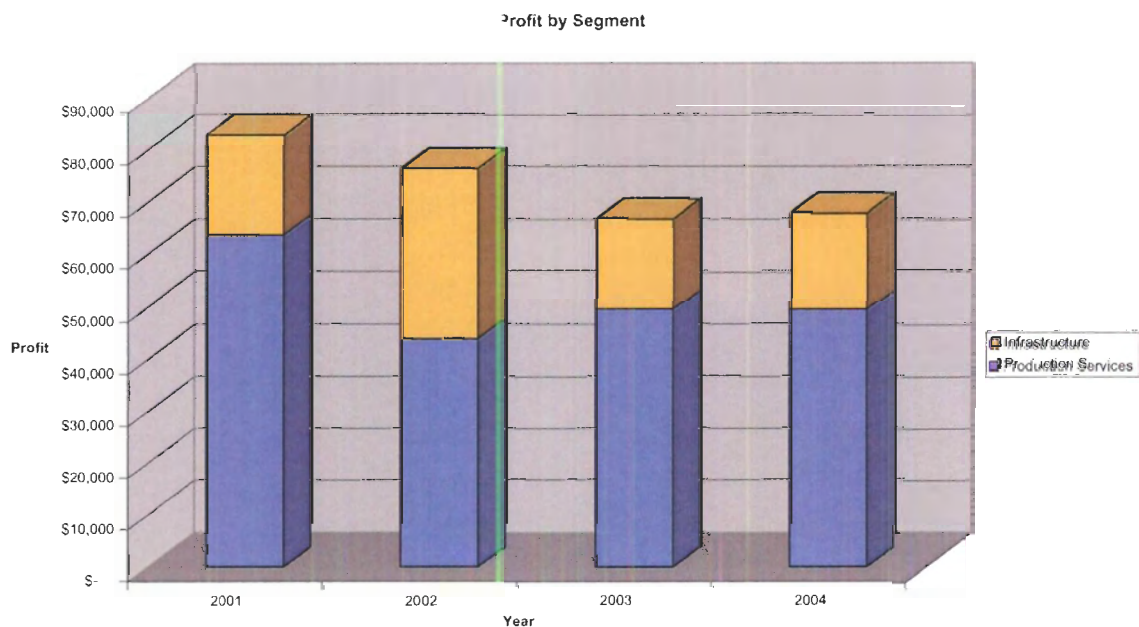


Figure Created by Author
Data Source: Flint Energy Services, Ltd., 2005

2.2.2 Infrastructure Services

Infrastructure is a relatively new division for Flint, created in 2001 by the merger with IPEC Ltd. This division's customer focus is on the larger oil-producing majors of the northern region of Alberta, specifically in the Wood-Buffalo area. Infrastructure has developed into a profit centre for Flint by achieving alliances with the majors, accounting for 34% of Flint's total revenue in 2004. However, the gross margin on average for Infrastructure is significantly lower than Production Services at an estimated 7%. As well, customers in this segment are more

concentrated with the top three as follows: Suncor accounting for 86%, and both Canadian Natural Resources Ltd. and Optinexen accounting for 2% each.

Flint has established a close working relationship with Suncor and Suncor’s unconventional or Steam Assisted Gravitational Drainage (SAG-D) process. (Appendix 4 – Unconventional Oil Industry) Flint has worked with Suncor on fabricating the modules used on ten of their fourteen SAG-D pilot projects. As these customers are extremely concentrated, Flint provides a high level of specialized service to the customer’s needs and the facility’s requirements to complete the projects. In some instances, Flint’s operating centres are actually located on the customer’s project site.

The product customer matrix of Flint in Figure 3 below will clarify and define each business unit. With these strong alliances, how will the labour crunch affect Flint? Will Flint be able to adjust its margins or costs to the customers, without losing a large agreement? Will the customers continue to work with Flint during the rise of labour costs and potential lower quality?

Figure 3: Product Customer Matrix by Revenue Percentage

			Customers			
			Majors		Support	Other
Division	Product	Location				
Infrastructure	Fabrication	Fort McMurray	Suncor 15%		CNRL 2% Encana 1%	
	Modularization of SAG-D	Fort McMurray	Suncor 16%	Optinexen 2%		
Production Services	Maintenance 42%	North	ConocoPhillips 32%	Shell 22%	Talisman 19%	
		East	Imperial 31% Encana 22%		CNRL 22%	
		South	Shell 39% Encana 23%			
		Central	Shell 49% Optinexen			
	Pressure and Vacuum 13%	East	Husky 11%			
	Safety 2%	North				2%

Figure Created by Author
Data Source: Flint Energy Services, Ltd., 2005

2.3 Ownership and Control

Flint's principal shareholder, SCF Partners, owns approximately 49.0% of the Flint Common Shares. This shareholder has the power to significantly influence Flint's affairs and has the ability to affect the outcome of matters requiring shareholder's approval, including the election of Directors and the amendment of its Articles of Incorporation and Bylaws. Assurances cannot be given that SCF Partners will not exercise their influence over Flint in a manner detrimental to the interests of the other Flint stakeholders. Of the shares outstanding for Flint today, five individual investors hold 17%. These five investors are the previous owners of smaller organizations that have been acquired by Flint. There is a substantial percentage difference between the individual investors and SCF Partners. It poses quite a striking variation in the size of holdings, interests and abilities to affect strategic decisions. The different types of ownership, goals and personalities will affect the style of decision-making between these two large shareholders on objectives and strategic future of Flint.

The largest shareholder, SCF Partners' mission statement is to 'deliver superior returns to our investors.' (SCF Partners, 2005) Founded in 1989 by Lee Simmons, SCF Partners provides capital and strategic growth assistance to build North American based energy service and equipment companies that do business throughout the world. SCF Partners focuses on a single industry: the energy service and equipment industry. They provide both equity capital and strategic growth assistance, while developing private companies into larger and liquid public entities. As an investors group out of the United States, SCF Partners are known for their ability to capture a small organization and aid in its growth for a return on their investments. Their objective as stated above is profitability and this results in the SCF Partners shareholders having low incentives to monitor and control managers; generally investors care about cash flow, not what an organization is experiencing out on the front lines.

With less than 20% control, the individual investors, who are the original owners of the smaller acquired firms, have minimal control. These investors are entrepreneurs of small businesses that have rapidly grown. These entrepreneurs are now responsible for a large publicly traded organization, and as such are held accountable, constantly monitored and systematically evaluated by many different factions of stakeholders, examples being: all levels of government, stock exchange commissions, concerned agencies and shareholders in particular. There are risks of these owners having the 'sacred cow' syndrome and ego driven decision-making to develop Flint in ways that may not be in the best interest of the overall organization. These five closely

held investors are less likely to want a take-over but will not have the control, or the ability to avoid it. These individual investors will potentially have the objectives, not only to grow Flint, but also to ensure the legacy of the business enhances their reputation because it is a direct reflection on them as people. This engages these five individual investors to monitor and bear all the costs associated with the organization's accomplishments and failures, however, only receiving their proportionate share of the benefits.

Understanding the ownership and control issues allows the stakeholders of Flint to understand the challenges it may face. Although the objectives, to date, have remained similar (growth and profitability), the reasoning or rationale behind the objectives is strikingly different. This may become an issue in the future in dealing with the demand for labour.

2.4 Financial Situation

With the current growth in the Alberta oil and gas industry, organizations and projects are continuing to proceed in spite of the increases in costs. The issue is whether or not Flint is able to keep pace with competitors, managing its costs to ensure long-term sustainability and profit in the industry.

Labour is the most significant component of cost of goods for Flint, accounting for more than 60% of the direct costs and is also the component that presents the greatest cost risk to Flint's business operations. Flint can engage in projects with its customers in one of two ways: lump sum payment or cost plus. Labour cost increases that cannot be passed on to customers will impact gross margins and operating profits for Flint. For example, where market conditions require that hourly employees receive an increase in wages or premiums, Flint may not be able to recoup these costs until specified adjustment dates in certain of its contracts. This increase then becomes a direct operating cost and is calculated into Flint's overhead, directly affecting its bottom line. As for cost plus arrangements, Flint is in a competitive market and must ensure that its pricing is low enough to sustain the contract but win the bid. Either way, a price increase affects Flint's operating returns unless managed appropriately.

Flint is currently significantly leveraged (Appendices 5 and 6 - Financial Analysis), and therefore must dedicate a substantial portion of its cash flow from operations to payments on its indebtedness. This commitment to payments outside of the organization will reduce the availability of cash flow to fund potential opportunities for working capital, acquisitions, capital

expenditures and other corporate purposes. This highly leveraged position will also increase Flint's vulnerability to adverse economic and industry conditions. This vulnerability limits Flint's flexibility in planning for, or reacting to, changes in its business and the industry in which it operates. This lack of available cash, among other things, will hinder its ability to borrow additional funds or acquire assets; and could restrict Flint from making strategic acquisitions or exploiting business opportunities. This places Flint at a competitive disadvantage compared to its competitors, which have less indebtedness.

Another factor is the overall low net profit margin that Flint is achieving. Based on the 2004 income statement for Flint, it achieved an overall 2.5% net profit margin, which has been decreasing over the past three years. (Appendix 6 – Ratio Analysis) This is a concern as Flint's financially healthy competitors have achieved higher profits and have increased their margins for the same three years. As the industry is experiencing significant growth, Flint has not been able to control its costs and capitalize on a growing market.

With the construction industry and the oil industry heating up, the pressures on Flint to produce a high quality product at a low price will increase. Flint is in a competitive market and must ensure that its pricing is low enough to sustain the contract but win the bid. Currently, Flint is financially inflexible between debt and customers. This highly leveraged position will increase Flint's vulnerability limiting Flint's flexibility in planning for, or reacting to, changes its customers may require.

2.5 Corporate Level Analysis

Recently, Flint's executive team established an objective for Flint during a strategic Five-Year-Planning meeting. They have created the statement 'Values to Vision' as their new slogan for Flint's strategy to become the Customer's Service Provider of Choice and the People's Employer of Choice in the construction services industry of oil and gas. These top two priorities for Flint can be broken into a corporate level strategy (revenue growth) and a business level strategy (employee retention).

At the corporate level, the highest priority for Flint is the planned growth in its revenue to double in five years. This growth in revenue will be primarily through organic growth, where Flint is looking to spread its current expertise in particular services to cover new strategic markets, while still focusing on its key customers and understanding their needs to create larger

opportunities. Flint will continue its current strategy creating longer and larger alliances with its customers.

Flint has established its position in the construction services market place as focused on a 'needs based' strategy, serving all the needs of a particular group of customers, while not serving other potential customers. Flint, although capable, does not serve any other construction related industry. This narrow strategy requires tradeoffs between focusing on specialized activities and high service level to one customer and choosing not to offer its services to other organizations that are in the same market mix. This is seen through the alliances that have been created with only a few but large customers such as Shell, Suncor, Imperial Oil, and Husky. Flint has offices and employees working right on the clients' site to ensure fast, accurate and highly specialized service.

Flint, through its acquisitions, has been able to provide its narrow base of customers with a broad product range. Flint's broad product range is considered 'horizontal' because there are many complimentary products available across Flint's divisions. Flint prides itself as being the 'one-stop-shop' for its customers, covering all the construction aspects of the oilfield industry. Flint can manage a project for a customer from green space to construction of the facility through to maintenance production and required shutdowns. This horizontal broad range of products, focusing on a narrow target market with a needs based strategy has enabled Flint to differentiate its services. Flint has been able to maintain charging a higher gross margin for its services to its long-term customers.

There are two broad ways for Flint to achieve this differentiation, tangibly or intangibly. Tangible differentiation is through input quality advantages, by providing complementary goods and services or process technology. The intangible differentiation is through advertising, brand development, brand spill over benefits, and reducing supply and creating cachet. (Shapiro, 2005) Flint's differentiation is largely based on the tangible aspects of its products and services. Flint provides complimentary goods and services, bundling the 'one-stop-shop' for customers, providing the safety training, pressure and vacuum services, shutdown services to support the Production and Infrastructure Projects.

Figure 4: Porter's Generic Competitive Level Strategies

		Competitive Stance	
		Cost	Differentiation
Competitive Scope Positioning	Broad Target Market	Overall Low Cost Provider	Broad Differentiation Strategy
	Narrow Target Market	Focused Low-Cost Strategy	Focused Differentiation Strategy

Source: Porter, 1996

Using Michael Porter's Generic Competitive Level Strategies, as seen in Figure 4, Flint has a focused differentiation strategy, with a narrow target market as its scope and a differentiation strategy as its competitive stance. This focused differentiation strategy provides Flint with the ability to charge a larger gross margin than most organizations; Flint charges a premium for its services.

From this corporate level analysis, Flint's first objective is to double revenue in five years. This is to be accomplished by focusing on a needs-based target market and by using a focused differentiation strategy. Flint has a sound strategy, which is to provide services to customers' major capital projects from start and to finish. Thus, Flint will generate value from the services provided through both the Infrastructure Division and the Production Division based on a single sale and client relationship.

2.6 Business Level Analysis

Flint's current strategy is to be both the Service Provider of Choice and Employer of Choice. In the previous corporate analysis, the focus was on Flint's top priority of growth from a corporate level or the Service Provider of Choice. The second priority of Flint is to focus on its employees, to be the Employer of Choice. This section will analyse the specific issues of labour shortages within Flint and the management of its workforce.

Flint's most important asset is its people and Flint's executive team has acknowledged that fact. To become the Employer of Choice the executive team have to introduce a way of developing their people through training, mentoring, and providing opportunities for their people

to grow. Using a slogan called the three S's opportunity – Say, Stay, and Strive, the executive team is acknowledging the top priority is their people, (recruitment, training and retention). (Appendix 7 – Flint Flash Newsletter) Flint is intending to improve its employer ratings amongst its employees while managing its workforce that is working on several projects at once. Primarily, Flint needs to maintain adequate levels of skilled trades people on an individual project, while secondly, managing the movement of its skilled trades people between projects to ensure continuous work. Flint is also striving to train its project managers to demonstrate project forecasting and workforce planning that is accurate, so that there is no lost time due to poor scheduling. However, given that Flint has started this process of valuing its employees, it must endeavour to follow-up strongly in its findings to maintain credibility. Losing credibility in a tight labour market would reduce Flint's marketing ability to employ/ recruit quality personnel, ultimately reducing Flint's capacity to compete for jobs, and deteriorating Flint's product quality.

There are many challenges Flint will face because it is aiming high with its objectives. These range from the changing demographics that shape the labour market, to specific needs for highly trained individuals such as pressure welders, to the management of the workforce on the job.

One very general challenge is that Flint must recruit workers to locations determined by the location of oil resources, typically in remote areas. A substantial part of the work occurs outside and as stated before, the work is cyclical occurring mainly in the winter season. These are the conditions that Flint's labour force must deal with and that can have a negative effect on potential employee career choices. Other employers in other industries are able to offer jobs that permit lifestyles that are more attractive. Many people expect to find jobs that involve working from 9 am to 5 pm Monday to Friday with a 15-minute commute. If job requirements are very different, people expect to receive some kind of compensating benefits. Such benefits as premium rate pay, living out allowance, or isolation pay all increase the cost of goods sold for Flint.

Figure 5: Major Flint Locations

Location	Facility Description	Number of Employees	Total Area (in square feet)
Sherwood Park, Alberta	Infrastructure	150	90,000
Cold Lake, Alberta	Infrastructure	90	32,000
Elk Point, Alberta	Production Services	30	17,800
Canadian Field Service Centers (30)	Production Services	2,630	420,000
U.S. Field Services Centers (7)	Production Services	1,200	49,500

Figure Created by Author
Data Source: Flint Energy Services, Ltd., 2001

Another challenge is the provincial requirement for training apprentices. Alberta's legal requirement states that there is to be a ration of one journeyman to every two apprentices compared to the previous ratio of one journeyman to every four apprentices, restricting further the number of apprentices Flint can employ. With a large number of journeymen entering into retirement, this is putting pressure on Flint to retain the older workers to aid in the recruitment and training of new apprentices. This increases costs to Flint because to retain the older workers Flint must provide incentives and/ or compensating benefits.

A further challenge to Flint is the time it takes for an employee to complete an apprenticeship for a qualified trade. Most trades that are found in the oil and gas industry require a minimum of three years to complete a trades program. This minimum of three of training is an issue for Flint as the cyclical work of construction and oil production services demands trades people to be available quickly and project opportunities will not wait. When customers are increasing project expenditures, they will not wait three years for Flint to have the appropriate workforce ready.

There is also the challenge of managing the workforce effectively. According to the Construction Productivity Improvement Report of 2002, Alberta's construction industry has gained the reputation of being one of the most challenging and demanding as the trend for large projects is to overrun cost and schedule. There is a concern that if this trend is not reversed, whatever the reasons, it will erode Alberta's competitiveness in construction. Increased productivity can have large impact on the overall construction process and consequently result in significant cost and time saving. (McTague & Jergeas, 2002)

A successful construction project is one that achieves the intended objectives in terms of cost, time, quality and safety. Construction is a labour-intensive process and on-site labour costs typically contribute 30% to the overall project's costs, so maximizing on-site labour productivity is an important area to focus on in order to reduce the capital cost of the construction project. This maximization of on-site labour productivity is possible only when the planned levels of productivity can be attained. However, productivity, or lack of it, is perhaps one of the main problems confronting the construction industry, the construction firm and the construction project (Canadian Construction Association, 2004).

One of the main reasons for cost overruns on projects is poor or non-existent workforce planning. Workforce planning is the process of organizing and delivering all the elements

necessary, before work is started, to enable workers to perform quality of work in a safe, effective, and efficient manner. On many projects, owners and contractors agree that workforce planning is lacking and that better planning is the key to better on-site labour productivity. On some sites, contractors have claimed that site worker productivity today is one-quarter to one-third of what it was in the past. There are several reasons for the poor workforce productivity, but for this discussion of poor project management, the following list is focused on poor workforce productivity stemming from the lack of workforce planning on-site:

- Work packages (plans for the day) for the day's job are deficient or non-existent.
- Workers arrive on-site and supervisors are not equipped to direct them to their tasks
- Labour densities are not properly calculated to determine how many workers can effectively work in a give in area of the site and productivity suffers.

The Construction Owners Association of Alberta has concluded that 10% of tool time and 27% of productivity can be improved upon through skilled project management – thus freeing up thousands of people in Alberta's workforce. (Alberta Economic Development Authority, 2004) Proper management of labour productivity can be both a source for productivity improvement and a solution to the perceived labour crunch described earlier or perceptively a competitive advantage for Flint. Projects always manage to find enough workers, so are labour shortages caused by the ineffective use of workers due to poor planning? Moreover, if the project managers had the ability to effectively manage the workforce, would there be a labour shortage at all?

The construction manager's strategy should be based on the objective to reduce non-productive time, or to increase time available for direct work. On average, workers spend 55.5% of their working time (excluding official times) on productive activities, 2.1% on supervision-related activities, 13% on "extra breaks", and 29.4% unproductively. The extra breaks consist of early quits and late starts; clearly a loss of 13% is considerable for a typical construction site. Overall the following, Figure 6, provides a warning for a construction manager and indicates that opportunities for significant improvement in labour productivity exist. (McTague & Jergeas, 2002)

Figure 6: Time Spent on a Construction Site

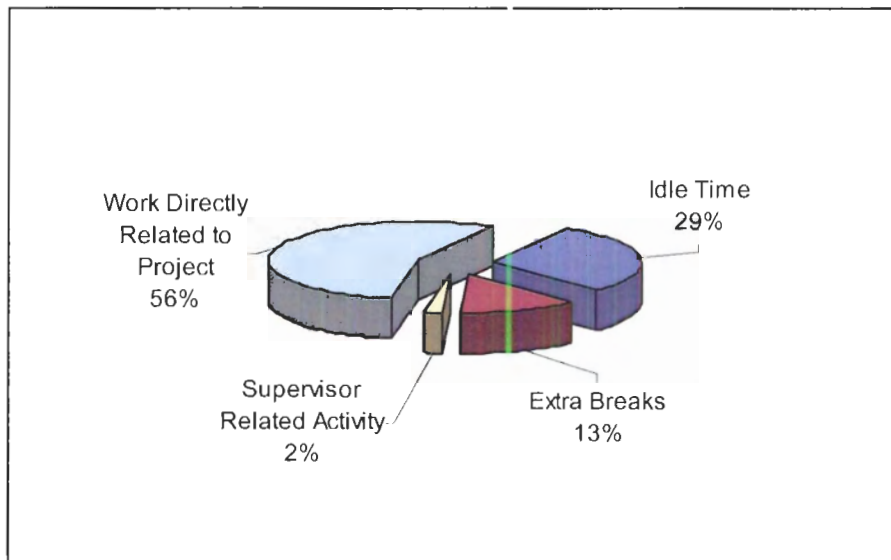


Figure Created by Author
Data Source: McTague. & Jergeas, 2002

A media report, found in the *Nickel's Daily Oil Bulletin*, on September 30, 2004 titled 'Open Minds, Better Management, Partnerships and Modularization will Benefit Mega Projects', by Lynda Harrison summed this up:

"The 20 mega-projects that have been executed in Canada, including offshore projects, while successful, have all experienced 20-100% cost/schedule overruns. They have had a shortage of skilled labour, lower than anticipated productivity and high labour turnover, with much of the blame placed on the workers' shoulders.

If we are going to blame lower productivity on workers we are missing the boat...the blame is on Management.... Currently 37% of mega-project worker's time is spent constructively working – what we call tool time. The rest of the time they are waiting among (15%) moving as a crew (15%), quitting early or taking breaks (14%), planning as a crew (11%) or moving equipment and or material (8%). But with better management, involving sequenced work packages and everything in place before work has begun, tool time could be increased to 47%, wait time reduced to 7% and planning time cut to 9%."

With a 29% reduction in unproductive time, this creates an opportunity for construction organizations to address the labour shortages. While it is unrealistic to suggest that unproductive time could be eliminated, there are areas where it can be reduced. The idle time affects all employees and is not limited to certain tasks; therefore, this decrease in idle time could directly influence the required time to complete a job. If productivity is improved, the project duration is

likely to be reduced, thus increasing profits to the construction organization through saving in direct cost of labour and indirect overhead costs due to decreased project duration. It may not eliminate the labour gap but it would create the opportunity for construction organizations to complete projects in a more efficient manner allowing them to manage their workforce among the projects to fill any gaps.

Most labour market measures would indicate that supply has increased to meet the rising demand for construction labour. Unemployment rates are low but stable and workers have been joining the construction workforce in sufficient numbers to fill available jobs. Traditional measures of compensation (wages and benefits) have been rising – sometimes more rapidly than in other industries. However, there is no general signal of wage pressures related to broad labour shortages.

These measures and statistics are often inconsistent with industry concerns about skill and labour shortages. Employer surveys in most trades, sectors, and regions regularly site labour or skill shortages as a top concern. These findings are reinforced by some accounts of rising costs and large projects being delayed or cancelled because of labour shortages. More precise and reliable evidence in this area usually reveals that there is a skill shortage related to very specific trades, regions, and projects. It has been documented, for example, that trades like pressure welders, crane operators, drywall installers, and gas fitters have been in short supply in specific regions and sectors. Indications of a general shortage are harder to find. Overall, though, it seems that the growth and changes to the system may not be adequate to create needed skills. (Construction Sector Council, 2001)

However, these general challenges are industry wide and not specific to Flint. All of Flint's competitors are in the same environment fighting for the same skilled labour, and they will all be faced with the same labour constraints. If a labour shortage in Alberta becomes more apparent, organizations will be forced to pay more for their skilled workforce. 'Wage wars' will begin to decrease profit margins for the industry as a whole. For example, of Flint's contractual agreements with customers on a lump sum basis, Flint is not able to pass these wage increases on to its customers as they occur, Flint will have to wait for the appropriate review meeting and justify any increases at that future date. Therefore, price increases can be passed along in the longer-term if accepted by the buyer. As for cost plus arrangements, Flint is in a competitive market and must ensure that it's pricing is low enough to win the bid, but high enough to generate a profit. Wage increases will increase bid prices and although competitors may be faced with the

same costs, if they can manage these costs and reduce their overall bid, they will win the work. Either way, a price increase affects Flint's operating returns unless managed appropriately in the short term.

Thus, Flint must manage its short-term costs and differentiate itself from the competition in the industry. Faced with this challenge, rather than to compete based exclusively on price, Flint is striving to demonstrate higher service quality and better performance. Flint will need to provide quality services that customers would be willing to pay a higher price. To maintain such a service, Flint will have to employ a highly qualified labourer force, incurring a higher cost of labour to retain the skills needed. Therefore, it is necessary for Flint to attract and retain a superior skilled workforce than its competitors to ultimately maintain its strategy of differentiation.

To date Flint has a very high turnover rate of personnel, in some office situations, the rate averages 30% annually. As well, the average duration of employment overall for Flint is three years; this timeframe is shorter than that of a typical apprenticeship-training program (four years is typical, while three is a minimum) that is required to be considered a skilled labourer. Therefore, Flint is not successfully retaining a workforce, which leads to decreased productivity and reduces its capabilities in maintaining its differentiation strategy. Unless Flint can turn around this retention issue, it is unlikely to be able to maintain its chosen strategy and therefore, to maintain its degree of growth and profitability.

This high turnover may be a direct result of how the human resources department within Flint's organizational structure is managed. There is one Human Resource Manager, but two recruitment teams, each representing one of the two divisions, Production and Infrastructure. (Appendix 8 – HR Organization Chart) There are few resources shared between Flint's divisions for human resources. For the most part, both Infrastructure and Production services have their own sources in recruiting, training, and retaining. This is a potential competitive advantage to pool resources and share competencies or in this case a competitive disadvantage.

A key issue for Infrastructure is the ability to handle the company's growth in one single location, Fort McMurray, while Production has demands throughout all of Flint's locations. This poses significant differences in hiring for the two different divisions. Infrastructure has to deal with the Fort McMurray location, as it is a remote location in a desolate region of Northern Alberta. The area is underdeveloped and the city's infrastructure is desperately trying to catch up

to the area's significant growth in population. This Fort McMurray area is generally experiencing difficulty in recruiting and retaining personnel, regardless of whether or not the labourers are qualified, because this region is not an appealing place to work, live, or play. Production faces different recruiting challenges. With different locations across Alberta for multiple short-term projects, recruiting and retaining qualified personnel is complex. These short-term projects are considered unstable and many skilled workers do not want to move from project site to project site to maintain a full-time job.

There may also be some conflicting managerial objectives. At the field level, project managers are rewarded for having a project come in on time. The project completion for the customer will have four objectives: safety, schedule, cost, and quality. For the oil industry, the cost of the construction project is traded off for the schedule and quality (safety is never traded as it is always the most important). These two objectives, schedule and quality, are considered the most important as the oil producer will make more money from the barrel of oil output once the project is completed than from any of the cost savings in materials and labour that may prolong the schedule. Therefore, the cost of the project is not as important to the oil companies as the quality and schedule of completion.

The primary goal of the project manager is to complete a project and that requires the two major inputs to be accessible within the project timelines. For Flint project managers, one of their goals within the project is to ensure required positions are filled with qualified personnel to complete the project requested by the client. This may be regardless of any training program or strategy Flint Corporate might have in place. Thus, project managers ultimately become individual recruiters to ensure their project is complete on time. They may disregard protocol, regulations, and any human resource strategy to ensure the primary objective of maintaining a schedule is reached. This can be a serious issue when it comes to abiding by the law and ensuring that the decisions are the best overall for Flint as a publicly traded organization. Flint has further enhanced this individualistic recruitment strategy by offering all employees of Flint a \$250 bonus cheque if they can find a potential employee to work for Flint.

In addition, with the changes in the Canadian workforce over the past two decades due to corporate downsizing, there is an increase in independent contractors and Flint's project managers have found these independent contractors as a secondary source of labour to supplement Flint's hourly workforce. The ability to hire independent contractors to complete specific project jobs has aided in project managers achieving their business level goals.

There are two different ways to hire a skilled worker within Flint and therefore, Flint's labour force is now comprised of hourly and independent contractors. As such Flint is able to increase or reduce the staffing levels depending on activity level. Flint describes these independent contractors as Direct Service Providers or DSP. The independent contractor hire has many benefits for both Flint and the DSP. Flint can avoid the paperwork and prolonged transactions involved in the traditional process of hiring. Flint can also avoid the labour code requirements of terminations and benefits costs. For the DSP, although they may not receive the benefits, they are usually compensated in their hourly pay rate and in Flint's policy they will be paid every seven days, compared to the traditional two weeks.

By looking at Flint's human resource matrix, Figure 7, it shows that the Production division has a significantly higher number of employees compared to Infrastructure, however Infrastructure has a higher proportion of DSPs. Within Infrastructure, one quarter of its workforce to date is supplied through DSPs, while DSPs represent only a fifth of Production Services. This results in steadier employment with Production Services. This may be a contributing factor for Production Services achieving a higher volume of sales and earning higher profit margin than Infrastructure for the past three years. Therefore, Production Services, by maintaining higher level of hourly employees, is achieving the differentiation in services and thus contributing to Flint's overall competitive advantage. This is a very simplified analysis and further insight should be given to the turnover rates, satisfaction levels, and productivity ratios for the divisions.

Figure 7: Human Resource Matrix

Count of Hourly Rate		Security Bus Unit		Grand Total
Company Segment	Region Name	HOURLY	DSP	
Production	Central	1146	205	1351
	Southern	1009	198	1207
	Eastern	524	99	623
	Northern	456	126	582
Production Total		3135	628	3763
Infrastructure	Central	276	75	351
	Southern	11	1	12
	Eastern	750	227	977
	Northern	10	1	11
Infrastructure Total		1047	304	1351
Grand Total		4182	932	5114

Figure Created by Author
Data Source: Flint Energy Services, Ltd., 2005

To combat the issues of high turnover, high labour costs and potential over use of independent contractors, Flint has recently changed its values to include 'People', at least acknowledging that this is one of its greatest resources. 'Say, Stay, Strive' is a new motto to entice employees to be loyal to Flint as an employer. Although a motto will not suffice in changing Flint's labour issues, it has taken steps to try to understand the issues of high turnover, such as conducting an employee satisfaction survey and analysing the results of the areas in which it scored poorly. The survey was conducted by Hewitt (a global outsourcing, and consulting firm) and with Hewitt's guidance, Flint decided to develop focus groups to further discuss and understand the employee issues. (The results of the focus groups and actions steps have not yet been communicated.) However, Flint will need to address the issues and create action plan that includes a business strategy to attract and retain a skilled labour force that ultimately supports Flint's corporate strategy to double its revenue in five years. However, two questions need to be asked in regards to the use of DSPs and Flint's strategy. First, does this employment strategy include the DSPs? Second, how can Flint differentiate its services if it is hiring contractors that any other firm can hire?

2.7 Summary of Internal Analysis

The analysis of Flint internally has identified the challenging issues that the organization faces, at both a corporate level and a business level. History has shown that Flint is capable of managing substantial growth. Flint has initiated strategic objectives and achieved differentiation in specific industries, examples of this is Flint's alliance with Suncor, Imperial Oil and Husky. These existing sources of sustainable competitive advantage are being utilised within Flint to support its position in the market today. From a corporate level analysis, Flint's first objective is to double revenue in five years. Flint is set to accomplish this goal by continuing to focus on its needs based customer market and utilizing a focused differentiation strategy. At a business level, Flint is initiating change in human resource management to combat the issues of high turnover, high labour costs and potential over use of DSPs. This acknowledgement of the issues is a proactive step for Flint. Nevertheless, there are questions that remain: Is the financial health of the organization enabling Flint to take advantage of, or control in situations within the market? With the large dependence on customer alliances, how will the labour crunch affect Flint? What strategic decisions can Flint make to adapt to the pressures? And what, if anything, can it do to offset the inevitable increase in labour costs?

3 EXTERNAL ANALYSIS

This segment of the strategic analysis will discuss the external factors at three different levels: the industry, the micro-environment and the macro-environment, each of which affects Flint's planning and performance. First, the analysis will discuss the two key industries that affect Flint, from both a global and then a regional point of view. Second, using a business model, the paper will analyse the micro-environment of the industry that can be risks or opportunities to Flint. Finally, the analysis will use a business framework to discuss the forces in the macro-environment that affect Flint.

3.1 Industry Analysis

3.1.1 Oil and Gas

Overall, the industry that affects Flint's sales volume is defined as the oil and gas production industry in Alberta. Customers demand Flint's services based on the market situation of this particular industry. The demand for Flint's services rises and falls with the fortunes of the oil and gas sector and their capacity to embark on capital projects.

The use of oil is extensive throughout history and the world, from caulking boats to dressing wounds, from heating a stove to enabling us to travel to the moon. Only in the 1850's, when oil was successfully refined into a fuel source that did not cause foul-smelling fumes, did it become a major source of energy for individual consumers. This was the beginning of the global oil production industry as seen today. However, the turning point for Canada's role in this market was on February 13, 1947 when Imperial Oil finally struck oil in Leduc, Alberta. Large post war discoveries of oil and natural gas in Western Canada reduced anxiety about dependence on imported oil supplies. This development brought economic growth to oil and gas producing areas of Canada.

The oil and gas industry is segmented into three areas: upstream, midstream and downstream, as shown in Figure 8 below. This figure indicates the Supply Chain for Flint

vertically, with the three industry segments running horizontally. The profit for all three of these segments has been steadily decreasing since 1977, according to the Energy Information Administration. (Energy Information Administration, 2003)

The upstream sector is where the supply chain first begins at the exploration and extraction of raw material (crude oil) from the earth's crust. In Canada, this extraction occurs in two forms: conventional and unconventional. The conventional extraction of crude oil is the traditional process of siphoning the free flowing oil from the earth's crust. The unconventional methods are the more recent developments that have occurred with the advancement of technology in regards to the 'tar sands' or oil sands of western Canada. Oil sands are naturally occurring mixtures of bitumen, water, sand, and clay that are found mainly in three areas of Alberta - Athabasca, Peace River, and Cold Lake. Bitumen is a heavy, viscous form of crude oil that is not free flowing and is therefore difficult to extract.

Figure 8: Supply Chain Analysis

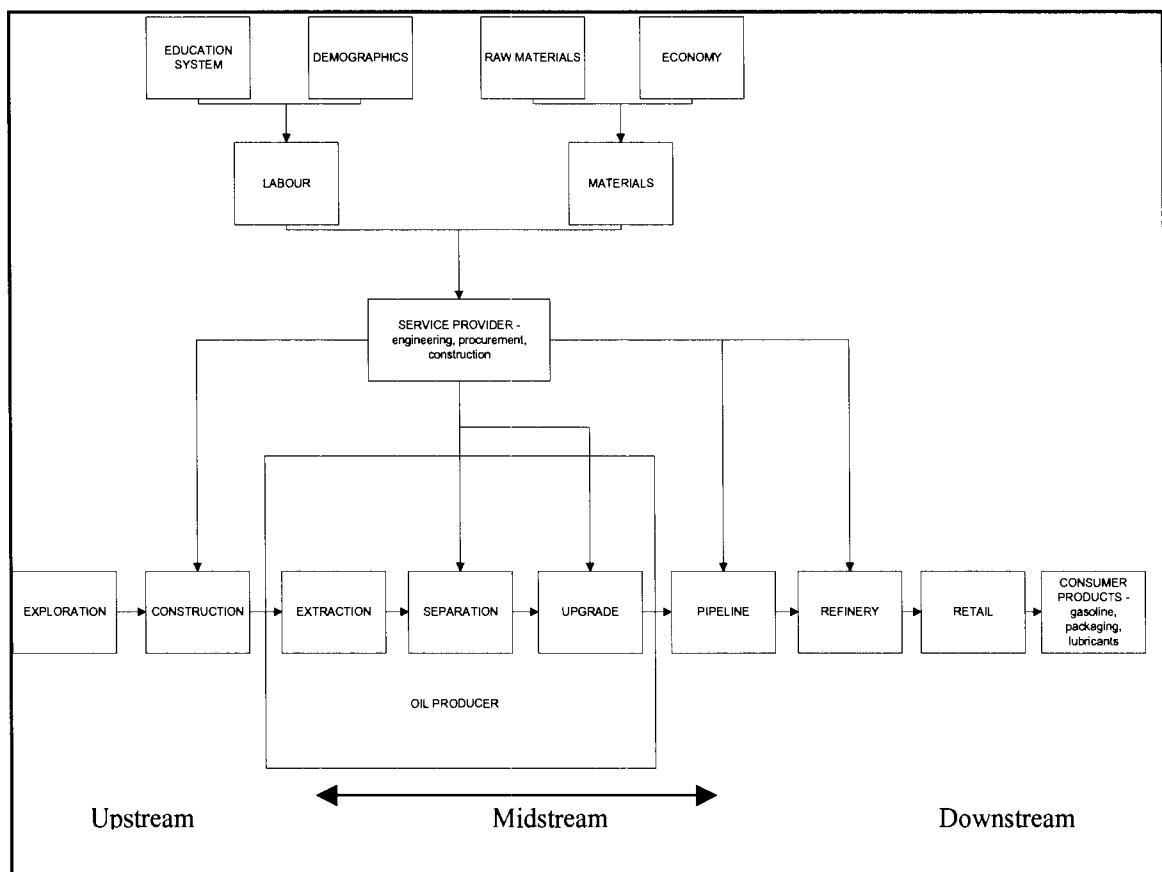


Figure Created by Author

The oil sands extraction is literally the process of taking the bitumen and separating the crude oil from the sand. This separation can happen one of two ways. First, surface mining of the oil sands is mining or extruding the bitumen less than 75 metres into the ground. The bitumen is collected by large trucks and hauled to a processing site. At the processing site, the bitumen is heated with steam to separate the oil from the sand. This is a very environmentally intrusive process and is a concern for multiple stakeholders and environmental agencies. Second, is the Steam Assisted Gravitational Drainage (SAG-D) or in-situ process, which extrudes bitumen more than 75 metres below the earth's surface. This process utilizes a pair of wells, one well pushes steam into the ground forcing the bitumen to separate, and the other well removes the crude oil. (Appendix 4 – Unconventional Oil Industry)

This geographically constrained industry sector is dependent on a non-renewable resource that is owned in a majority of cases by government-controlled agencies around the world. These governments only lease the land to the oil producers for their exploitation. The extraction is a capital-intensive project and requires long-term investment in infrastructure. However, even with these constraints, the value created and captured at this first segment (upstream) has been the greatest, compared to the other segments of the oil industry. (Energy Information Administration, 2003)

The midstream sector includes the oil and gas pipeline systems that connect the production sites to the consumption areas, including the storage and transportation of the refined oil. The refining of crude oil, which is also a very capital-intensive process, is regularly plagued with project cost overruns. The midstream sector does not create or capture large value for the industry, however a large amount of research and development has been invested to try to create product differentiation to increase value creation and value capture. During the 1990's, many large integrated companies reduced their refining assets, choosing to be purchasers and investing project dollars where there were higher returns. Some smaller independent refiners (those without upstream assets) chose to grow, both by purchasing assets from integrated companies and by expanding capacity in their existing facilities.

The downstream sector consists of refineries, distribution utilities, wholesalers, service stations and petrochemical companies. This final stage is mirrored in the retail industry; refining of oil is the manufacturing stage, distribution of the refined oil is the wholesaling stage and a service station selling the refined oil is the retailing stage. Many oil-producing organizations have forward integrated to the retail sectors to ensure that hold-up is avoided, and branding is

increased to the consumer. Even though there is value created through marketing and branding, there is very little value captured. The downstream sector is increasingly under pressure, as competition grows more intense between the vertically integrated organizations. By looking at the value chain of the oil producing organizations, this market is attractive but it does have pressures on profits that need to be identified. (Appendix 9 – Value Chain)

Today Canada is the fifth-largest energy producer in the world, behind the United States, Russia, China, and Saudi Arabia. Over the past two decades, Canada has become a significant net energy exporter of oil. In 2001, about 31% of Canadian energy production was exported, with the United States as its main customer. In the first three quarters of 2003, the United States imported more oil (including crude oil and petroleum products) from Canada than from any other country. Along with being a major producer, Canada is also a significant consumer, ranking eighth in the world. (Industry Canada, 2005)

The oil producing market is a competitive selection market with many firms of unequal size and unequal efficiencies producing identical products. Financial barriers to entry and exit are large but rivalry is based on costs and the industry profits on average are low, and vary across the firms. The key success factors for the oil production sector are the global ownership of oil reserves.

The Western Canadian Sedimentary Basin (WCSB) is the largest known oil and gas reserve in the northern hemisphere. Producing 70% of Canada's crude oil and 80% of its natural gas, Alberta continues to be the focus of the industry in Canada. The upstream oil and natural gas sector accounted for more than 30% of Alberta's total revenue for 2003. About 75% of the total industry spending takes place in Alberta. Oil and natural gas account for nearly 60% of Alberta's exports. (Western Canada Oil and Gas Industry Symposium, 2004).

According to the Canadian Association of Petroleum Producers, in 2004 there were 20,700 wells drilled in Alberta, an increase of almost 3,000 wells, up from 17,796 or a 16% increase from the year before. In total, there are 1,921 million barrels of conventional oil reserves; 4,881 million barrels of surface mining and 2,025 million barrels of in-situ or SAG-D available in the WCSB. Production in 2004 was 662,000 barrels per day of conventional, 440,000 barrels per day of surface mining and 303,000 barrels per day of in-situ. With only 743,000 barrels of unconventional oil being produced from the 6,906 million proven unconventional barrel reserves, this indicates that there is almost 100 times more oil in

unconventional reserves than what is being produced today. This indicates that at the production rate of today there is only one hundred years left of available production.

Even though the demand is still growing for oil and gas, at this point there are indications of the oil production industry heading towards maturity as the competition increases and the margins decrease. From an economic standpoint, in the 1990's, there was consumer surplus and the excess supply forced prices to go the lowest in over 20 years. Firms had to rethink their production utilization rates and evaluate alternatives to reduce their costs. This left the industry with low demand, low prices and excess capacity, an unattractive market to be in for oil producing organizations. Between 1995 and 2001, WCSB production declined by 13% to about 1.2 million barrels per day. (Western Canada Oil and Gas Industry Symposium, 2004).

The following figure shows the increasing maturity of the conventional WCSB oil extrusion, declining oil and gas resources per new well since mid 1990. This graph also shows the number of producing wells required to maintain total daily production. Although a shortage in the production of oil due to a lack of the natural resource will not be seen in the short run, oil is a non-renewable resource and therefore it will become scarce over time.

Figure 9: Production of Conventional Oil

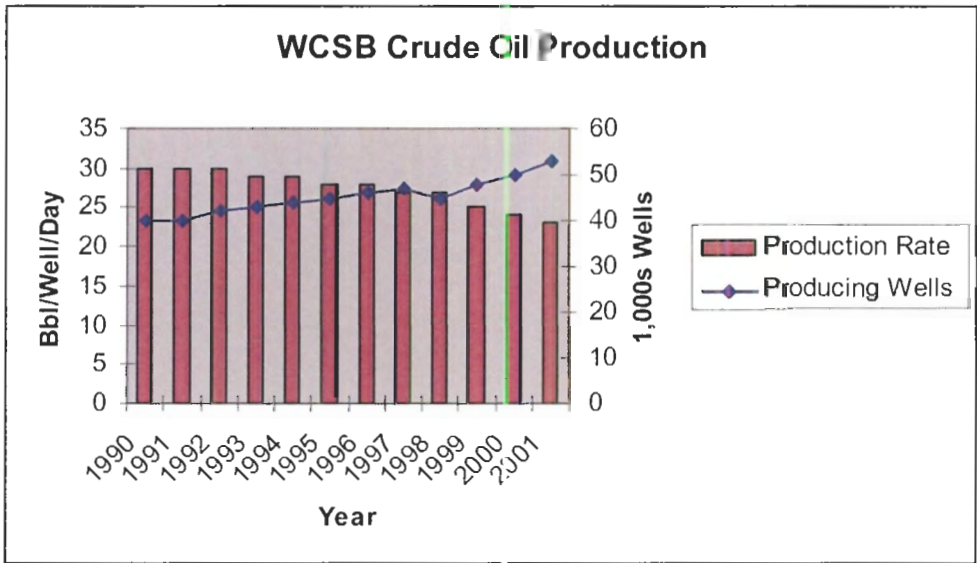


Figure Created by Author
Data Source: Canadian Association of Petroleum Producers, 2005

The shakeout period has begun with the increase in mergers and acquisitions seen over the past few years. There is also an exit of failed firms, or consolidation of the market, indicating

the industry structure is stabilizing. Within the newly formed organizations, the control is now highly structured. Publicly traded companies are focused on returns rather than production growth and capital spending was curtailed due to historically low oil prices. Even though the demand for the oil is stable and growing at a predictable rate, overall the profits for organizations in this industry have declined in comparison.

Organizations are focused on process innovations to reduce costs. This leads to technological advancements such as SAGD or In-situ which can increase the reserve availability of northern Alberta. What was once unsalvageable is now being extracted for production. These innovation breakthroughs with the significantly high demand and high commodity prices of today are renewing capital expenditure.

Figure 10: Estimated Capital Expenditure for Oils Sands Projects

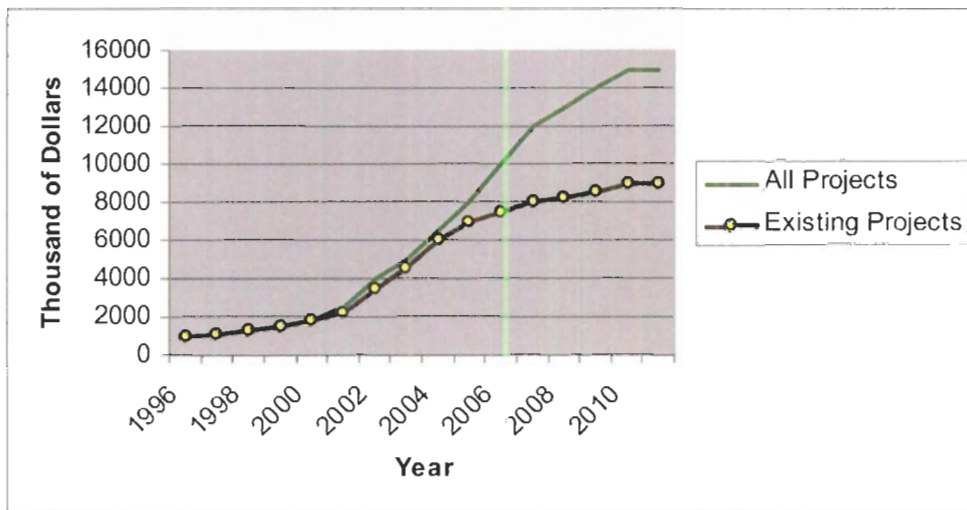


Figure Created by Author
Data Source: Alberta Economic Development Authority, 2005

Capital spending on conventional oil was just over \$11.7 billion in 2002, while the oil sands saw an increase to \$6.7 billion. To date, the forecast for future capital projects in Alberta's oil and gas industry is just over \$70 billion, as seen in Figure 10 and Figure 11. The direct and indirect employment of this industry is 183,000 jobs with a total overall impact of approximately 500,000 jobs. This has been steadily increasing on average 8% for the past 8 years. (Canadian Association of Petroleum Producers, 2004)

Figure 11: Estimated Regional Expenditure on Projects

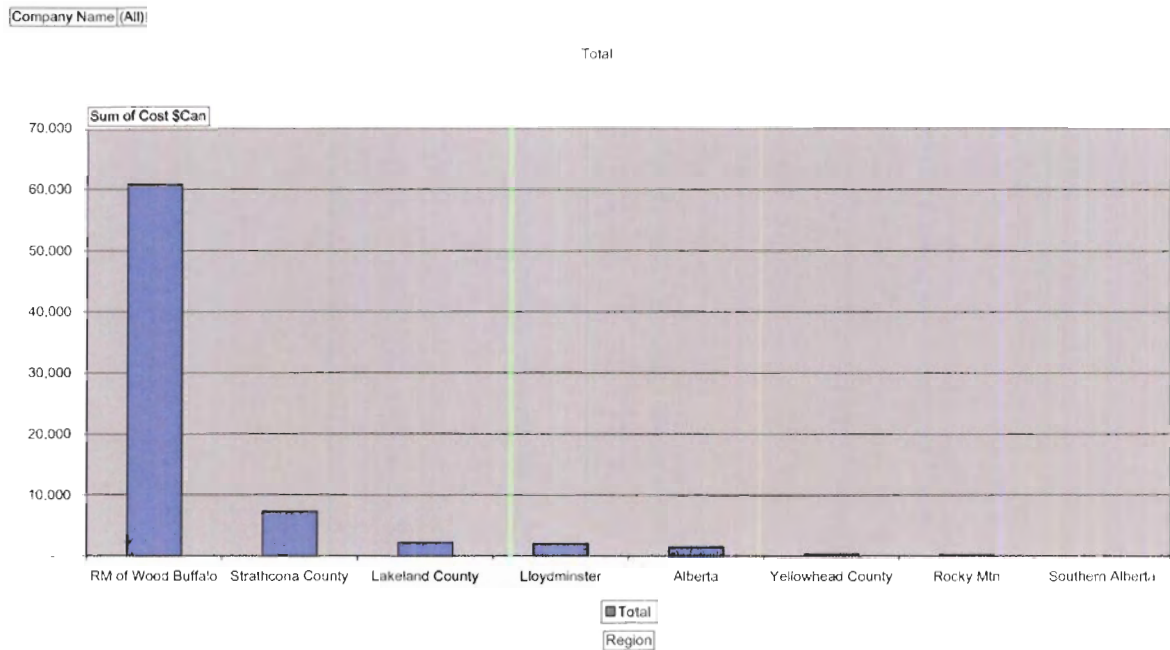


Figure Created by Author
Data Source: Alberta Economic Development Authority, 2005

There are two key success factors for this industry: owning productive reserves and maximizing yield. Those organizations that have the rights to the land with the most reserves and the ability to produce those reserves at the lowest cost will be the most successful organizations in this oil and gas producing industry.

However, there are many additional factors that affect the wide fluctuations in oil and natural gas prices from supply and demand to market uncertainty, all of which Flint has no control over. Such things that may cause these swings in the market include: supply of crude oil world wide, decisions on production by the Organization of Petroleum Exporting Countries, weather conditions, political instability of producing countries, consumer demand, price and availability of alternative fuels, pipeline capacity, imports, governmental regulations and taxes, refinery capacity, and the overall economic environment. These factors and the volatility of the energy markets generally, make it extremely difficult to predict the future prices of oil and natural gas or the demand for Flint’s services, with any certainty.

3.1.2 Construction

The construction industry is the market that Flint directly competes in as project managers. Flint’s competitors and suppliers are found in the heavy industrial construction

industry. This part of the discussion will focus on the construction industry itself and more directly, the effect it is having on the labour market and vice versa.

Construction is the single largest industry in Canada, in economic output and in the number of people employed in Canada. The construction industry represents 5.3% of the total employment and represents approximately 12% of annual Gross Domestic Product (GDP). The GDP for the construction industry, representing the value of all production, grew by 3.5 % in 2004. This growth is expected to continue until 2007 when it is predicted that the growth should slow, as shown in Figure 12. (Canadian Construction Association, 2004)

Figure 12: GDP Forecasts in the Construction Industry

Gross Domestic Product (In Millions Of Current Dollars); 2004-2009						
	2004	2005	2006	2007	2008	2009
Overall Construction	67414	70798	73589	75865	78008	79893
Residential Construction	25371	26792	27883	28627	29418	29722
Non-residential Construction	42043	44006	45706	47238	48590	50171
Gross Output (In Millions Of Current Dollars); 2004-2009						
Overall Construction	163671	171590	178142	183501	188579	192935
Residential Construction	65980	69675	72513	74447	76505	77294
Non-residential Construction	97691	101915	105629	109054	112074	115641

Figure Created by Author
Source: Canadian Construction Association, 2004

As one of Canada's largest industries, construction plays a vital role in Canada by providing infrastructure and employment. The industry is essential to the progress of the Canadian economy, considering it impacts all sectors of the economy, and maintains and repairs over \$5 trillion in assets. There are approximately 900,000 Canadians employed in the fifty different skilled trades in the construction industry today (Construction Sector Council, 2001). One out of 17 workers employed in Canada earns a living in the construction industry and close to one million Canadian men and women are employed in many of its diverse trades and professions.

There are four general categories of construction work:

1. Residential construction refers to the construction or remodeling and renovation of single-family and multi-family residential buildings.

2. Institutional and Commercial construction involves the commercial and institutional buildings and related structures, such as stadiums, grain elevators, and indoor swimming pools.
3. Civil Engineering construction includes entire engineering projects, such as highways, dams, water and sewer lines, power and communication lines, and bridges.
4. Heavy Industrial refers to the construction of factories, such as cement, automotive or power plants.

Though the industry stands out as one of the major employers, the size of the average construction firm is quite small. In the residential sector, nearly 90% of firms have fewer than five employees. In the non-residential sector, almost 70% of the firms have five employees or fewer.

This paper concentrates on the Heavy Industrial sector. Heavy Industrial construction work is divided into two broad categories: design management, and project management. As Flint does not design or engineer any of its projects, a more specific focus will be on the second category: Project Management.

Project management construction work involves all the different trades and occupational specialities required for heavy industrial construction. A steady stream of materials and specialized workers are needed at the site. There are well-established trades that divide work among acknowledged crafts such as: Pipe Trades, Refrigeration and Instrumentation Mechanics, Construction Electrician and related, Masonry and Concrete related, Carpenters and related, Sheet Metal Workers, Metal Trades including Boilermakers, Welders and Millwrights, Painters, Labourers, Heavy Equipment Operators including Cranes, Other Occupational Training Infrastructure.

Non-residential construction investment, led by rising investment for major oil sands projects, will increase the demand for related construction trades from the year 2006-2012, as shown in Figure 13. The demand for construction related trades in Alberta continues to be strong in line with construction investment activity in the Province, as shown in Figure 14.

Figure 13: Number and Value of Major Projects in Alberta

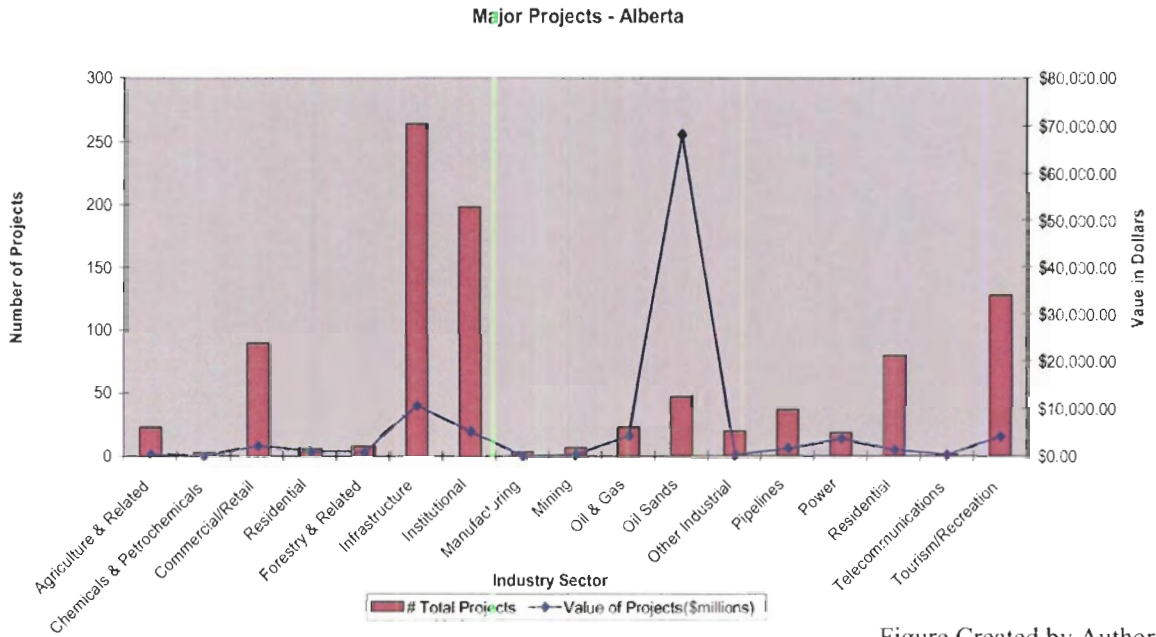


Figure Created by Author
Data Source: Alberta Economic Development Authority, 2005

A number of key construction trades that will be in high demand: Plumber-pipe fitters, welders, power engineers, carpenters, and electricians. These trades continue to account for the largest number of requirements for the major projects. (Construction Owners Association of Alberta, 2004)

Figure 14: Employment in Alberta by Industry Sector

Employment by Industry Sector– Alberta

In thousands

Wholesale and Retail Trade	265.1
Health care and social assistance	163.2
Construction	161.1
Manufacturing	144.1
Accommodation and food services	124.2
Professional, scientific and technical services	120.5
Forestry, fishing, mining, oil and gas	111.6
Educational services	109.1
Transportation and warehousing	98.5
Finance, insurance, real estate and leasing	90.0
Other services	82.8
Information, culture, and recreation	71.7
Public administration	70.4
Business, building and other support services	66.0
Agriculture	65.8
Utilities	13.9
All industries	1,757.9

Figure Created by Author
Data Source: Statistics Canada, 2004

3.1.3 Summary of Industry Analysis

The economy is a driving factor in the demand for Flint’s services and although Flint cannot control the economy, Flint can be aware of the effects that both the oil and gas and the construction industry will have on the demand for Flint’s services to the midstream oil and gas industry. Overall, Canada is becoming a world player in oil production as technology advances increasing the ability of organizations to extract oil from the largest reserve in the northern hemisphere. Alberta is centre stage, capturing over 80% of the oil production for Canada. As the economy continues to thrive, the demand for oil will continue to increase. This represents large opportunities for Flint, as oil and gas suppliers are Flint’s primary customers and the customers’ expenditures are driven by the price of the commodities they produce. With the positive conditions in Alberta’s external economic environment (strong economic growth, increasing demand for oil, largest oil reserve, increasing expenditure, and increasing demand for construction) the Alberta economy will continue to grow.

3.2 Micro-Environment Analysis

The micro-environment analysis will use Michael Porter's model entitled the Five Forces Analysis. (Baye, M., 2000, p13) This divides the forces in the micro-environment into the Power of the Buyers, the potential Substitutes, the Competitors, the Barriers to Entry/ Exit and finally the Power of the Suppliers. This discussion will be concentrated on the power of suppliers, focusing on the demand for a skilled workforce.

3.2.1 Buyer Power

Demand for Flint's service is primarily driven by the current and anticipated prices of oil and natural gas. This is a result of Flint's customers basing projects on their cash flow. When Flint's customers have the capital to invest, they will identify projects for expenditure. Low commodity prices cause Flint's customers to reduce capital expenditures and as a result, demand for Flint's services will drop, typically lagging an industry upturn or downturn by two or three fiscal quarters (Flint Energy Services, Ltd., 2001). Currently, oil and natural gas prices are increasing significantly and as a result; Flint has seen a record first three quarters for 2005.

More specifically, drivers that dictate the volume of sales activity in the Infrastructure segment of Flint will be driven by the capital budgets of Flint's customers and their need to develop new or enhanced facilities, particularly capital expenditure with evolving technology, and production capabilities of the WCSB. With the Production segment of Flint, revenues are driven by the capital expenditure for customer's facility maintenance. To keep oil wells and production running efficiently, equipment and customers facilities will periodically be shut down for maintenance or have routine upgrades completed. The customer completes its evaluation of a project's return on investment and decides whether or not to proceed. When the commodity price of oil are expected to be as high as seen in the recent months, the return on investment for producing more barrels of oil is high and therefore, Flint's services are in high demand.

The oil and gas production industry is an extremely concentrated market with only ten companies accounting for 83% of the projected growth over the next 10 years in this region totaling just over \$70 billion. According to Canadian Association of Petroleum Producers twenty major producers account for more than six percent of Canada's gross domestic product (Canadian Association of Petroleum Producers, 2005). This is also reflected in Flint's customer base, for the fiscal year 2004 where seven of Flint's largest customers, with whom it has strategic alliances,

accounted for over 80% of Flint's revenues. Such a concentration of demand, based on such a volatile commodity does not make this market very attractive and Flint needs to mitigate the risks of a downturn in the market place.

In trying to mitigate the risks of upturns and downturns from its customers, Flint tries to establish long-term alliances to smooth out the demand trends. However, the strategic alliances that Flint is involved with are governed by contracts that can be terminated upon notice, a notice that can range from 20 days to three months. This is a result of the buyer's power. Should Flint chose not to sign such an agreement to try and mitigate its risks by requesting longer commitment from the buyer to avoid the fluctuations in the economy, Flint runs the risk of having the buyer contract with another supplier who is willing to accept the terms of the agreement.

Flint's business strategy calls for establishing new and expanding existing alliances to try and offset this risk of buyer power. As seen in previous charts, Flint's buyers are extremely concentrated. Flint is dependent upon specific customer alliances and subsequent large revenues from a small percentage of clientele. Loss of one or more of Flint's strategic customer alliances or Flint's failure to expand its existing strategic alliances could seriously harm Flint's business or slow its growth compared to prior years.

By using Porter's Five Forces Analysis it is established that the power resides with the buyer, therefore making this segment unattractive. It is unattractive because Flint's buyers can chose from a wide range of suppliers with a wide range of diversification, while Flint can only supply a concentrated market of a few major buyers.

3.2.2 Substitutes

Flint is in the market of services that are currently outsourced by its customers. So the only straight substitute is the decision of a customer to do the work in-house. These large oil producers are choosing not to manage the construction projects, and having these projects outsourced to contractors, such as Flint. An advantage in outsourcing is the ability of the oil producers to focus on their core competencies rather than manage the labour and equipment of a capital project. However, the reason for a customer to retain the work in house is for greater control. The disadvantage to this greater control for the customer is greater risk and less flexibility within the project itself. Should these large oil producers choose to do the work in-house, Flint may see its market share diminish. So, as long as Flint can prove to its customers that

they can maintain control with the flexibility of outsourcing, the threat of substitution shall remain low. Therefore this segment is attractive and is somewhat within Flints' control.

3.2.3 Barriers to Entry

There are only a few Barriers to Entry but they are costly in this industry and considered large barriers. The construction services of the oil and gas industry demands flexibility in manpower and equipment to be able to handle the fluctuation in seasons and in expenditure from the buyers. The ability to handle project completion deadlines and maintain quality assurance during peak project times while surviving the troughs of slow project times with the low margins is necessary in this industry. The costs associated with poor project management can be quite high if utilization rate is not maintained and on the flip side, the exit barriers can be just as high as the entry barriers, creating a cutthroat environment when commodity prices are low and expenditure from buyers is decreasing. Many large organizations within this industrial service sector have significant resources. Competitors such as PCL, Ledcor, and Triton Projects can ensure project success with financial backing and the ability to survive with lower margins, as their other construction divisions will pull them through the tougher times.

As stakeholders become more knowledgeable through increased technology and information flow, there are more and more regulations from multiple sources of governing powers to hold corporations accountable for all aspects of running a business. Keeping up the governing bodies and evolving regulations can be very difficult for organization trying to enter the industry. In the construction services of the oil and gas industry, with the work being so labour intensive, compliance costs may be too high for newcomers to enter. Worker's Compensation Board targets the workplace to get the job done safely with standards such as Total Recordable Injury Frequency or TRIF's (Injuries per 200,000 work hours per year). As seen in Figure 15, Flint to date is below the required industry average and pays a lower premium as a result. Should the TRIF increase for Flint the costs will increase, as well as the potential loss of customers.

Figure 15: Flint's Safety Rating compared to WCB Industry Rating

FLINT WCB Account	Industry Sector	Class	WCB Rating	2004 WCB Rating	2005 WCB Rating	Flint Rating 2005	Difference
3999221	6304	6.01	Construction and Trade Services	3.66	3.11	2.03	35%
2030947	9902	6.02	Cleaning Svces - Mobile Pressure	4.55	3.87	2.55	34%
4201456	40400	6.01	Construction - Industrial	3.67	3.33	2.89	13%
2030947	40400	6.01	Construction - Industrial	3.67	3.33	4.02	-21%
4071774	40400	6.01	Construction - Industrial	3.67	3.33	3.50	-5%
3999221	40604	6.07	Mobile Equipment Operation	3.59	3.31	3.14	5%
4201456	40905	6.07	Pipeline Construction	3.59	3.30	3.28	1%
4201456	42124	6.06	Electric Wiring	2.86	2.50	2.36	6%
2030947	42124	6.06	Electric Wiring	2.86	2.50	1.50	40%

Figure Created by Author
Data Source: Workers' Compensation Board, 2005

As well as safety, another barrier to entry in this market is quality, where the customers are demanding higher standards be adhered to, such demands as ISO certification or Quality Procedure Manuals with Quarterly reviews.

The entry of new competitors into the industry when there are significant profits to be made is often an indicator of increased competition. Too often good results cause firms to be less competitive, complacency rendering them vulnerable to new sources of competition. Thus, this industry is a monopolistic competitive market, according to the definition presented Michael Baye in the Managerial Economics and Business Strategy, Third Edition. (Baye, M., 2000, p301-306). There are many organizations, each of which is small relative to the entire market, allowing the industry, in a time of significant profits, to look encouraging to potential entrants. Economic theory suggests that under conditions of monopolistic competition an organization should devote considerable effort to attaining deeper understanding of their competitors (current and potential) and these competitors likely future course of action.

3.2.4 Competition

Flint has many competitors that range in various sizes, capabilities, locations, and revenues. First, this section of the analysis will discuss the overall type of market for this industry. Second, the analysis will discuss, in more detail, the larger publicly traded competitors of Flint, by looking first at the market concentration, then at the conduct of each competitor. Finally, this section will conclude with an overall summary of the rivalry that Flint experiences.

The industry that Flint is producing or servicing customers in is a monopolistic competitive market. As stated earlier, in a monopolistic competitive market, there are many organizations, each of which is small relative to the entire market. However, each organization produces a product or service that differs slightly from the others. The products are close, but not perfect, substitutes. To maximize profits, Flint has to produce its service where its marginal revenue equals its marginal cost. The profit-maximizing price is the maximum price per unit (or in this case project) that customers are willing to pay for the profit-maximizing level of output. Because there is relatively free entry into monopolistically competitive markets, if organizations earn short run profits additional organizations will enter the industry in the long-run to capture some of those profits. Similarly, if existing organizations incur losses, in the long-run organizations will exit the industry. Since there are many organizations to provide services in the monopolistically competitive industry, the only reason Flint will have any control over its price is if customers view Flint's service as differentiated. The demand for Flint's service is less elastic when customers view the other organizations' service as a poor substitute for it.

By looking at the industry and the previously discussed buyer power, it is obvious that this is also a Producer-to-Producer rivalry (Baye, M., 2000, p11). This type of rivalry functions only when there are multiple sellers of a product competing in the market place. Given that the buyers are scarce and hold the power, producers compete with one another for the right to service the customers available. Those organizations that offer the best-quality product at the lowest price earn the right to serve the customers.

Flint's principal competitors are recognized as follows:

- Triton Projects, Pillar, Ensource, Ensign, Mullen and Enerflex in oil and gas production services
- PCL Construction, Ledcor, Ensign and Enerflex in facility infrastructure, fabrication and installation
- CEDA and Quinn in facility maintenance
- United Safety, Splash & Dore and IROC Systems in safety services

However, the competitors that are analysed in this discussion are specifically, Triton Projects a division of the Churchill Corporation, Ensign Energy Services, Mullen Transportation, and Enerflex Systems Ltd. These competitors have been chosen because they compete with Flint on its largest projects – production and infrastructure - and because they are publicly traded. The following figure shows the strategic group map of the competitive relationship that these five organizations work in. The figure shows the capital employed of these organizations on the vertical axis, the gross margin on the horizontal axis and sales volume by the size of the circles,

Churchill having the smallest revenue, lowest gross margin and the second highest capital employed.

Figure 16: Strategic Group Map comparing Sales Volumes, Capital Employed, and Gross Margins

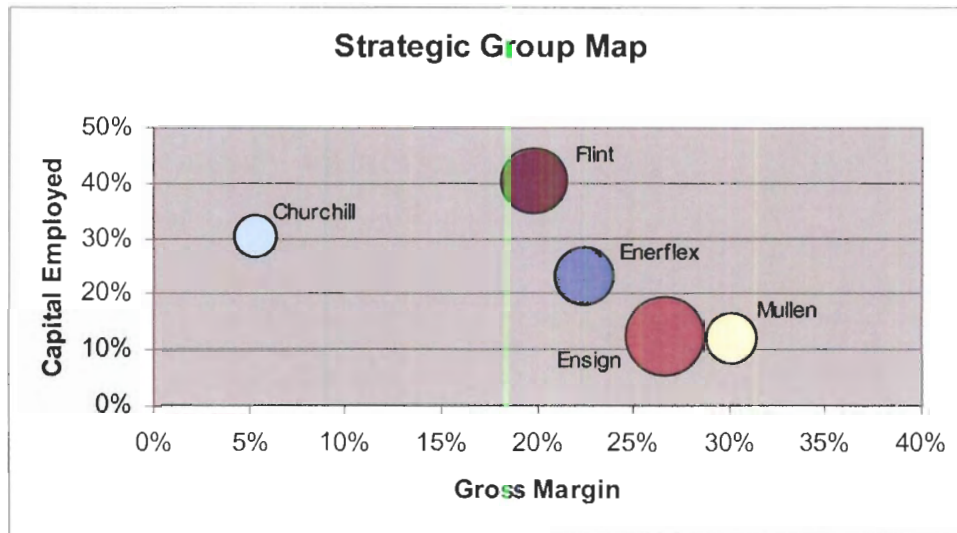


Figure Created by Author
Data Source: Company Financial Reports 2005

Triton Projects (Triton), as a division of Churchill Group (Churchill), is a direct competitor for Flint’s Production Services segment. Churchill is managed using five operating segments. Overall Churchill provides building construction, heavy industrial general construction, fabrication, insulation, electrical, instrumentation, power-line construction and maintenance and related services throughout Western Canada, Northwestern Ontario and the Northwest Territories through wholly owned subsidiaries. Triton Projects is the industrial general contracting segment of Churchill that includes heavy industrial general contracting fabrication, site work and ongoing maintenance. Triton Projects was the largest beneficiary of work in 2004 for Churchill. While Churchill is active throughout Western Canada, Ontario and the Northwest Territories 60-70% of consolidated revenue was generated in Alberta. Triton has acquired six different organizations ranging from construction to electrical to insulation. Churchill’s objectives are to build a highly profitable, diversified, and sustainable construction and industrial service business. Churchill’s revenue in 2004 was \$334.6 million with a net loss in earnings of \$6.1 million. This was the second year in a row Churchill was in the red, due to future investments, client delays on projects and poor management of rising costs. (Churchill Corporation, 2005)

Ensign Energy Services (Ensign), incorporated in 1987 has acquired, since 2002, ten organizations to diversify its operations. With 7,300 employees around the world, Ensign now has international presence. As a leader in the delivery of oilfield services, Ensign has four major segments: contract drilling, rental and equipment, well servicing and manufacturing and production services. Headquartered in Calgary, Alberta, Ensign's strategy is to achieve growth by: optimising utilization of their extensive fleet of oilfield service equipment, leveraging technology, targeting emerging growth opportunities and completing strategic acquisitions. In 2004, Ensign reached sales of over \$1 billion dollars and earned a net income of \$118 million. (Ensign Energy Services, 2004) Already in the 3rd quarter of 2005, Ensign for the second year in a row has achieved over \$1 billion in sales volume. (Ensign Energy Services, 2005)

Mullen Transportation (Mullen) is a diversified transportation and oilfield services company, focused in the energy sector of Western and Northern Canada with its activities divided into two distinct segments: Oilfield Services and Trucking. The oilfield services accounts for 65% of this organization's revenue. In 2004, Mullen's strategy was to focus its expansion in the oilfield services segment. This strategy led Mullen's revenue to grow to \$470 million, with a net profit of \$46.4 million in 2004. (Mullen Transportation, 2004)

Enerflex Systems Ltd. (Enerflex) is a leading supplier of products and services to the global oil and gas production industry. Enerflex's core expertise lies between the wellhead and the pipeline. Headquartered in Calgary, Alberta, Enerflex has approximately 2,400 employees and operations in Canada, Australia, the Netherlands, Indonesia, the United States, Pakistan, and Germany. While Enerflex is building its international presence, the company's fortunes are largely tied to the natural gas and operating expenditures in Western Canada. Enerflex's largest business segment is its services employing 51% of its staff, holding 35% of total assets, and generating 44.6% of the company's revenue. Sale volumes in 2004 were up slightly to \$557 million with profits of \$11 million. (Enerflex Systems, 2005)

Figure 17: Product Customer Matrix with Flint's Competitors

	Oil Sands Production	Natural Gas Drilling	Other: Safety
Construction			
Residential	H	H	
Commercial	E, H	E, H, L	E
Infrastructure	A, D, E, J	A, D, E, J, L	A, E
Production	A, B,C, F, G, H, J, K	A, B,C, F, G, H, J, K, L	A
Transportation	K	K	

Competitors
A FLINT
B Pillar
C Ensource
D PCL Construction
E Leducor
F CEDA
G Quin
H Triton Projects
J Ensign
K Mullen
L Enerflex

Figure Created by Author
Data Source: Company Financial Reports 2005

As previously discussed in the industry analysis, the oil and gas industry of Alberta has over \$74 billion in major oil industrial related projects scheduled over the next 8 years. This means that there is \$9.25 billion per year as potential sales volumes for industry's service providers to achieve.

By using the Four-Firm Concentration Ratio as demonstrated in Figure 18, (fraction of total industry sales produced by the four largest firms), commonly used to establish the market concentration within an industry, the ratio indicates that this market has many sellers, giving rise to much competition. Although this is a crude measure of the size structure of the industry, it confirms previous analysis that competition in the service industry is high. However, there are limitations to this measurement and analysis because many of Flint's competitors are not publicly traded and their sales volumes are not readily available. Leducor, PCL, Ensource, Quinn, Cedar, and Pillar as examples of the larger firms known to Flint as competitors that are private organizations. As well, in this industry, there is regional remoteness to overcome. Many competitors in this industry are in the local market and do not compete on a regional or national

level. This understates that actual level of concentration in the industry for Flint, as competition will vary in the local versus regional markets.

Figure 18: Discussion on Market Share

Total Market

\$ 74,000,000,000 Major Projects Volume Forecast for 8 Years
 \$ 9,250,000,000 Volume per Year
 \$ 743,000,000 Flint Sales Volume
 8% Market Share for Flint

Sales Volume for Competitors in Alberta Oil Industry

	Sales Volume	% of Market Volume
Flint	743,000,000	8.0%
Ensign	1,059,000,000	11.4%
Enerflex	557,077,000	6.0%
Mullen	306,085,000	3.3%
Churchill	40,080,000	0.4%
Totals	1,962,242,000	29.2%

One third of the market concentration is with these 5 organizations.

Figure Created by Author
 Data Source: Company Financial Reports 2005

Figure 19 shows a few of the different financial performance ratios comparing the five organizations. As shown, even though these competitors are in the same industry as Flint, they all result in different profit margins and returns on equity. By evaluating the major competitors ratios, Flint can begin to understand what the movement of their competitors is and how it can establish differentiation.

The Employee Productivity Ratio, sales revenue divided by the number of employees, reveals the differences in cost structures as the numbers vary. Flint is the lowest with \$135 per employee in 2004 while Enerflex had the highest at \$279 that same year. This can be regarded as a competitive advantage, as some organizations may have access to technologies that others do not, creating an increase in productivity per employee. As Flint's productivity ratio is the lowest, it would be an area to improve upon. (Appendices 10 – 13 Ratio Analysis)

Figure 19: Performance Ratio Comparison of Competitors

	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
PROFITABILITY RATIOS	ROE				SG&A				Net profit margin			
Enerflex Systems Ltd	10.74%	-1.65%	0.24%	3.94%	9.37%	16.33%	14.06%	13.89%	3.39%	-1.32%	0.13%	2.11%
Ensign Energy Services	23.34%	10.88%	17.57%	18.29%	3.42%	4.55%	3.26%	3.22%	13.13%	7.94%	10.66%	11.22%
Mullen Group	17.98%	8.46%	14.13%	17.32%	10.79%	10.81%	11.70%	10.75%	9.08%	5.44%	7.52%	9.86%
Churchill Corporation	25.45%	-0.41%	-12.00%	-24.81%	10.60%	6.16%	6.20%	7.18%	2.65%	-0.04%	-1.14%	-1.84%
Flint Energy Services, Ltd.	13.39%	10.01%	7.66%	6.26%	8.68%	9.57%	10.66%	10.42%	5.07%	3.90%	3.36%	2.54%
ASSET TURNOVER RATIOS	Asset turnover				Receivable days				Cash days			
Enerflex Systems Ltd	1.69	0.72	1.13	1.14	66.17	99.80	85.27	86.86	0.00	5.62	4.77	8.41
Ensign Energy Services	1.19	0.75	0.90	0.93	62.83	92.49	89.06	90.20	23.43	12.80	8.51	5.41
Mullen Group	1.51	1.03	1.10	1.18	51.71	74.37	67.44	60.61	14.97	0.00	0.00	0.00
Churchill Corporation	2.83	3.15	3.11	2.74	84.39	82.66	77.15	84.35	26.19	16.50	16.71	17.15
Flint Energy Services, Ltd.	1.10	1.25	1.18	1.18	89.26	61.94	72.91	83.68	3.77	4.52	1.91	1.58
FINANCIAL LEVERAGE RATIOS	Financial leverage				Payable days				Employee Productivity			
Enerflex Systems Ltd	1.87	1.73	1.67	1.63	42.03	88.24	60.25	57.42	234.40	176.60	271.33	278.54
Ensign Energy Services	1.49	1.83	1.84	1.75	59.45	95.24	84.04	73.99	172.51	121.83	173.38	141.27
Mullen Group	1.31	1.51	1.70	1.50	36.21	47.80	49.13	45.58	179.46	137.51	175.63	204.72
Churchill Corporation	3.40	3.12	3.37	4.92	69.16	61.62	62.38	58.73	150.65	141.67	142.27	260.81
Flint Energy Services, Ltd.	2.39	2.04	1.94	2.08	45.66	33.69	41.18	45.20	159.25	154.91	130.24	135.24

Figure Created by Author
Data Source: Company Financial Reports 2005

Over the past 15 years, all of the competitors analysed have experienced significant growth of vertical and horizontal integration, acquiring organizations that are similar as well as along their supply chain. This is a reflection of this growing market entering into maturity as previously discussed.

Although these are the largest of the competitors that have similar divisions to Flint, there are also privately held and smaller organizations that are recognized as competitors. A majority of Flint's competitors are small and geographically focused, creating a real diversification between them. Typically, these smaller organizations, in a specific region, can provide one or two of the broad range of services that Flint provides. Flint offers its customers a wealth of services across a large geographic area differentiating Flint from a majority of its competitors. Flint charges a premium for its services (differentiation) but cannot compete head-to-head on price with the smaller 'mom and pop' organizations.

The success of Flint depends on the strength of its competitors and the nature of their interaction. The effect of competitors on Flint, both individually and collectively, will set future strategies as the market matures. Differentiation is difficult to maintain, with substitution and imitation as threats, therefore Flint will constantly have to evaluate its competitor's movements for future differentiation and sustainable profits.

Overall, the competition or rivalry segment in Porter's Five Forces analysis is somewhat unattractive. Looking at the larger competitors, Flint has succeeded in competing with them but there is a growing concern about Flint's future. As some of these competitors, public and private, are larger than Flint, Flint does not have the financial strength to make some long-term internal investments in organizational systems or commitments. On the other hand, Flint is too large to be as flexible as some of the smaller entrepreneurial organizations to adapt quickly to the wants and needs of the customer. Therefore, Flint's strategy is to double in size in the next five years to ensure its longevity in the industry; otherwise, it may be squeezed out of contention from the larger more liquid organizations that can buy flexibility and/or pushed out of the running from the smaller, more responsive, and adaptable organizations.

3.2.5 Supplier Power

As Flint is in the construction services industry, its suppliers come in two distinct forms: skilled labour and material suppliers. For the purpose of this analysis, the concentration will be on the labour as a supplier power. As for the skilled labour in this industry, the resources are constrained for multiple reasons. First, there is slow down in demographic growth as the baby boom era is passing into retirement age, with the rate of fertility decreasing in Canada. Second, there are perceptions from parents that greater educational value, resulting in a more successful future, will be achieved through post-secondary education in business management and computer technology, rather than in the technical trades programs. Third, the geographic location of the work is restricted to remote locations with few inhabitants forcing potential laborers to move or participate in long commutes that are undesirable. Finally, the slowdown in the energy market through the 1980's and 1990's caused a downsizing in companies creating a poor industry reputation. These factors have all contributed to the shortage of qualified labour being experienced today. As shown in Figure 20, the unemployment rate in October of 2005 for Alberta was at its lowest in 30 years with the largest employment gains in Mining and Oil and Gas Extraction (Alberta Economic Development Authority, 2005)

Figure 20: Provincial Employment Rates

Employment Rate by Province	
Canada	62.7
Alberta	70.2
Manitoba	65.4
Saskatchewan	64.4
Ontario	63.8
British Columbia	60.8
Quebec	60.3
Prince Edward Island	60.1
Nova Scotia	58.3
New Brunswick	57.7
Newfoundland	50.1

Figure Created by Author
 Data Source: The Daily, May 6, 2005

First, looking at the population rates of Alberta, in Figure 21, gives an indication of the issues the labour market is facing today. Alberta's Population Report for 2004, states that Alberta's population growth continues to be among the highest in all the provinces. The following figure provides the January 1st population estimates and yearly growth rates of Canada and Alberta since 1999. Alberta's population is estimated at 3,223,415.

Figure 21: Population Growth Rates

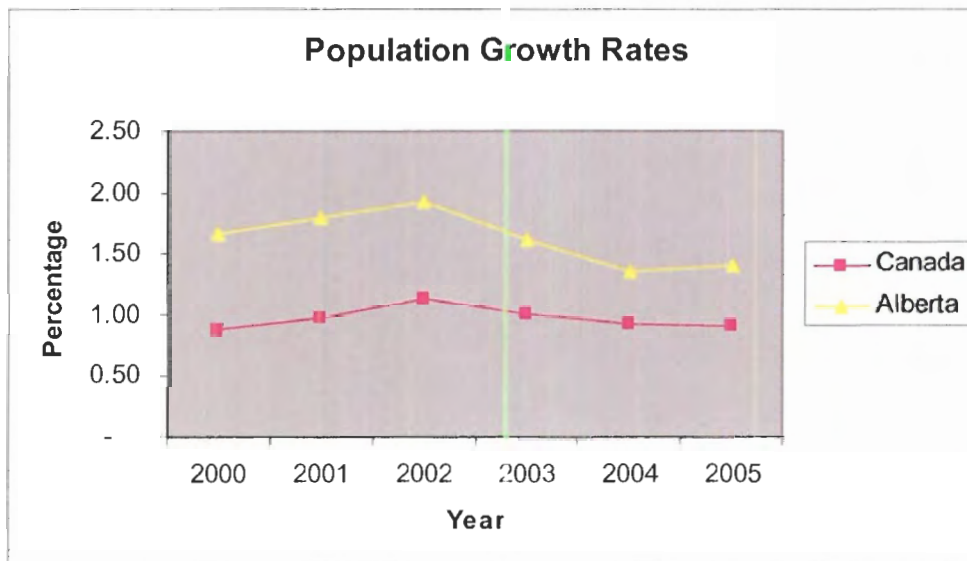


Figure Created by Author
 Data Source: Alberta Population Report, March 2005

Over the period 2004-2009, the Athabasca-Grande Prairie region shows the highest average percentage growth at 2.9%, followed by the Red Deer at 2.3%. The high annual population growth for the Athabasca-Grande Prairie region is reflective of its healthy and growing economy, attracting migrants to the region. The Wood Buffalo-Cold Lake region has a younger population, with 40.0% of the population under the age of 25 in 2004. Despite this, the proportion of the younger age groups are expected to decline through the forecast period while the older age group proportions are expected to climb, a trend seen in many other Alberta regions. It is expected that the 55 to 64 year old age group will have the fastest average growth rate of 5.9% while the 35 to 44 year old age group will have the slowest average growth at 0.4% (Economic and Demographic Analysis, 2004, August).

Figure 22: Regional Breakdown of Unemployment and Major Projects

Region	Unemployment	Project Expenditure \$	Project Expenditure %
Athabasca/ Grande Prairie	3.2%	1960	2%
Wood Buffalo	3.9%	58900	59%
Camrose	3.1%	712	1%
Calgary	4.2%	1023	1%
Edmonton	4.1%	1696	2%
Banff/ Jasper	3.1%	703	1%
Lethbridge/ Medicine Hat	3.3%	14255	14%
Red Deer	3.7%	10092	10%
Unallocated		10489	11%
Total		99,830	100%

Figure Created by Author
Data Source: Alberta Economic Development Authority, 2005

Even with the growth in Alberta's population and participation rate, Alberta's unemployment rate fell to 3.5 % in October of 2005; the lowest unemployment rate in 30 years. Figure 22, shows the regional breakdown of the unemployment levels throughout the province. Alberta also has the lowest provincial unemployment rate in Canada, with the national average at 6.9% (Alberta Economic Development Authority, 2005). The decline is a result of employment increasing for the fifth month in a row combined with a decrease in the size of the labour force - more people retiring than coming on stream or simply moving out of Alberta faster than they are migrating to this province.

Second, with the perception in the 1970's that trades were a 'low class, low paying and unchallenging career,' educational systems with society encouraged young people to focus on post-secondary education that consisted of entrepreneurial business savvy, it appealed to society's perception of success. There are more post-secondary registrants than Canada has seen before, but these students are pushed by their parents to seek jobs in industries that are seen as stable with long-term viability. Although trades are high paying and challenging careers, they encompass project-based, seasonal, cyclical, and often take place in remote, undesirable locations. This reduces the number of students registering for trades training, the skills that are required for construction related employment.

The third issue was the geographical restrictions that an employer in the oil industry is challenged with, because it is dependent upon oil reserves found in specific locations. These locations are, in a majority of cases, remote. A substantial part of the work occurs outside and as stated before, the work is cyclical occurring mainly in the winter season; these are attributes of the Flint labour force that have a negative effect on potential employee career choices. There is competition for careers that occur with other industries and what lifestyles they represent. As stated earlier, entrants abandon the energy service sectors and seek more stable, full time employment in other industries. This turnover results in new 'green' work force additions that at times strains the supervision capability of the experienced crews.

Fourth variable was the effects of economic down turn in the industry. The economic downturn in the 1980's and 1990's prompted many oil and gas companies to impose hiring freezes and as a result, the industry received a poor reputation as an employment choice. Throughout the last two decades, many people have been 'pushed' into self-employment through the downsizing of large organizations. Restructuring as a common response to the cycles of the industry has led to significant losses of skilled workers. In addition, new entrants see the oil and gas business as one that does not offer long-term career stability and growth.

Over the past few years, the competition for field level workers has intensified because of more drilling activity and other industries (forestry, oil sands, retail, housing) offering attractive alternative work. This affects industry's ability to attract and retain skilled workers. Continuous 12-month employment is a key factor to retain many of the qualified individuals in the work force. This results in a shift of some workers to other more stable industries (one service provider estimated the cost of losing staff at \$9,500 per employee) (Gwodz, B & Ziff, P., 2003). This new

challenge for the oil and gas industry has required seismic and well site service providers to expand their human resource searches to across North America.

Overall, this segment is unattractive as the supply of skilled workers has the power to choose from different careers. Because of the lack of supply in this industry, it is an employee's market. In economic terms, the demand is outnumbering supply creating an economic loss. This market is unattractive for the consumer, namely Flint.

3.2.6 Summary of Micro-Environment Analysis

Using Porter's Five Forces Analysis, the industry for Flint is unattractive. Even though there is only one true substitute (in-house project management by customers), the competition is strong with difficulty of exiting and entering the market increasing the rivalry. This intense rivalry is a result of the high profit margins that encourage entrants to overcome the barriers to entry and then remain because of the capital investment, ensuring that exiting is difficult. With only a few organizations holding a large portion of the buyer power, and the suppliers, both skilled labour and equipment vendors, having multiple markets as supply choices there is little power for Flint to capitalize on.

However, Flint can reduce the risks and improve the opportunities. Flint needs to assess what is within its power to control and in doing so, reduce the risks or vulnerabilities. Already Flint has established some crucial strategies to reduce risks to its organization. Within these five forces analyzed, Flint cannot control its competitors or the entry barriers, but Flint is trying to differentiate, this will also increase barriers to entry through branding the Flint product. Flint cannot control its buyers, but it can provide a superior product and is striving to establish a niche market. Flint cannot control the substitute but is trying to establish alliances to ensure long-term relationships with businesses.

Of all the variables, supplier power is the only one in which Flint has not yet developed a successful strategy. Flint can ultimately strategize to reduce and/or control this risk to decrease the vulnerability that Flint has in the industry. This is an opportunity that can be exploited with a management strategy. Managing the labour side of supply is the most likely to be successful in supporting the strategy of differentiation and growth.

3.3 Macro-Environment Analysis

This analysis looks at the macro-industrial forces on an industry and ultimately on the organizations within that industry. This analysis will summarize some key political, economical, technological, legal, environmental, and social issues but will offer some in depth analysis of the social factors that have the potential to affect labour supply and Flint's strategy for growth. From a macro-environmental analysis, dealing with the social aspect, it is the utilization of new sources of labour combined with renewed training and education efforts that will undoubtedly become more prominent in the years to come. Skilled immigrants, women, and Aboriginal workforce will, in this regard, play an increasingly important and strategic role.

3.3.1 Political

The regulatory frameworks and processes that affect human resources in this industry are those focusing on environment, health and safety, and consultation with stakeholders. The following paragraphs will discuss these different political issues for Flint and its industries.

The safety and health of workers in the construction industry is and will continue to be a high priority. Legislation is driving training and development, and in the oil and gas industry, companies and contractors are collaborating to establish safety standards. Safety training, demonstrated competence, and accreditation will become standardized within the industry and act as a prerequisite for employment for both employees and contractors.

From a labour supply point of view, governmental policies on inter-provincial migration and international migration restrict the mobility of resources. National, provincial, and territorial governments regulate the industry, trying to streamline regulatory processes that are important to continuing investment. Change is necessary in the federal government's requirements to allow immigrants certification and recognition of holding a trade from a foreign country. With streamlining the process, there will be a reduction in the amount of time it takes to receive recognition for certification and to be put to work.

These regulatory processes, affecting all trades people looking to work out of province, require inclusive public consultation. These consultations can be time and cost intensive, but the failure to adequately perform the required consultation can put proposed industry activities at risk. This requirement has increased the importance within companies to have people who are

skilled and knowledgeable on consultation, issues resolution, public affairs, and stakeholder relationship building.

Because of the need for this industry to work on lands that are under Aboriginal control, there is a focus on the development of relationships between the construction industry, Aboriginal Peoples and communities that are long term and mutually beneficial. These relationships are often built by focusing on ways in which the Aboriginal Peoples can have long-term involvement in the industry through education and training, employment, and business opportunities.

Governments play a role in establishing ad hoc programs that address targeted labour market issues as they arise. These programs range from the Alberta RAP program for high school students to ad hoc programs that address an identified gap in training and skills. One of the most prominent of projects is the development of the Red Seal Program, a standardization of regulations to ensure that training is meeting all the provincial requirements, allows a provincial ticket to be transferable to other provinces such as Alberta, BC, Saskatchewan and Ontario.

Other ad hoc programs range in mandate, bringing together sponsoring industries, labour pools, and training providers to create workable solutions. There are governmental programs available to groups such as the Alberta Aboriginal Apprenticeship Project (AAAP) that was established in 2001 by the Province of Alberta to promote the opportunities within industry trades and the Aboriginal Communities. The AAAP was created in response to labour and market needs in Alberta. The Aboriginal Skills and Employment Partnership (ASEP), officially launched in 2003 is a federally funded program to maximize training and job opportunities in major economic development projects across Canada. The Athabasca Tribal Council (ATC) and the oil sands industry signed a “Capacity Building Agreement” designed to enhance the ability of Aboriginal Peoples in the Wood Buffalo region to participate and benefit from the development of the oil sands. In the oils sands, the Regional Issues Working Group (RIWG) provides a proactive process, which promotes the sustainable development of resources within the Regional Municipality of Wood Buffalo for the benefit of all stakeholders. The Education and Jobs Committee consists of human resources practitioners from local companies and other community stakeholders coming together to study and collaborate on the issues facing the region. (Athabasca Regional Issues Working Group, 2005, June)

Flint’s operations are subject to federal, provincial, and municipal legislation, as well as, regulations in its construction and maintenance operations. Flint has established guidelines and

management systems to ensure compliance with environmental laws, rules and regulations. These systems have been important in establishing Flint as a responsible organization and have won it much success in the tendering process and in the establishment of alliances. However, the adoption of new laws or regulations or the more vigorous enforcement of environmental laws or regulations could seriously harm Flint's business by increasing expenses and limiting future opportunities.

3.3.2 Economic

In the last decade, the globalisation of the oil and gas industry that created the mega-majors, and the cyclical economic conditions of the construction industry, has subjected Flint to many economic challenges beyond its control. Demand for Flint's services are based on several oil and gas factors: the global commodity price, which reflects demand and supply, seasonal development activity, and new production development costs of the mega-majors. This has resulted in a boom and bust business environment that responds to the exploration and production companies adjusting to shifting business conditions. That response has a profound effect, in turn, on related businesses such as project completions contractors, well service providers and pipeline transmission companies, such as Flint.

The Alberta economy relies heavily on trade. A predicted slowing in trading partner economic growth will result in declining economic growth in the province. Alberta is expected to see a decline in real GDP growth until 2006 after which it will see a slight increase. Alberta's major trading partners include the rest of Canada, the United States, the European Union and Japan. Therefore, with Alberta's economy is directly tied to that of the United States, as 90% of Alberta's exports are across the American border, as their economy has grown over the past 20 years, Alberta has had the strongest economy in Canada, with an average real rate of growth of 3.4% per year. (Alberta Economic Development Authority, 2005)

These economic cycles can create huge imbalances between the supply of new apprentices and the demand of hiring organizations. There is a lag between economic cycles and apprentice enrolment cycles creating an economic loss that occurs when apprentices cannot find work or employers cannot find workers. Similar to the violent commodity cycles that can push markets to booming excess and then precipitate deep recessions, a particularly harsh reality of the construction and energy industries is the extreme volatility of the workforce requirements. Seasonal fluctuations can double or cut employment in half for many trades during the course of

each year. This volatility in employment makes it difficult to attract and retain employees, as well as expensive to sustain systems that require investment in equipment and materials only to be faced with extended periods of under-utilization.

Overall, Canada is becoming a world player in regards to oil production as technology advances and increases the ability of organizations to extract oil from the largest reserve in the northern hemisphere. In particular, Alberta is centre stage capturing over 80% of the oil production for Canada. As the economy continues to thrive, the demand for oil will continue to increase. This represents large opportunities for Flint, as oil and gas suppliers are Flint's primary customers and the customers' expenditures are driven by the price of the commodities they produce. With the positive conditions in Alberta's external economic environment (strong economic growth, increasing demand for oil, largest oil reserve, increasing expenditure, and increasing demand for construction) the Alberta economy will continue to grow.

3.3.3 Technology

For Flint, technological advances have two major impacts. First, the impact on the demand for Flint's services and second the impact on the related employment requirements.

As the pressure to reduce emissions and the cost of producing oil increases, technology has had both a positive and negative effect on the supply and demand for oil production. These changes then have an effect on demand for construction services related to oil production or the sales volumes for Flint. On the positive side, technology has reduced the amount of gasoline needed to operate a motor vehicle, subsequently reducing the demand for oil per vehicle. However, through technology, the cost of vehicles, both the sunk costs and the operating costs have declined and the demand for vehicles themselves has increased thus offsetting this reduction in demand of oil. Despite technological advances, the demand for oil is still on the rise, as shown in Figure 23. However, technology is still a threat to the use of oil and the development of alternative energies lends itself to the onset of a disruptive technology, ultimately reducing the demand for crude oil, and therefore decreasing the need for Flint's specific services to the oil and gas industry.

Figure 23: World Consumption of Oil

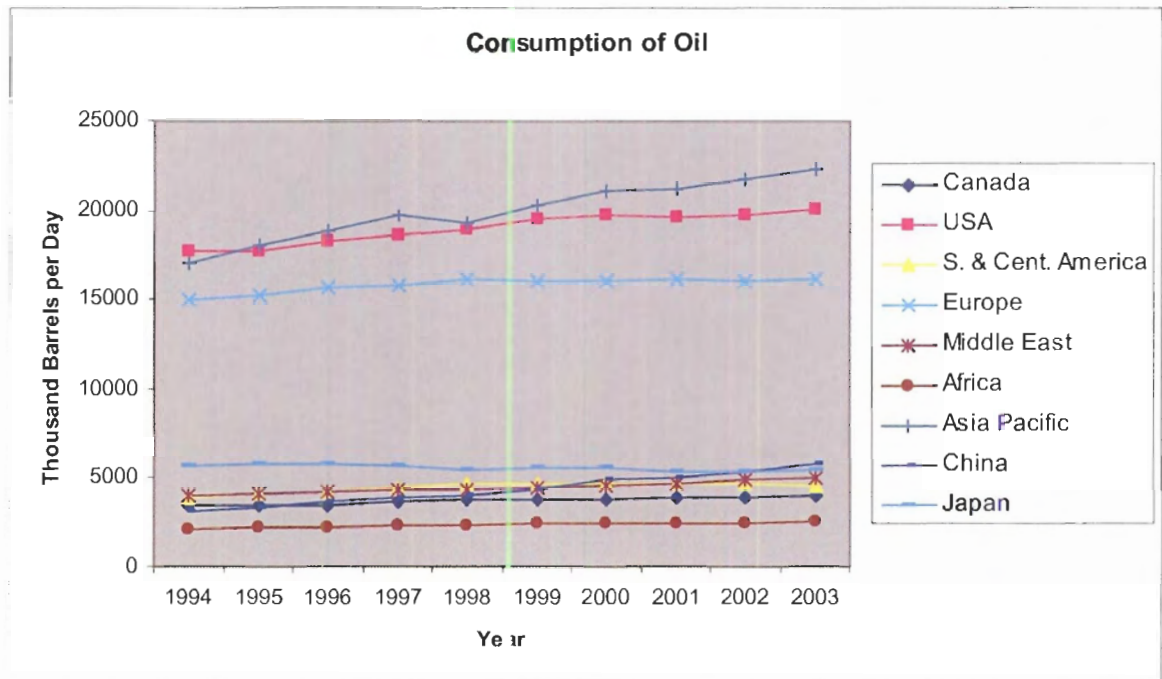


Figure Created by Author
Data Source: British Petroleum, 2005

Technology also increases the demand for evolving skills in the workforce while increasing productivity and lowering costs. As the life cycle of technology grows smaller and develops at a rapid pace, trades people must be constantly upgrading their skills. However, it was the thinking in the 1970's in elementary schools that trades were not the preferred career choice. Therefore, the rate of students with a trade reduced during the 1970's and 1980's. There has been more development in the service and entrepreneurial industries throughout Canada, increasing the white-collar workers of today. There is a real demand by the industries for trade schools and an increase in trades development within the elementary schools to change the mindset of blue-collar jobs.

3.3.4 Legal

There are two aspects of the legal environment that affect Flint. First, there is the legality of dealing with its customers in the construction industry and second, there is the legality of dealing with the supply of labour.

In regards to customers, Flint supplies a project team to the customer that will complete a project directly on the customer's site. This site, in many cases, already has facilities fully

functioning and producing barrels of oil. There are operating risks as well as hazards that Flint will encounter, such as damage to customers existing facilities that could hinder the rate of the customer's oil production. With the current high prices for oil, this damage could be catastrophic to Flint's sustainability, as the customer would hold Flint accountable for its losses. For Flint to be the cause of reduction in barrels produced per day would have serious impact, not only financially, but also environmentally, with any damage to the environment from the direct oil and the indirect byproducts of oil. With liabilities from an accident caused by Flint employees, fleet of trucks, or equipment, Flint could be held accountable for all consequential damages, depending upon how the agreement was written with the customer. Should Flint be found negligent there is potential to ruin Flint's future as an organization.

Flint's operating segments are often required to provide performance bonds as assurance of contract completion. As an operating risk, Flint is dependant on annual performance reviews to receive 'bond liability' insurance. If this insurance is not received Flint may not be able to accept business, as it is a condition of receiving certain contracts. As well, this necessary insurance may not be adequate to cover all losses or liabilities Flint might incur in its operations. If Flint insurance rates increase due to poor performance, Flint would then be subject to the risk that it may not be able to maintain or obtain insurance of the necessary type and amount desired at reasonable rates. This would then impact its future sales volumes; this could limit growth as well as potentially have an adverse effect on the on-going operations.

The second aspect is the supply of labour and the legal environment concerning the health and safety of an employee and the move towards independent contractors or self-employment status. More and more regulations from multiple sources of governing powers hold corporations accountable for all aspects of running a business.

Occupational Health and Safety (OH&S) Legislation confirms there is little question that even with an effective pre-qualification system in place, workplace owners are at risk of being found to have fallen short of due diligence requirements without evidence of at least on-going monitoring of contractors. On March 31, 2004, the Bill C-45 amendments to the criminal Code came into force. The changes created an explicit mechanism designed to make it easier to convict corporations and other organizations of criminal negligence based in part on the actions of defined "representatives". The definition of "representative" in section 1(2) of the Criminal Code includes contractors, clearly demonstrating a legislative intention to extend the employer's obligations and liabilities under the Criminal Code to situations involving workers of a contractor

the employer has hired. The question is, whether owners are putting themselves at risk under the Criminal Code by not taking any actions with respect to OH&S relating to a contractor's workers at a project? Because the owner is specifically permitted to avoid doing so, for the purpose of being treated as the project 'owner' rather than the constructor by the Ministry of Labour. (Edwards, 2005)

In the construction services of the oil and gas industry, with the work being so labour intensive, Worker's Compensation Board targets the workplace to get the job done safely with standards such as Total Recordable Injury Frequency or TRIF's (Injuries per 200,000 work hours per year). Should the TRIF increase for Flint, the costs to insure its employees will increase, as well as, the loss of market share due to a poor WCB rating. Flint to date is below the required industry average and pays a lower premium as a result.

Over the past three decades, there has been an increase in globalisation, corporate restructuring, and employee mobilization; therefore, it is not surprising to see a significant shift in the employee-employer relationship. The move toward self-employment is an example of this shift and can have significant legal repercussions for employers and employees. This movement has become a growing concern in the common law courts for impacts such as: social representation, taxation, Worker's Compensation Board and Occupational Health and Safety. This shift to self-employment or independent work will be discussed in more detail in the Social section.

3.3.5 Environmental

Flint recognizes it must conduct its business in a manner that protects and preserves the environment and complies with applicable legislation and regulation. The Alberta construction services industry in the oil and gas sector is faced with a growing number of concerns; a combination of high development costs, environmental challenges and high natural gas prices have resulted in some companies delaying or downsizing projects in recent years. Flint is subject to federal, provincial and municipal environmental legislation, as well as, regulation in its construction and maintenance operations.

Environmentally, global warming is a critical issue for the oil and gas sector and under heavy criticism from non-governmental organizations, restrictions have been placed on the production of carbon monoxide and other greenhouse gases that directly affect the demand and cost of doing business in the oil production industry. This challenges the production projects to

become more environmentally compatible and sustainable. In regards to the changing environmental policies, hiring Quality Control and Environmental Analysts to watch over the progression of a project with the right experience and knowledge become necessary for project managers.

3.3.6 Social

Severe cycles, rising taxes, regulatory costs and consolidation among material and equipment suppliers have increased the risks to employers and workers. Restructuring as a common response to the cycles of the industry has led to significant losses of skilled workers. Experienced mid-career employees often choose to consult independently or to leave the industry altogether. In addition, new entrants see the oil and gas business as one that does not offer long-term career stability and growth. This affects industry's ability to attract and retain skilled workers. Several companies have gone to foreign locations to reduce their cost of operations and become more competitive, however, for the oil industry this is somewhat restrictive as the product is geographically located and therefore limits the ability to move. The companies are not able to move, and therefore the people must move to the companies.

As previously discussed, there is currently a tight labour market to date in Alberta, as the unemployment rate is at a record low of 3.2%. This is a result of many contributing factors: the economic boom within Alberta in the past five years, the high-energy prices, the increase in capital expenditure and the increased job creation across the Province, all pushing the unemployment rate to its current lows. This discussion the Social impact to the industry will cover five specific components within Alberta's labour force: the increase in self-employment or independent contracting, the education levels of Aboriginals, the participation of women, the provincial acceptance of migrants and finally, the overall aging population.

3.3.6.1 Independent Contractors

Throughout the last two decades, many people have been 'pushed' into self-employment through the downsizing of large organizations. Economic downturn in the early 1980's has prompted many companies to impose hiring freezes, making independent contractors fashionable and economical for Canadian employers who need highly skilled professionals to complete very specific tasks while maintaining the flexibility to trim their payroll costs. The structural change

that tries to limit these risks and costs is the trend to subcontracting. This shift acts to limit the extent of employment relationships and substitutes independent operators.

There are advantages and disadvantages to both the employer and the employee when it comes to independent contracting. Paid-employment relationships have been burdened with taxes and regulations that can be minimized in self-employment or independent contractor arrangements. Employers must not only provide their employees with the relatively generous reasonable notice of termination according to common law, but they also incur the administrative costs of periodically deducting and remitting to the appropriate authorities contributions for Employment Insurance, Canada Pension Plan, Workplace Safety and Insurance Premiums, and Income Tax, and of maintaining comprehensive personnel records. Utilizing independent contractors relieves the employer of the responsibility for benefit plans that can include medical and dental benefits, long-term disability insurance, life insurance, savings and Registered Retirement Savings Plan's. With this move toward self-employment, the employer's reliance on the services of contractors, casual employees, temporary-help agencies, and part-time workers, is growing. Obviously, employers will seek cheaper substitutes if the price of employee labour increases too much. (Fudge, 1999, p139) Pressures to avoid tax and risk were most severe during the recession when big projects were rare and, unemployment and bankruptcy common.

For organizations, there are two major disadvantages to using independent contractors in this competitive industry. First, it is hard for an employer to maintain claims about a distinctive value in their workforce when competitors can hire these same contractors. With the labour force being a key component in project completion, how does an organization build a competitive advantage with rotating personnel? Second, safety and other workplace standards are hard to enforce when workers set their own hours and are responsible for their own equipment. With this industry having one of the highest rates in accidents and injuries, as well as, stakeholders demanding tighter controls over workers safety, how does an organization manage its safety rating and ensure discipline amongst its labour force? Both of these issues are paramount to an organization in the construction sector of oil and gas industry.

There are many benefits from an employee's perspective to becoming self-employed. They can avoid payroll deductions for Employment Insurance, Income Tax, and the Canadian Pension Plan. They can also deduct from their self-employed earnings for income tax purposes such items as travelling expenses to and from the worksite and maintaining an office at home. As well, being self-employed can allow for greater flexibility than that of a regular employee in

setting his or her own working hours. Even though people have been initially pushed into the self-employment job circuit, they have come to enjoy the 'pull-like' aspects of their self-employment experiences. The self-employed enjoy the independence, flexibility, and variety that their job path brings to them. Another aspect that some people enjoy is the resulting co-relation of work-effort to income, providing them with greater control over their job security.

However, for others, this irregular income can be the cause of great anxiety. Many experience long hours with lack of the employment benefits and see this as a serious drawback. The independent contractor is now responsible for his or her own Employment Insurance and Canadian Pension Plan contributions. Other disadvantages are the lack of training opportunities, negative perceptions of self-employment, all the additional tasks of running a business and the lack of protection for the future. The advantages of self-employment are sometimes challenged as many of the perceived benefits linked to 'independence' and 'control' are often more apparent than real. The self-employed often operate in situations where the client in effect becomes the boss, a state of quasi-employment. Concerns about non-standard work arise because workers in these jobs tend to have low earnings and are more likely to live in low-income families. Self-employment brings a significant burden in terms of bookkeeping; need for professional services, insurance, increased risks, no paid holidays, no statutory holidays, or sick days. They also face greater risk of unemployment and enjoy fewer employer or government-sponsored benefits. (Kapsalis & Tourigny, 2005)

Demographic trends in Canada's population and the business cycles of major industries have led to increases in self-employment or independent contractors. Six out of ten working Canadians are employees with permanent full-time jobs, the traditional standard form of employment. One and half out of ten are self-employed. The incidence of non-standard work has been rising in recent years (VOSKO et al., 2003, p 29-49). In Canada, the growth of self-employment from 1979 to 1997 was substantial, increasing 77%. Between 1989 and 1997, self-employed workers accounted for approximately 80% of total job growth in Canada. (Manser & Picot, 1997, p37) Figure 24 indicates these statistics.

Figure 24: Canadian Growth of Self-Employment

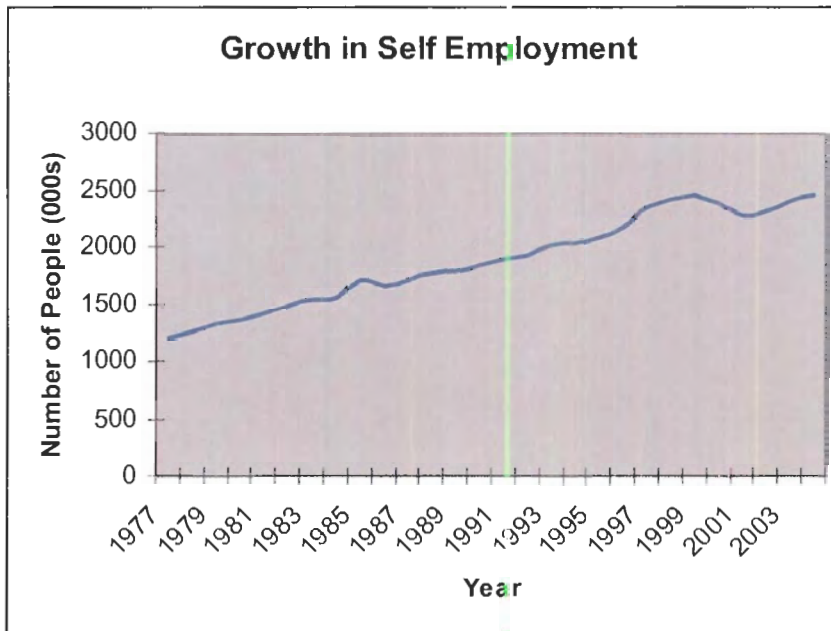


Figure Created by Author
Data Source: Statistics Canada, 2004

This movement has become a growing concern in the common law courts for impacts such as: social representation, taxation, Worker's Compensation Board and Occupational Health and Safety. Among the negative effects of self-employment growth are the suggested costs of increasing bankruptcies, persons without disability and extended health insurance, pension coverage, erosion of tax based governmental income, broken marriage costs due to the long hours and financial stress and the possibility of reduced social cohesion due to more people working in isolation. For these reasons, Human Resources Development Canada has suggested to legislation that:

'The burden of proving a worker as an independent contractor is on the employer, and the benefit of doubt should favour the worker... Legislation should provide for the protection of home workers and other workers who meet the criteria of 'employees' against reprisals (dismissal, suspension, discriminatory measures or any other reprisals) for refusing to enter into an independent contractor relationship with their employer'. (Human Resources Development Canada, 2000)

The risks or consequences of incorrectly classifying a work relationship can be some or all of the following:

- Penalties, interest and liability

- Direct liability under the Income Tax Act of Canada because of an operation's failure to withhold and remit income tax on behalf of its employees
- Liability under the Employment Insurance Act as a result of an organization's failure to withhold and remit employment insurance premiums
- Liability of Canada Pension Plan contributions
- Liability under the Workplace Safety and Insurance Act

The reclassification risks with Canada Revenue Agency could charge the following penalties at a minimum of the following:

- Canadian Pension Plan and Employment Insurance from employer and employee contribution for the current and previous year
- Ten percent penalty on the total assessment and interest of approximately prime plus one percent from the date each of the contributions was due. (Canadian Federation of Independent Business, 2004)

Coverage under Worker's Compensation Board (WCB) protects Flint from exposure to large claims, and unlike private insurance, it will not be cancelled. It is a great safety net for employers as the workers are forbidden to include the employer in a lawsuit. However, should the worker not be covered and considered an employee by WCB, the organization will become open to the liability of a workplace accident. To justify in the eyes of the law, that an independent contractor is truly independent, they and organizations have established the invoicing procedure, but submitting an invoice is not a determining factor. Especially when a person makes a claim for Employment Insurance or Worker's compensation they may say that the employer forced them to submit invoices in order to avoid making remittance on the worker's behalf. Should the independent contractor not have a WCB account or if they are not on Long Term Disability, the organization that hired them is responsible for their WCB premiums. Therefore in the event that the employer is audited by the WCB and the independent contractor does not have a WCB account or the employer has not obtained a 'clearance', the employer will be forced to pay the WCB premiums, back premiums, penalties and interest that apply during the course of the work. (Canadian Federation of Independent Business, 2004)

An analysis of Flint's labour force by trade shows that the B Ticket Pressure Welder accounts for almost 50% of the independent contractors or DSPs. This is a very crucial component of independent workforce as B Ticket Pressure Welders work for short periods and provide their own capital investment of a truck and welding equipment. Thus, Flint chooses to hire B Ticket Welders as independent contractor and not as employees. The capital investment required for a B Ticket Welder would not be a smart outlay of cash for Flint for such short-term

sporadic workforce requirements. As well, due to the nature of the job, the Pressure Welder is flexible and mobile, able to move from one job to the next with little interruption. In addition, to become a qualified B Ticket Welder there are stringent rules and regulations in regards to safety and quality. This means that Flint can utilize the B Ticket Welder as a DSP, without the worry of liabilities, while achieving the flexibility for project requirements and avoiding the under-utilization of expensive assets. Therefore is it in Flint's best interest to continue to hire these welders as DSPs and avoid permanent employment. However, the criteria are quite specific for allowing this trade as a DSP, and not all trades are the same. Flint may want to set guidelines as to what trades qualify to become independent contractors as there are risks to Flint that will need to be acknowledged.

In the end, Canada Revenue Agency that has final says over whether a person is an independent contractor or an employee. This allows for changes or evolution in a system that Flint does not control, making this a risk to Flint. The question is the courts will ask is, what is the degree of economic dependence the individual has on the organization? Key point being that the more economically dependent the more likely the Courts are to perceive the relationship as an employee, whether at common law or under employment statutes. Moreover, as Flint increases its use of independent contractors, these laws and underlying issues will come to a forefront from a financial, legal, and social perspective.

3.3.6.2 Aboriginals

Over the past two decades the population of working age Aboriginal People in Alberta increased by 32%, while the working age population of all Albertans increased by 13%. In 2001, the Edmonton Region had the highest Aboriginal Albertan's working age population with 26, 190 or 25.5% of Alberta's total Aboriginal people working age population. Nearly two-thirds or 62.2% of Alberta's Aboriginal people lived in Edmonton, Northwest and Northeast regions. (Human Resources and Employment, 2005)

The Aboriginal population is rising faster than that of the national aging population. Reported data on the Aboriginal population indicates a growth rate of 22.2% from 1996-2001 (Petroleum Human Resources Council of Canada, 2003, p106) while the growth rate for the non-Aboriginal population for the same period is 3.4%. Approximately half of this is attributable to demographic factors such as a high birth rate, while the balance is likely accounted for by increasing awareness of Aboriginal roots resulting in more accurate reporting. In addition, the

median age of the Aboriginal population is 24.7 years and 37.7 years for the non-Aboriginal population. The median age is the point at which exactly one-half of the populations is older and the other half is younger. The median age of Aboriginal Alberta was 23.4 in 2001, which is 1.3 years lower than the national Aboriginal Age. This is also lower than Alberta's non-Aboriginal people's median age of 35.4 years.

Figure 25: Statistics on Aboriginal Participation Rates

	Industry Profile	% of Industry Population
Total - All Persons	120,040	
Demographic Profile		
Inter-provincial/ inter-territorial migrants	11,160	9%
External Migrants (lived outside Canada 5 years ago)	2,680	2%
Visible Minority Population	5,520	5%
Aboriginal Peoples (self-identifying)	6,160	5%
Persons Self-Employed (incorporated and unincorporated)	10,255	9%
Immigrants	11,055	9%
Persons who immigrated in 1996 or later	1,385	1%
Other	71,825	60%
Gender		
Male	95,810	80%
Female	24,230	20%
Age		
15-29 years	33,205	28%
30-44 years	51,690	43%
45-59 years	30,710	26%
60 years and older	4,435	4%

Figure Created by Author
Data Source: Statistics Canada, 2001

Aboriginal participation rate in Alberta (portion of the working age population that is either employed or actively seeking employment) of 64.2% was second highest after Ontario (64.6%) among the provinces. This is 2.8 percentage points higher than the national average for Aboriginal People. However, although this rate is increasing with the off-reserve Aboriginals by 4.4%, the rate is decreasing with on-reserve Aboriginals by 2.2%. And overall, the provincial participation rate was 8.9-percentage points higher than the Aboriginal Albertan's participation rate. (Human Resource and Employment, 2005) A further breakdown of participation rates is shown in Figure 25.

Education levels of Aboriginal people have risen but remain lower than the non-Aboriginal population. Just over half of Aboriginal people age 15 and over have completed high

school compared to 70% of non-Aboriginal people. In Alberta, 29% of Aboriginal people had completed post-secondary certificates, diplomas or university degrees, compared to non-Aboriginal people at 45%. Although levels are rising they are still significantly lower than non-Aboriginals. There are indications that the Aboriginals in specific areas, namely the northern region where Aboriginal populations are larger and the major projects are underway, will not reap the benefits of the current economic boom due to the low training and education levels.

3.3.6.3 Women

The entry of large numbers of women into the paid workforce has been one of the most significant social trends in Alberta during the last century. The number of women in Alberta's labour force has increased from one in 14 workers in 1905 to one in two in 2005. Women drove the growth in the labour force within most provinces during the 1990's, according to the 2001 Canadian Census (Statistics Canada, 2001). In Alberta, they accounted for about 50% of the growth in its booming labour market.

During the last several decades, the participation of women in the labour force has undergone dramatic growth. Most of this growth took place in the 1970's and 1980's. Over the 1990's, their labour force participation rate increased at a much slower pace. In 1991, 52.6% of women aged 15 years and older were part of the labour force, representing 45.3% of the total workforce. These numbers rose to 58.9% (women in the workforce) and 45.8% (share of the workforce) by the end of 1999. In 2003, 63% of women in Alberta worked compared with 75.8% of men, the highest participation rate in the labour force for women in Canada. (The Daily, 2004, May)

During this time, the phenomenon of "superwomen" was on the rise as women began to juggle family responsibilities, household tasks, and careers. The employment rate of women with children has almost doubled in the last quarter of the century. In 2003, 72% of Canadian women with children under 16 worked, up from 39% in 1976. The number of single-parent families led by women was also increasing (786,000 families in 1991, compared with 377,000 in 1971), contributing to the feminisation of poverty, which intensified during the last 20 years. In 1997, 18.3% of adult women were living below the poverty line; the average wage of a woman working full-time was equivalent to 72.5% of the wage of a man working full-time. That figure drops to 63.8% if all working women are taken into consideration (including those working part-time and the self-employed). Only 4.9% of employable Albertan women were unemployed in 2003, one of the lowest unemployment rates in Canada at the time.

Fortunately, in the area of education, women are doing better than ever. In 1997-98, women represented 55.7% of the student population at the university undergraduate level, 50.7% at the masters' level and 42.5% at the doctoral level. In 2003, 74% of Canadian women with a university degree and 69% of those with a certificate or diploma from a community college worked, compared with 59% of those who only completed high school. The number of women apprentices in the carpentry, bricklaying, sheet metal, and motor vehicle mechanics trades quadrupled between 1988 and 1997. However, women continue to be underrepresented in these non-traditional occupations. In 2004-2005, women made up only 8.6% of the total number of apprentices.

3.3.6.4 Provincial Migration, Immigrants and Foreign Workers

Canada had the second highest rate of population growth among developed countries between 1994 and 2004. During that period, the Canadian population grew at a rate approaching 1%, while the rate for the United States was 1.1%. Between 1994 and 2004, Canada's rate of natural increase of 0.39% was exceeded only by that of the United States (+0.58%) among the developed countries. The United States was the only country in the group whose fertility rate was at the replacement level of 2.1 children per woman. (The Daily, 2005, September)

With a fertility rate of 1.5 children per woman in Canada, and a life expectancy similar to other countries in this group, Canada continues to have a relatively high rate of natural increase. What distinguishes Canada the most was the size of its gains in migratory exchanges. At 0.61%, the Canadian net international migration rate was the highest of any developed country from 1994 to 2004.

Because of the contribution of migration, Canadian population growth kept pace with that of the United States. Whereas US growth was primarily due to a high rate of natural increase, the growth of the Canadian population was largely and increasingly due to its net international migration. With the fertility rate remaining around 1.5 children per woman for a number of years and with the population inevitably aging as a result, the contribution of international migration will have to increase to maintain the levels of Canada's population growth in the decades to come. The population estimates continue the trends of recent years. Between July 2004 and July 2005, the Canadian population grew by 0.93% or by 296,100 to 32,270,500. In this same period, Canada received 244,600 immigrants, 5,500 more than in the previous year.

Although more than half of the immigrants to Canada (53.2%) chose Ontario as their province of residence, Alberta was the province with the fastest population growth between July 2004 and July 2005, due to the soaring oil prices and employment in the oil patch. By increasing at a rate of 1.62%, the population of Alberta grew by 52,000 to 3,256,800. Additionally, the Province saw a substantial increase in its net inter-provincial migration, which was up 6,000 from 2004. (The Daily, 2005)

In 2004, more than half (53.1%) of Alberta's in-migrants came from British Columbia and Saskatchewan. Of these in-migrations, the employment rate was a higher than the employment rate for other Albertans. Although the numbers of inter-provincial migrants in Alberta increased in 2001, the unemployment rate for inter-provincial migrants decreased by 2.5% to 6.6%.

The largest influx of provincial immigrants in the past have been from British Columbia, but that has since slowed as British Columbia's economy has turned around and the 2010 Olympics were announced. This project alone has potential to create as many as 132,000 local jobs between 2003-2015 (Hirsch, T., Brunnen, B., & Molin, K., 2004). The Olympic construction, northern pipeline development, continuous investments in the oil sands and construction of hydro dams will all put tremendous pressure on skilled labour in Western Canada over the next 5 to 10 years for the skilled trades working on the mega-projects.

3.3.6.5 Aging Population

The Canadian economy is dependent upon the contribution that construction makes by providing infrastructure and employment. However, it has been recognized that the industry's workforce is aging. In 1971, 7.3% of Alberta's population was aged 65 years or older. By 2001, this proportion had grown to 10.4% and by 2026, 17.5% of Albertans will be aged 65 years or older. The proportion of the labour force made up of individual less than 35 years of age had fallen from 45.5% in 1994 to 40.4% in 2004. (Construction Sector Council, 2001)

Since the economic recovery began in the late 1990's, there has been a focus on the large generation, now between 35 and 55 years old, that will soon begin retiring. Replacing this large group is the younger age group; 15 to 24 year olds have been unchanged or declining in numbers, posing a challenge for the supply of skilled workers. Currently the average age of a construction worker is 40 to 46, creating a demographic need for new employees to enter the industry. Many trades are already experiencing skills shortages and others are anticipating shortages that are

expected to become more critical as today's construction workers begin to retire. (Construction Sector Council, 2001)

In 1999, the average age of retirement in Canada was 61.0 years. Two-thirds of Canadians retired before the full amount of their Canadian Pension Plan was to be received at the age of 65. Between 1987 and 1990, 29% of people retired before the age of 60, this rate grew by 43% between 1997 and 2000. The following figure shows the age distribution of Canada's labour force in 2001.

Figure 26: The Age Distribution of Canada's Labour Force

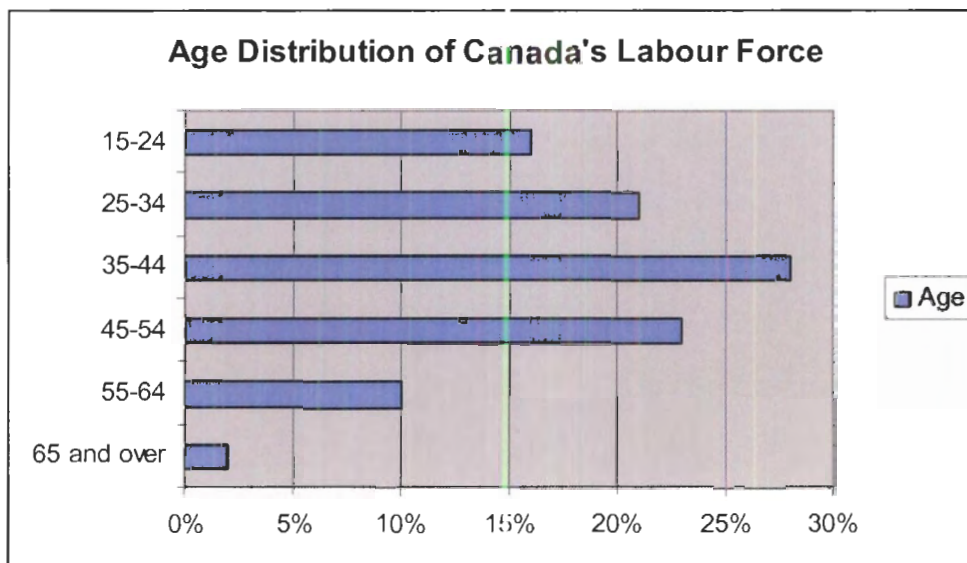


Figure Created by Author
Data Source: Statistics Canada, 2001

By looking at Figures 26 and 27, it becomes obvious that over the next 10-15 years there will be an increased pressure on skilled carpenters and construction trade supervisors. By comparing the overall population of Canada's labour force, and that of the specific construction labour force it is shown that there are two crucial differences: that the youth group is smaller and that the 35 plus population is larger. This implies a moderately older population and a more aggravated set of training needs. Taking this demographic analysis a step further, there are even important demographic differences among the trades. (Statistics Canada, 2001)

Figure 27: Age Distribution across the Industries

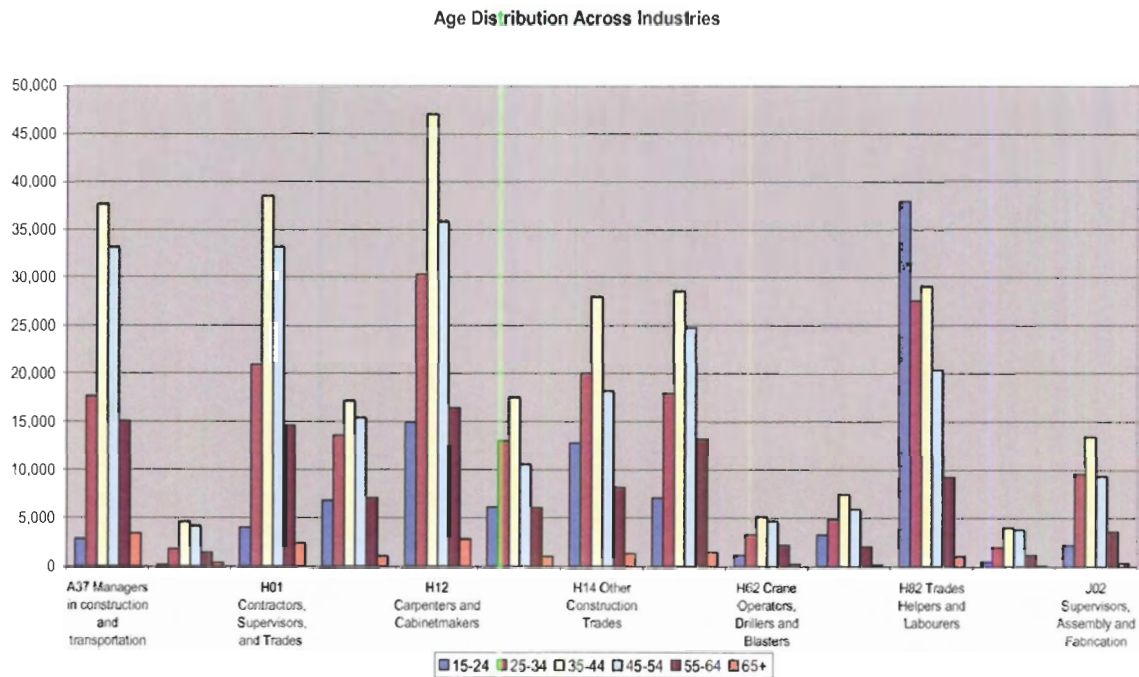


Figure Created by Author
Data Source: Statistics Canada, 2001

An aging population is a growing concern as most trade journeymen are currently moving into retirement, this means a shortage of journeymen to train the apprentices. As this is a government regulated division of the trades industry setting the standard of training at a ratio of two apprentices to one journeyman, within the industry there is a push to increase this to four to one to ease the burden of lack of skilled trades people.

3.3.7 Summary of Macro-Environmental Analysis

This analysis looked at the six macro-environmental forces on the industry with a focus on the social issues of the labour related challenges. Politically, Flint's operations are subject to federal, provincial, and local regulations that govern its day-to-day operations. The adoption of new laws or the more vigorous enforcement of regulations could seriously harm Flint's financial position by increasing expenses and limiting future opportunities. Demand for Flint's services is subject to the changes in the economic community and the rise and fall in the demand for oil. As well, changes in technology have a direct impact on the need for Flint's services. Flint will have to adapt to the changes in technology to continue providing needed services while remaining competitive. The required types of insurance to work directly on the customer's project site, the

legal environment concerning the health and safety of an employee and the movement towards using independent contractors instead of employees, are potential legal challenges that Flint will have to cope with. Environmentally, the Alberta construction services industry in the oil and gas sector is faced with a growing number of concerns; a combination of high development costs, environmental challenges, and heavy criticisms from non-governmental organizations. Flint recognizes it must conduct its business in a manner that protects and preserves the environment and complies with applicable legislation and regulation. Finally, the social aspect of the utilization of new sources of labour will undoubtedly become more prominent in the years to come. Flint, as an employer, is drawn to the advantages of using of the independent contractor, but vulnerable to the consequences of misuse of such a labour force. As the growth and participation rate of Aborigines, age 15-24, in Alberta increases, it would be advantageous for Flint to establish relationships with this untapped labour resource. There is opportunity for Flint to work with governmental organizations promoting women in trades, as women continue to be underrepresented in these non-traditional occupations and yet have dramatic growth in their participation within the work force. Due to the movement of migrants to Alberta and the increasing standardization of provincial certification for construction trades, Alberta has the fastest population growth among the provinces. Flint can work with the related associations in Alberta to expand its footprint as a potential employer of choice. As well, the recognized fact of an aging workforce in the construction industry will pose a challenge for the supply of skilled workers. This lack of supply, or skilled journeymen, will also represent a lack of training opportunities for the younger generations, as these mentors will not be available to draw on for guidance or advice. That will possibly play a future role in the knowledge of the trades, the quality of work performed, and the overall health and safety in the construction industry.

3.4 Summary of External Analysis

There are external forces that affect Flint and constrain its ability to achieve its objectives. However, by completing this analysis it has become apparent that Flint can manoeuvre within these forces to its advantage. The economy is a driving factor in the demand for Flint's services and although Flint cannot control the economy, Flint can be aware of the effects that the two major industries, Oil and Gas and Construction, have on the demand for Flint's construction services to the midstream oil and gas industry. There are many factors that affect the wide fluctuations in oil and natural gas prices from supply and demand to market uncertainty, all of which Flint has no control over. These factors and the volatility of the energy

markets generally, make it extremely difficult to predict the future prices of oil and natural gas or the demand for Flint's services, with any certainty. Both of the industries analysed, oil and gas and construction, were seen as volatile but full of growth opportunities.

By utilizing the micro-environment analysis, the upstream oil production services industry, overall, for Flint, is unattractive. For Flint, the buyers hold the power, while the increased demand for supplies, both skilled labour and equipment creates economic shortages for Flint. However, there are avenues for Flint to reduce the risks and exploit the opportunities, that is, by having a focused differentiation strategy in a niche market and establishing long-term alliances with buyers while utilizing a management strategy to reduce the risks of a shortage in labour.

This external analysis also looked at the six macro-environmental forces on the industry with a focus on the social issues of the labour related challenges. However, everyone in the industry, including Flint's competitors, face the same challenges mentioned. Therefore, Flint must invest in strategies that create superior resources and capabilities that cannot be imitated, to create a competitive advantage. Flint must handle the changes in the environment better than its competitors. In fact, if Flint is really in tune with changes in the environment, it will be better at coping with the challenges mentioned. It will be proactive with regard to change and will not be caught off guard too often with unexpected increased costs, and shall do relatively better than its competitors in the marketplace. Flint's operations are subject to increasing expenses and limited future opportunities, stressing even further the need for a strategic human resource development plan. That is what Flint has to do to succeed in a volatile marketplace. Ultimately, the questions are;

- What strategy can Flint embark on in regards to the shortage of labour to offset the unattractiveness that this industry poses?
- Can Flint contract and remove itself from volatility that it cannot avoid?
- Or should Flint defend its position and focus on retaining what it has so successfully built to date?

4 FULCRUM ANALYSIS

This segment of the strategic analysis of Flint will bring together all the issues that have been discussed and explore what Flint's choices are, in regards to its objectives. This analysis will begin by summarizing the internal and external issues, the growth strategy for Flint, followed by its potential sustainable competitive advantage and conclude with a summary of the opportunities facing Flint.

4.1 Internal and External Issues

The strategic analysis of Flint internally has identified the challenging issues that the organization faces. At a corporate level, Flint's first objective is to double revenue in five years. Flint is set to accomplish this goal by continuing to focus on its needs based customer market and utilizing a focused differentiation strategy. At a business level, Flint is initiating change in human resource management to combat the issues of high turnover, high labour costs, and potential over use of DSPs. This acknowledgement of the issues is a proactive step for Flint.

The external forces that affect Flint constrain its ability to achieve its objectives. However, by completing this analysis it becomes apparent that Flint can use these forces to its advantage. By utilizing the micro-environment analysis, the upstream oil production services industry is unattractive with the buyers having a majority of the power. This is demonstrated in Figure 28 below. However, there are prospects for Flint to reduce the risks and exploit the opportunities, that is, by having a focused differentiation strategy in a niche market and establishing long-term alliances with customers while utilizing a management strategy to reduce the risks of a shortage in labour. The supplier power is strong as well. This is an area in which Flint has not yet created a viable strategy. Flint can reduce its risks in the market place by putting one in place. This external analysis also looked at the six macro-environmental forces on the industry with a focus on the social issues of the labour related challenges. Flint's operations are subject to increasing expenses due to labour shortages, limiting future opportunities.

Figure 28: Industry Analysis

+ Signifies less attractive	Service Provider - Flint	Heavy Construction Industry	Oil Production Industry
Substitutes	-	-	-
Entry	+	+	-
Buyer	++	+	+
Supplier	+	+	+
Rivalry	+	+	-
Summary	+++	++	-
Key Success Factors	Differentiation Alliances	Differentiation Alliances	Cost Drivers Economies of Scale

Figure Created by Author

History has shown that Flint is capable of managing substantial growth and even though Flint's strategy has been successful to date there are some key issues arising from the external and internal analysis that Flint's current strategy will be unable to handle. Corporately, an overall assessment of current performance indicates that Flint has been a successful venture for the stakeholders. However, the lack of a business strategy with regard to labour resources will soon have a ripple effect on the corporate objectives. At the business level, Flint is struggling with the sourcing of qualified labour and has started to straddle its competencies to try and get the job done, using project managers as recruiters and disregarding any corporate strategies that may be in place. How can a firm double its revenue without a strategy on how to allocate its resources to achieve these goals or to handle the additional workload?

4.2 Growth Strategy

An organization at a corporate level will set long-term goals or objectives on what it wants to achieve. The strategy is defined as to how the organization will allocate its resources to achieve these long run goals. (Porter, 1996, p61) Strategy is about modes of expansion, entry, contraction, or defence. Today, Flint's current strategies are constrained as the market is changing. What allocation of which resources should Flint focus on?

Flint has built its reputation as a differentiated service provider, with the largest work force and equipment resources that gives Flint the ability to complete high quality projects on schedule. Flint, has recently announced its objective to double its revenue in five years, which will substantially increase management's responsibilities. Failure to manage this growth could cause Flint's margins and profitability to decline. Flint has indicated that it will achieve this growth by becoming the Service Provider of Choice and the Employer of Choice. Flint

executives have indicated that penetrating new markets with the company’s established competencies would provide them with the organic growth that they wish to achieve. This is called a Defending Growth Market Strategy, which is a horizontal strategy or an internal strategy to maintain current markets and expand into new markets that Flint has not yet penetrated. This will mean increasing Flint’s skilled labour force to complete an increasing number of projects. As stated by many Flint executives – ‘The growth is ours to lose.’

With the history of this market being unattractive, Flint will need to defend its positions in the market place by focusing on controlling the risks while exploiting the opportunities to move its current situation towards the higher competitive position to achieve the doubling of growth. Even though Flint cannot control some of the external factors affecting the market, Flint can achieve stability and growth through cost controls and strategic decision-making. There is opportunity for Flint to move within the market industry, in either direction: capturing the market opportunities, or moving into lower competitive positions, as shown in Figure 29.

Figure 29: Market Opportunities for Flint

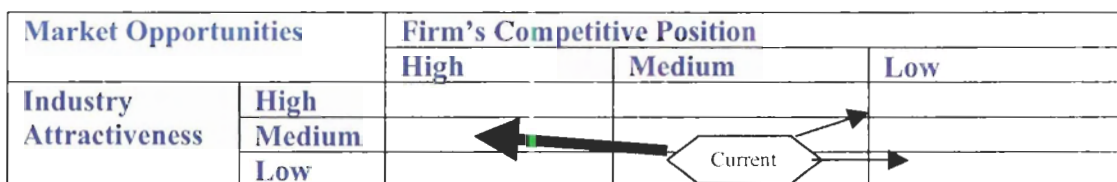


Figure Created by Author
Data Source: Shapiro, 2005

Strategic decision making in this unstable market with strong competition forces Flint to have the competency to recruit individuals for its peak project times and maintain low overheads for its low project times, thus requiring Flint to use any means necessary to ensure manpower productivity and flexibility. It is critical that Flint be able to attract and retain top talent. The key to this is creating and sustaining a positive image of both Flint and the industry. The ability of Flint to attract high achievers is dependent upon the degree to which those individuals believe a career in oil and gas provides long-term rewards, growth opportunities, potential for long-term careers and that Flint is the overall best option to achieve that.

4.3 Sustainable Competitive Advantage

Sustainable Competitive Advantage occurs when a firm maximizes the difference between customer's willingness to pay and the costs of the goods. Competitive advantage therefore arises from differentiation strategies; the ability to differentiate products (without raising costs) relative to the other firms or cost advantages; the ability to reduce costs relative to the other firms. (Shapiro, 2005) Understanding a firm's ability to sustain a competitive advantage comes from examining the activities and resources that it utilizes. Activities are referred to as the sequence of activities that allows a firm to transform inputs to outputs, while resources are referred to as tangible or intangible assets.

For Flint, achieving a sustainable competitive advantage will involve understanding how each level of the organization's primary and secondary activities contributes to its strategy of differentiation. Flint's primary activities are its marketing, sales, project management, after sales service and its inbound logistics of labour and equipment. Flint's secondary activities are its financial management, administration, and human resources.

Already discussed in this analysis is the primary activities differentiation, through long-term alliance contracts, superior project management, large fleet resource, and specialized service for customers. All of these activities contribute to Flint's differentiation or competitive advantage. The primary activity that has been acknowledged as a weakness is the inbound logistics of labour. Although Flint has prided itself on having one of the largest labour forces in the industry, it is finding it harder and harder to recruit and retain employees in recent times. Flint does not believe that its human resources strategy or lack of one is contributing to the differentiation or competitive advantage. Overall, Flint's employee productivity has been declining over the past four years.

With Flint's current human resource strategy, it is unclear how this support function of Flint is contributing to its overall competitive advantage. Flint is currently sourcing labourers through employment and independent contracts, allowing the flexibility of a large resource at a low price per labourer. This indicates a potential low cost advantage strategy, not differentiation. However, Flint is neither sourcing the lowest cost employee nor managing the Human Resource Department in a low cost environment. It has been unclear until recently what the strategy was for this activity. Of late, Flint has set in motion a strategy to become the Employer of Choice to support its objective of doubling growth. This strategy and objective means that Flint at the business level of the Human Resource Department will require an action plan to achieve a sustainable competitive advantage.

While these resources and activities, both primary and secondary, are valuable as they contribute to Flint's performance, none of these resources are rare and can therefore be imitated. Flint does not possess anything that a competitor cannot copy. To sustain the competitive advantages that Flint has acquired or developed it must continue to invest in strategies that create superior resources and capabilities that cannot be imitated.

Flint must defend against the erosion of its markets and profitability. Erosion can occur in two ways, through competition or appropriation. With competition, based on scarce resources, the advantage can either be imitated or substituted. In Flint's case, Human Resources superiority can be substituted in many ways. Flint's concern should be with imitation of its advantage by its competitors. There are no isolating mechanisms protecting Flint in the eyes of its customers and Flint can be easily substituted by another up and coming competitor, current or potential.

The other form of erosion is appropriation or the ability to benefit from the competitive advantage. Is there any hold-up or slack in the returns from the advantage? Hold-up is the major constraint that Flint is experiencing right now through the lack of skilled labour in the system. The employee market is eroding Flint's profits and ability to produce.

4.4 Summary of Fulcrum Analysis

So how is Flint going to utilize the opportunities in supplier power to enhance its ability to retain a labour force capable of supporting Flint's objective to achieve double the revenue by becoming the Employer of Choice? By reviewing the previous discussions, there are different options that Flint can utilize to enhance sustainable competitive advantage. Focusing on Flint's issues with the labour shortage in Alberta, and supplier power in the industry, there is a need to create a Human Resource Strategy for Flint Energy Services. By completing the internal analysis of Flint, the area of needed attention was at the business level. By creating a specific strategy at this business level, and by allocating resources to achieve a long-term goal, Flint will be able to achieve its corporate level goals of over \$1.4 billion dollars in revenue by 2010. However, what should the goal be? What should the strategy focus on? Is the strategy, 'Say, Stay Strive' detailed enough for Flint management to follow? Finally, how should Flint's resources be allocated?

Flint has an extremely high turnover rate with a low employee productivity rate that needs to be addressed. As Flint is striving to achieve doubled revenue in five years, it must acknowledge that to do so will require an increase in a flexible labour force that is skilled and productive. Where will this come from?

This analysis acknowledges four opportunities for Flint. First, the current strategy of utilizing the Direct Service Providers has been successful for Flint and Flint's competitors in the industry. So this strategy remains an option for Flint to continue to manage both employees and independent contractors. Second, to address the need to access a larger skilled labour pool with increased management capabilities is the option to outsource the human resource function. Third, to become the Employer of Choice, the opportunities in retention of employees become an opportunity for Flint to take advantage of in a more progressive and strategic manner. And finally, in the same notion as retention, alternative or underutilized sources of labour could create a large internal workforce with differentiation advantages and become an intriguing option for Flint.

These strategies will be described, discussed, and evaluated in detail in the next three segments of this paper.

5 STRATEGIES

This segment of the analysis will focus on the four selected strategies. Each strategy will first be described in detail, and then the advantages and challenges will be discussed, followed by a layout of the costs associated to them.

5.1 Outsourcing Human Resources

5.1.1 Description

There are several different options for outsourcing the functions of the Human Resource department. This analysis will look at the outsourcing of recruitment only. This would entail hiring an outside agency to handle Flint's Human Resource recruitment needs. Through a study conducted by Hewitt, there were four reasons to outsource: (Rosenthal, B.E., 2005).

1. Gain access to outside expertise (93%)
2. Improve quality service (85%)
3. Focus on core business (73%)
4. Save money (72%)

Flint would be looking to take advantage of all four of these reasons, plus the additional safeguard should legislation change affecting the status of independent contractors.

As an example, when Westjet was facing some similar challenges, as documented in the article "Westjet Lands Top Talent by Outsourcing Recruiting Software", it outsourced because it needed help to support its growth. As an additional benefit, the company saved money in the process.

"To keep up with our growth and to ensure we have the necessary people available for peak travel times, we evaluated our department and realised there were areas where outsourcing made sense for us" says Brian Paisley, Manager of the Talent Management Team, which is responsible for recruiting across Canada.

Using a group called SonicRecruit, Westjet has reduced their workload of over 55,000 applications a year by moving online and pre-screening with ranking questions. Applicants have to answer a few customized pre-screening questions before their application is submitted.

SonicRecruit has reduced the average cost per hiring from \$7,500 to \$5,000. Additional costs can be recovered because customers are able to eliminate some of their administrative costs.” (Rosenthal, B.E., 2005)

Currently, Flint has 79 out of 550 full time employees working in the Human Resource Department. This means that almost 15% of Flint’s overall staff is dedicated to the recruitment and support of the workforce. The costs to manage this number of staff, plus the costs to recruit potential hires is staggering. At an average hourly cost of \$54 dollars (including benefit costs) working an average of 2000 hours in a year, this is just over \$8.5 million to maintain this human resource department. A 4” x 5” advertisement in the local newspaper for fourteen days costs an estimated at \$5,104. Using the turnover rate mentioned earlier of 30% annually, this means that Flint’s Human Resource Department has to hire an estimated 1,255 new employees annually. Assuming that two-thirds of these are hired through alternate methods (website, job fair, word of mouth) that leaves approximately 377 to be advertised in the local newspaper. This totals over \$1.9 million spent on job advertisements alone. This does not included any of the interviewing or hiring costs associated with attempting to hire a potential employee. Of course, once hired there are also relocation and training fees with no guarantee that the employee will actually be productive. Then there are the costs of all other employees’ productivity levels dropping due to compensating for the loss of the previous employee and the training of the new employee.

There is a risk in errors being made when selecting an agency to work with. The human resource department may commit to a poorly chosen agency or poorly written agreement with the agency. This may encompass poor service or lack of responsiveness by the supplier. Therefore, agency selection must include looking wide and drilling deep, while keeping the options open. As well, there must be quality assurances drafted into the details of the agreement with penalties, tracking performance and cost savings; and expected response times. Governance becomes the responsibility of Flint and it must assign the right person to have accountability and clear understanding of the model.

5.1.2 Advantages

Overall, Flint’s outsourcing relationship should aid in achieving its objective of Service Provider of Choice and Employer of Choice through the following advantages. As each advantage is described, both direct and indirect cost savings will be noted.

One advantage is the access to an increased labour pool. The leveraging of the agencies’ resource pool to Flint’s advantage will reduce the amount of recruiting needed to fill the required

positions. Flint will have the ability to recruit from an already established qualified labour pool. It is the agencies' responsibility to ensure that the potential personnel are qualified before they are put in the pool of resources. This instantly reduces the amount of recruiting and reference checking compared to what that Flint needs to do currently.

Another advantage of outsourcing is the improved services to all stakeholders involved. Potential independent contractors and employees would no longer be frustrated with Flint's business process that at times is handled by over four different departments. (Appendix 14 – DSP Hiring Process) Potential employees or independent contractors will go through a sophisticated system from the agency as a process for hire. This is an opportunity for Flint to leverage the expertise of the agency. This expertise is not available internally with Flint as it is not Flint's core competency. As an added bonus to potential hires, once qualified they would be available to a wide range of employers, not just Flint's database.

As well, the reduction in bureaucracy allows the flexibility for current project managers who are currently acting as recruiters or trainers, to concentrate on their core competencies. For Flint, that means it may be able to recruit higher calibre employees who are looking for their role within an organization to be their core employment role; project managers want to manage contracts, not recruit trades people and trades people want to expand their trade skills not train or compensate for others. Adding this top talent then helps the other business processes and core competencies while increasing employee morale subsequently improving productivity.

Over time, this satisfaction will lead to increased sales. Increasing sales and quality in hiring will also lead to improved service to shareholders expecting accountability and reduction in risk. This will ultimately improve customer relations. Utilizing the sophisticated agency's system will satisfy Flint's customers with a larger labour pool, timely invoicing, reporting workforce management, and predictable financial costs.

One of the added bonuses of going through the outsourcing process is that Flint will learn much about its organization. The outsourcing process will force Flint to understand how its processes are being handled currently and how Flint compares to others in the industry - generating better information from experts concentrated in the industry. Outsourcing will produce better financial reports and analysis, with more accurate and timely information leading to better and more informed decisions.

As well, there is a potential for improvement based on the specific process of recruiting potential employees. There is the added value of economy of scale, as the agency has the ability

to reduce costs by handling hiring for many clients. There should be labour arbitrage, as this agency will have the ability to indicate to Flint where labour is less expensive and where there are cost savings to be achieved. As for the scarcity of specific trades, the agency will have access to the alternate resources that Flint cannot reach on its own. Using the agency will allow Flint to not only move farther along the Best Practices learning curve, but it should obviate the need for Flint to invest capital in Human resource process improvements as this would now be the responsibility of the agency investing their capital, not Flint's.

As Flint is concerned with its bottom line, shareholders much prefer outsourcing as a function of layoffs to cut payroll costs, even when the savings are the same. Shareholders will realize that outsourcing this process will allow Flint to easily scale its workforce up or down in response to the economic and seasonal cycles of this industry. Layoffs, on the other hand, can damage stock prices.

Should Flint hire a recognized expert in the industry of outsourcing as its supplier, Flint will work with an agency that has a long history of successful interactions with industry regulatory agencies. This will lead to Flint having an easier time of compliance when the agency is fighting the battles for Flint in regards to employment issues.

From a risk reducing advantage, there will be written protection from the agency that guarantees insurances and WCB is up to standard, in regards to the arrangement with independent contractors, exonerating Flint from any potential liabilities. These agencies create a buffer between Flint and the independent contractors and therefore, the CRA is more likely to consider the contractor an employee of the agency, not an employee of Flint. However, a special risk exposure exists when an organization uses an agency's staff. These hires can still appear to a third party as a direct employee.

5.1.3 Challenges

One of the major challenges of outsourcing is lack of internal learning. If Flint contracts with others for its provision, Flint will not develop the knowledge of Human Resource issues if it does not have a human resource team to develop their skills and qualitatively manage its workforce. Flint will become dependent upon the outsourcing agency to provide any data required on an employees skills and development. Therefore, this is not a good option when the asset is specialized, or in Flint's case when the project manager, estimator, and scheduler are such key components to the workforce, Flint is going to specialty train these employees with Flint

techniques that have made it successful to date. This then leaves Flint open to imitation, as these skills will be shared at a faster rate within the workforce. This is a risk that Flint will need to assess prior to commitment to outsourcing, whether or not it is comfortable in having a dependence on a third party with such a critical component of its competencies.

As well, there may be a failure to realize costs savings because of hidden or escalating costs. If Flint does not commit to the required preparatory work to ensure a complete understanding of what is required, it may not understand all the costs associated with making such a change to outsourcing. Flint must acknowledge that change is complicated and that the new processes must be tested; understanding all interfaces; and anticipating all costs thus requiring participation from all Flint stakeholders.

The initial preparation for such a business process change is significant and cannot be taken lightly. Flint will need to know what it wants, while cleaning up its issues internally and lining up appropriate support. This is more about change management and commitment than about hiring an agency. Flint will need to take the time to prepare, be ready for the effort; get management's commitment; and then implement quickly.

As well, human nature makes employees resistant to change. Flint's employees, both potential and incumbent, will fight change, especially when the changes involve an important business process. All companies considering outsourcing have to determine the price the organization is willing to overcome this enormous internal resistance to shaking up the status quo.

5.1.4 Costs

Flint has been given a proposal: the average cost for outsourcing with a qualified agency is an additional \$2 per hour to the hourly wage. For Flint, this could be a substantial amount of money. With approximately 955 independent contractors active with an average hourly rate of \$54.04 and the average hours worked at 1,152 this could cost over \$2 million. Figure 30 shows Flint's actual breakdown of employees, the average hours worked by labour source and pay rate. With an additional 4,100 employees in Flint's system, working an average 2,000 hours per year, outsourcing could cost Flint in total over \$6.6 million per year. This financial calculation is demonstrated in Figure 31.

Figure 30: Average of Hours Worked and Pay Rate

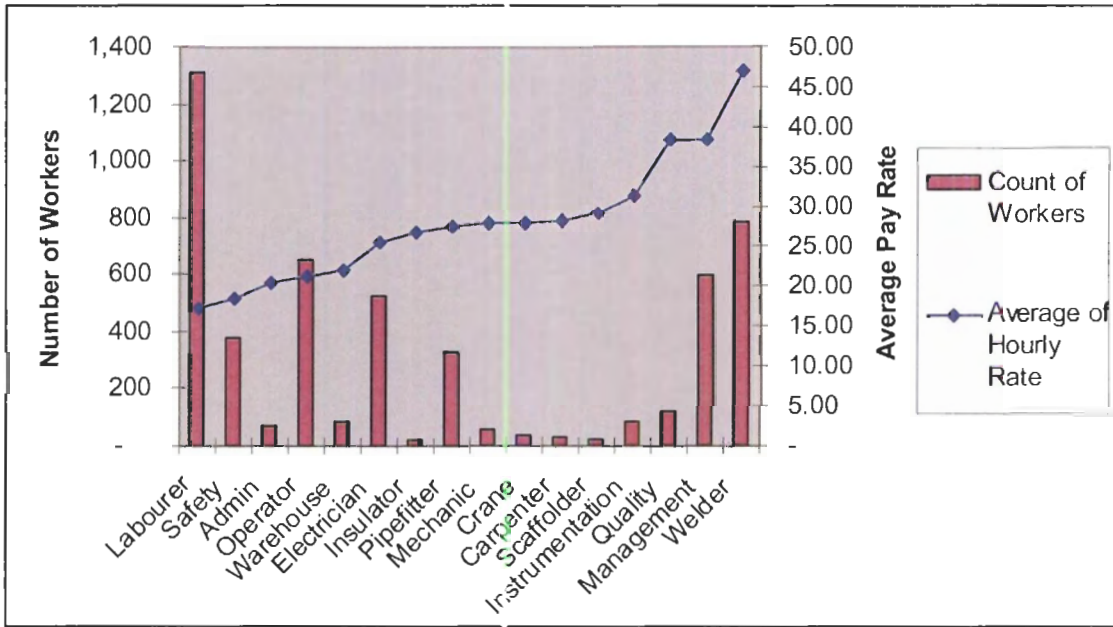


Figure Created by Author
Data Source: Flint Energy Services, 2005

If Flint left eight human resource personnel to manage the agency, costing a total of \$864 thousand, plus the cost of the agency. at over \$6 million, it would save Flint over \$3 million in a reduction in human resource and recruitment costs with an increase in productivity, efficiencies and human capital knowledge.

Figure 31: Cost of Payroll from August to December of 2004

Sum of Total Cheques/Dir.Dep.	
Company Name	Total
Flint Field Mechanical	26,026,515
Flint Field - DSP's	18,403,069
Infrastructure	9,144,989
Infrastructure DSP's	8,409,277
HJB	5,463,171
Firestone	4,680,949
Flint Field E&I Division	4,653,420
Production	4,234,248
HJB - DSP's	2,004,033
Firestone DSP's	1,764,127
Transline	1,650,486
Safety	1,305,061
Conex	1,232,735
Transline DSP's	819,084
Conex - DSP's	589,442
Transline LTD	26,653
Safety - DSP's	26,031
Reid's	14,774
Reid's DSP's	8,416
FFPI	6,976
Grand Total	90,463,455
Average Hourly Pay Rate	54.04
Hours worked in 6 months	1,674,009
Multiple by 2 for entire year	2
Total Hours worked in a year	3,348,018
Multiple by \$2 for cost of agency	2
Estimated Total Cost for Agency	6,696,037

Figure Created by Author
 Data Source: Flint Energy Services, 2005

5.2 Independent Contractors

5.2.1 Description

Independent contractor, self-employed worker, or Direct Service Provider (DSP) is a type of labour force utilized by Flint to supplement its employed labour force. By definition “independent contractor” is a legal term for a person who is hired to do work for another person but who is not an employee or agent of that person. The hiring organization is not responsible for the daily management of the independent contractor nor does the organization owe that independent contractor the same legal duties owed by an employer to an employee under labour and employment laws. The process is currently in place for Flint to handle the independent contractors that are needed to complete the projects that Flint wins throughout the year (Appendix 14 - DSP Hiring Process). This process involves the pre-qualification of independent contractors, which is designed to provide Flint some risk protection. This pre-qualification is the minimum requirement of the independent contractor to work on behalf of Flint. This minimizes the risk to Flint and the independent contractor while performing work. A common process is adhered to establishing a uniform method of data collection. This system facilitates the process of ensuring that an independent contractor is put to work with Flint as easily and as quickly as possible while still managing the risk to both parties.

From a legal standpoint, Flint requires that when the independent contractor signs the contract for services that the independent contractor has become incorporated, has a business license with an applicable GST number, and has registered with the CRA. This is to ensure that Flint is making a contract with a legal entity and not person for employment.

The distinction between employee status and independent contractor (or self-employed) status traditionally depends on the degree of control. In the context of liability for the acts of others, or *vicarious liability*, imputed to employers for their employees' negligence, the importance of actual control of work is readily understandable: one cannot hold a party legally responsible for the wrongdoing of others if she has no control over them. (Status of Women, 2005)

Another way for Flint to test that it is abiding by the law is the “Four Fold Test.” This is the most frequently used test to date in the court of law. Lord Wright in 1947 in *Montreal v. Montreal Locomotive Works Ltd. Et Al* stated:

‘In earlier cases, a single test, such as the presence or absence of control, was often relied on to determine whether the case was one of master or servant, mostly in order to decide issues of tortious liability on the part of the master or superior...It has been suggested that a fourfold test would in some cases be more appropriate, a complex involving 1) control, 2) ownership of the tools, 3) chance of profit, 4) risk of loss.’

This test encompasses the traditional control test but also brings in the distinction between the person who has a contract of service (employee) and contract for services (independent contractor). Understanding the difference is crucial when it comes to governmental deductions and assessing liabilities. (Canadian Federation of Independent Business, 2004)

From a coverage standpoint, Flint verifies that the independent contractors have adequate insurance and coverage for all equipment, claiming Flint as additionally insured on their policies. Should an independent contractor make a mistake on a job for Flint then Flint has this assurance that there is coverage for any damages that may occur. Errors without coverage could have serious consequences.

There are major issues with Flint’s current process of using independent contractors. There are situations where the relationship between the independent contractor (DSP) and Flint looks very similar to an employee/ employer relationship. Understanding Flint’s vulnerabilities can easily rectify this. The DSP should only be hired in certain situations; those situations when the DSP will not pose a threat to Flint’s objective of increasing sales revenue. This can be achieved by following the four-fold test, regardless of the written contract for service. Should the DSP not pass this test, and then a decision has to be made by an unbiased responsible party within Flint as to the next action to be taken. As with any other business related decisions with legal ramifications, it is always difficult to know which action is more likely to achieve Flint’s objectives. By not hiring the independent contractor, it could potentially delay work and this could cause problems for project completion deadlines and customer satisfaction. What are the risks in the short-term and long-term with such decision-making abilities being handled in the field?

5.2.2 Advantages

One of the advantages of utilizing independent contractors is the flexibility in contracting work out by the hour and not actually employing the person. This allows Flint to ramp up its labour force in the peak project periods, and to scale back in the low project periods with little paperwork, compared to lay-offs of employees. As Flint is concerned about the bottom line,

shareholders much prefer independent contractors as a function to layoffs to cut payroll costs, even when the savings are the same. Shareholders realize that independent contractors will allow Flint to easily scale its workforce up or down in response to the economic and seasonal cycles of this industry. Layoffs, on the other hand, can damage stock prices.

There are incentives created by Flint's internal personnel objectives that encourage the hiring of DSPs. Internally, project managers are measured by the percentage of gross margin they are able to maintain and are rewarded at the end of the year based on that percentage. As DSPs are presently charged to a customer with a higher gross margin than employees are, hiring DSPs can help project managers maintain a high project gross margin.

There are several things that lower Flint's overhead and increase margin by using DSPs. There is the capital cost avoidance, Union or collective bargaining avoidance, payroll deductions avoidance, as well as the lower transactional costs which in turn reduce the overhead costs to Flint. Employees of Flint on the other hand, are considered a greater cost to Flint's overhead; benefits, payroll deductions, capital costs, and upgrade training is required to cover these employees.

As defined in agreements with Flint customers, the gross margins are negotiated. In a majority of cases, the overhead costs are lumped together under the management of the agreement, being charged out at a low gross margin (as it is a shared cost for all of Flint's customers). Although Flint has the ability to set its own margin, it still needs to maintain its volumes, and customers will negotiate hard up front on the overhead margins, as these costs are easily forecast. However, on the labour rates of DSPs, these margins are considered direct costs to the job and are charged the same as materials, at a higher gross margin. It is justified by Flint to the customer as an additional expense occurred due to the customers' requirements.

The responsibility, to decide whether or not to hire as an employee or a DSP, falls directly on the District Operating Managers. These managers must ensure that their project totals at the end of the year achieve an expected gross margin rate. Influencing the district managers on this decision is the year-end bonus which is measured against their achieved gross margin rate. This can be achieved by utilizing as many DSPs compared to employees, as possible as, reducing net costs.

5.2.3 Challenges

There is much debate about the risks of utilizing independent contractors. There is a lot of information available on the vulnerabilities from both an organizational and an independent contractor's point of view, more than can be mentioned in this paper. As discussed in the Legal section of the Macro-Environment there are issues to consider and consequences to weigh when deciding to hire an independent contractor. This is a summary of the major concerns for Flint.

Flint acknowledges that the Direct Service Providers are the highest risk in regards to safety, property damage, environmental issues and successful completion of the work in accordance with the customers primary agreement. Flint lacks the ability to monitor DSP's safety record or performance, just the WCB account that is paid on a yearly basis. This is different from employees, as Flint trains, monitors, and evaluates its employees on a monthly basis. This is a major concern for Flint as the construction industry has the second highest rating for injuries in all of Alberta, as shown in Figure 32. As, DSPs are a higher risk than employees are, with regard to safety, and safety is a foundational value of Flint, this a strong reason to avoid DSPs. However, faced with the external factors of the industry as previously mention in the External Analysis, Flint and its competitors are all using independent contractors.

Figure 32: WCB Industry Ratings for 2005

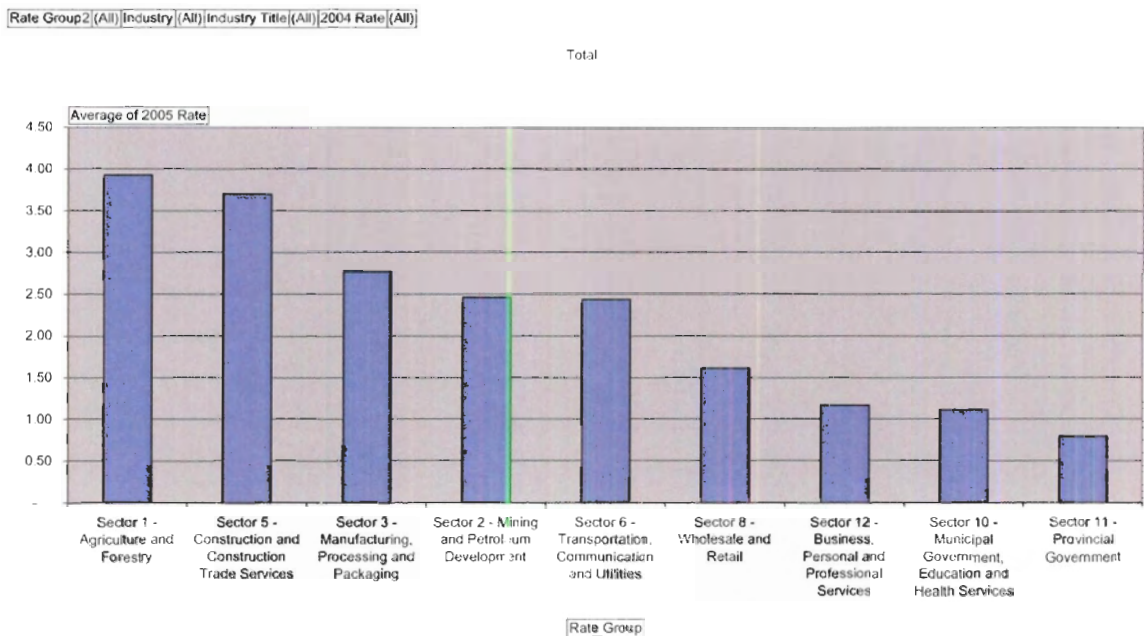


Figure Created by Author
Data Source: Workers' Compensation Board, 2005

Looking at risks, there is no protection should Flint human resource personnel miss a crucial piece of documentation. Flint is required to ensure that all independent contractors have their Certified General Liability, Auto Insurance, and Workers Compensation Board requirements applicable to the work environment in order to work. If this information is missing, Flint may be responsible for the independent contractor's liabilities. In addition, with missing documentation, there is no buffer between Flint and the independent contractors in regards to the Canadian Revenue Agency. The CRA is more likely to consider the contractor as an employee of Flint and that Flint is therefore responsible for all governmental deductions and liabilities. If the DSPs do not pay all applicable taxes and other withholdings, CRA could look to Flint for payments and penalties, even years after the DSP has ceased working for Flint.

There is the additional risk in regards to defining independent contractors and employees that legislation and common law rulings are considered living documents; evolving as time goes on. Although the recent trend in case law has been helpful by potentially providing greater flexibility to structure one's affairs in a tax efficient manner, the determination on whether or not a worker is defined as an employee or independent contractor is and continues to be necessarily uncertain. The consequences of being wrong after the fact can be costly as penalties, interest, Canadian Pension Plan, and Employment Insurance premiums may all need to be paid. Flint, having carefully crafted written agreements setting out the intentions of the parties may offer some protection for itself, but what if the independent contractor subsequently changes his or her mind and argues the relationship is not what it was purported to be. Is Flint vulnerable to the risks or liabilities? Will Flint be aware of the legislation changes and be able to cope with the decisions made? Should Flint invest in a labour and employment lawyer that specializes in CRA rulings so that it is covered for the chance of future rulings going against it? (Merrick, P., 2002)

Categorizing oneself as an employee or independent contractor is not simply a matter of inserting the proper clause in an agreement. All of the facts and circumstances must be considered in making that determination. Within Flint, the person responsible for determining whether or not a person is to be an independent contractor or an employee is not within the Human Resource Department, the person responsible is the District Operating Manager, who ultimately submits the paperwork for their workforce requirements on a project. Does the manager understand the issues and risks from a legal and a corporate standpoint? Should this

decision be brought to a higher level? Moreover, remembering the bonus system, is Flint sending a mixed message?

5.2.4 Costs

As mentioned earlier, Flint spends just over \$8.5 million to maintain this human resource department and advertising costs are an estimated at \$1.9 million on job advertisements. With 955 independent contractors active in Flint’s system, and an average of 518 working each week, there is a risk in the process of missing documents occurring, critical documents as previously mentioned: Certified General Liability, Insurance, WCB Account and Incorporation.

Figure 33: Statistic on Omissions for the Week of May 21, 2005

Omissions	Number of Independent Contractors
WCB Account Information	12
Incorporation Registration	10
Certified General Liability	33
Automobile Insurance	20

Figure Created by Author
Data Source: Flint Energy Services, 2005

In fact, looking at a randomly chosen week in particular, May 21st, 2005: of the 552 DSPs working, there were 50 independent contractors with 75 omissions of documentation – 9% error rate for this particular week, as shown in Figure 33. This does not mean that these organizations did not have the proper paper work, only that Flint did not have it on file. Nevertheless, Flint had no paperwork proving otherwise. What are the risks that Flint is taking? What are the risks that the contractor does not have the proper paperwork or coverage? What are the risks in the construction industry (with one of the highest on the job accident rate in all industries Canada wide) that an incident will occur? What are the risks that Flint would be found liable? Is this a risk that Flint is willing to take?

Flint has 79 full time employees directly related to recruitment whose job it is to support and manage these risks. There are processes in place to ensure that the paperwork is followed up and received in a timely manner. However, these same processes indicate that the contract with the DSP should not have been made in the first place without the required documents.

5.3 Employee Retention

5.3.1 Description

As stated earlier, in the quotation from the Nickle's Daily Oil Bulletin, it is suggested that the development of good planning standards and a well trained (and retained) workforce would be a key differentiator for Flint. Flint has set an objective to become the Employer of Choice to aid in its overall growth strategy. The motto that has been created is 'Say, Stay, Strive.' Essentially, Flint is looking to recruit (say), retain (stay), and produce (strive) effective employees. To develop differentiation in hiring Flint may need to start looking outside the traditional box of recruitment. What can be done internally to differentiate? Strategies for attracting and retaining workers must include more than competitive compensation. Flint must also address benefits, work environment, training, and development.

According to Peter Hart, CEO of Rideau Inc, a Montreal based company that designs corporate recognition systems, employees are looking for a little extra attention that cold hard cash cannot bring. Hart indicates that according to Abraham Maslow, the employee's hierarchy of needs should be acknowledged in the workplace and can be partially met by receiving recognition from colleagues and superiors. At their best, formal recognition programs pay for themselves through reduced turnover and increased employee satisfaction. It can cost up to \$6,000 to hire a single employee, so keeping their current high-performers happy is important. 'Retention is directly tied to recognition,' says Hart, 'people join companies, they quit their managers'. (Holloway, Andy, 2006, February, p88.)

The issue that Flint should handle immediately is the management of its employees that it has already retained to date. It would not be cost effective to recruit new employees to Flint if it cannot retain the ones it already has. This is an issue for Flint as its turnover rate is at 30% with average employment tenure of 3 years. Given the projected shortages of skilled workers, it will become increasingly important to find ways to retain workers.

Management of the Flint's workforce can represent either a significant competitive advantage or a major obstacle to its business success. Effective management begins with workforce planning, the assessment of both external and internal labour force characteristics, and an assessment of the number of people with specific competencies required to execute the business strategy. This effective management will establish a central source of information, to

collect and communicate best practices thus facilitating Flint and stakeholder access of this information.

There are Human Resource Planning Systems available that produce and report on performance appraisal results, academic qualifications, skills inventories, applicant data, turnover data, job description, and job requirements data. The Human Resource Department should then be able to use the system to provide statistical overviews for the whole organization, as well as for each unit involved in succession planning. The overview should summarize flow data, such as recruitment, separations, promotions, transfers and turnover, and personal data such as sex, designated group for employment equity purposes, languages, group and level, age, years of service. A preliminary estimate of potential vacancies based on retirement projections should also be provided. More detailed assessments of these data may be conducted with line management wherein information can be added that is not formally contained in the system, but may be known in the work environment, such as possible transfers, promotion, resignations, and retirements.

One of the first steps would be to create a human resource policy, similar to the example shown in Figure 34. This would entail creating policies, with goals, and objectives, as well as strategies for achieving those goals and the measures that would monitor such policies and their success.

Figure 34: Human Resource Retention Policy

Policy	Goals	Objectives	Strategies
Contributions	Alignment	Understanding of goals and priorities	Common approaches to performance management
Compensation	Commitment	Recognition and satisfaction	Multi-year strategy to effectively attract and retain
Competency	Competence	Identify and develop skills	Promote learning
Learning	Versatility	Movement in Industry	Succession management planning
Safe and Supportive	Well-Being	Receive support for their own safety and well-being	Promote health and safe work practices

Figure Created by Author
Data Source: Corporate Human Resource Plan Framework, 2005

Flint must define skills requirements and establish the effective, efficient productivity levels for each position. The more accurate and realistic the specification and job requirements

for the position, the more likely the employee will feel motivated to do a good job. Improving a job description is not a winning strategy.

This leads into the hiring practices. Flint needs to use a recruitment process that will reduce costly turnover and increase its chances of selecting and retaining the right people who will deliver the performance that Flint requires. One of the reasons for the turnover rate could be a result of ineffective hiring practices. To help increase the retention rate Flint should better define the job requirements and set a policy in motion to facilitate the human resource strategy of retention.

Another aspect of retention is the 'on the job' feedback that will allow employees to evolve, improve, and do more for Flint. It is important to assess the employee's performance regularly and fairly. Human Resources should be systematic about performance evaluation for every employee, and link the performance evaluation to their compensation program so that employees take it seriously.

As well, succession planning becomes a key component to the retention policy. Partly in response to demographics and partly because of a desire to ensure continuity of business operations, the industry across the country acknowledges that succession planning is a key issue. While many organizations have established succession plans for top management and key technical positions, the practice is not yet universal. Flint has a program in place for certain areas but it is not utilized through out. Accordingly, Flint's management systems of today, not universal, or monitored, will likely continue to be less than successful.

The Human Resource Department of Flint will also have to consider succession planning for positions where workforce segmentation, attrition analysis and labour supply pressures indicate a labour shortage may occur so that it can develop and implement timely and effective human resource strategies.

Another course of action for employee retention is to provide them with the necessary skills to be effective at their job position. To many employees, the level and quality of training available in a workplace becomes a critical component. Offering employees ample training and development will close gaps in skills with current employees and is considerably less costly than hiring new employees or outsourcing. Flint can develop mentorship programs, apprenticeship opportunities, co-op placements, and high school programs that simultaneously elevate the image of the industry and capture the interest of students.

Key Factors in the Retention of Apprentices as reported by the Customer+Citizen Relationship Strategy Group, Ltd. (2004):

1. Workplace – positive workplace with development and recognition with challenges and opportunities to advance
2. Hiring – choosing the right people first!
3. Training – employer committed to apprentices learning.
4. Communications – two way dialogue – feedback, performance reviews
5. Rewards and Recognition – simple thank you
6. Opportunities for advancement (Customer+Citizen Relationship Strategy Group, Ltd., 2004)

However, the upstream oil and gas industry reports an optimal planning horizon of three to five years for workforce size and demographics. The industry indicates that this timeframe is difficult to implement during merger and acquisition and commodity price cycles. Further, the application of workforce planning is very low throughout the industry, with greater application in larger organizations. This is a serious observation when applied to the education, training and development model, which require significant lead-time to respond to industry needs. Information on an aggregate industry level is either not available or not readily available for the training providers to assimilate into long planning cycles. Internal trends reported in education, training and development in the industry focus on leadership development and, in some instances, succession planning.

Flint needs to recognize that there will be skill shortages in the near future, and may want to explore innovative ways to retain skilled workers during an economic downturn. This may require the assistance of other partners, in particular governments at the federal and provincial levels. Educational institutions and industry need to work together on training programs and resources that focus on developing critical skills of the workplace. Because it takes time to acquire skills and knowledge, the relationship between educators and industry will be important in addressing future skill requirements and the promotion of lifelong learning systems.

Human resources development should be looked at within the context of the strategic staffing needs of the industry. The industry has relied on compensation and benefits to attract new entrants to the industry. The Canadian oil and gas industry pays competitive levels of pay across the spectrum of positions. The industry recognizes that pay levels must exceed those in other industries to balance the issues of cyclical employment and remote work requirements. Many companies set compensation levels according to several database sources to ensure their pay practices are competitive. With respect to benefits, the market percentile distribution for the value

of benefits provided (pension, savings, and group insurance benefits combined) is greater in the oil and gas sector than any other.

While competitive pay and benefits will aid in Flint retaining workers, the future retention strategies must go farther. Retention strategies that incorporate career opportunities, learning and development and work/life balance are increasing. Flint can establish benefits programs that include personal spending accounts to encourage skills development and health, by providing an employee with an account and guidelines on the items that qualify for reimbursement. Specifically, some organizations offers generous flex time programs, enhanced leave provisions, education and tuition reimbursement, and scholarships for family members and targeted programs for career advancement and progression for high potential employees.

Retention strategy focuses on specialized skill areas or geographic areas that are remote and for which it is difficult to recruit. Specifically, the Fort McMurray area, remote pipeline locations, and the Northwest Territories are areas where recruitment is focused and retention is important. Continuous 12-month employment is a key factor to retain many of the qualified individuals in the work force. This results in a shift of some workers to other more stable industries.

5.3.2 Advantages

One of the major advantages of retaining the workforce is the long-term learning, and specialization that occurs. For Flint the benefits of this learning or specialization on the job is the increased efficiencies in better project management. This increase in efficiencies can eliminate or reduce the job site waiting times and thus increase the tool-time of the labour force on the project. As mentioned earlier, this productivity increase can free up a workforce needed in a time of labour shortages.

For the Human Resource Department, the advantages of increased employee retention is the superior access to information about the 'true' abilities of the employee, better personnel allocation decisions, reduced hiring and firing costs, potential to attract better employees because of better opportunities in a large, diversified company. This then contributes to employee satisfaction, increasing morale in the work place environment and thus resulting in increased productivity, creating that Employer of Choice branding.

From a risk reducing advantage, there is protection for Flint that guarantees insurances and Workers Compensation Board requirement to work is up to standard. Flint acknowledges

that the high risk in regards to project management of a heavy industrial construction site. Risks in safety, property damage, environmental issues, and successful completion of the work in accordance with all the applicable regulations and the customer's agreement are a top priority for Flint. By having complete control over its employees; their experience, knowledge and training, Flint can reduce the level of risk.

5.3.3 Challenges

There are disadvantages to Flint retaining employees than utilizing independent contractors as previously mentioned. There is the capital cost requirements, Union or collective bargaining, as well as the increased overhead as the ability to charge out the work hours is at a lower gross margin. Employees of Flint are considered overhead costs, which are usually charged out at less than 10% gross margin.

Another of the challenges of utilizing employees is the inflexibility in employing a person. Utilizing employees is a cumbersome process when Flint is looking to quickly mobilize or demobilize its workforce. It does not allow Flint to ramp up its labour force in the peak project periods, or to scale back in the low project periods. Flint is concerned about the bottom line, and shareholders are critical of layoffs to cut payroll costs, as layoffs can damage stock prices, while increasing costs.

While one of the advantages of retaining the workforce is the long-term learning, and specialization that occurs, this is a long-term investment. Achieving expertise in the work force does not happen in timely fashion and should Flint require expertise quickly, it will have to look outside of its employees.

As well, attempting to retain employees is a long-term investment required to make such a strategy successful. The initial preparation for such a business process change is significant and cannot be taken lightly. Flint will need to know what it wants, while addressing internal issues and lining up appropriate support required. This is about 'change management' as human nature makes employees resistant to change. Flint's employees will be resistant to the changes, especially when the changes involve the employees at a personal level in an important business process, i.e. performance reviews, department goals, and personal objectives.

5.3.4 Costs

The costs of managing a human resource strategy can be expensive, and a process that is difficult to measure. There are tangible costs related to human resources but the measurements for success are intangible. It is estimated that the cost of losing employees is \$9,500 per employee, (Gwodz, B & Ziff, P., 2003) plus the \$6,000 to hire according Fortune 2000 companies. (Holloway, Andy, 2006, February, p88) Currently, the Human Resource Department accounting for almost \$8.5 million dollars, is conducting a strategy that is unsuccessful with Flint's turnover rate at over 30%. Recently Flint has put into action a new type of recruitment strategy, paying out \$250 to individual Flint employees that can recruit a new employee on Flint's behalf. How much will that cost Flint to administer and maintain? Moreover, how is that incentive for individual employees going to contribute to the competitive advantage?

From a financial standpoint, depending upon the level of involvement in the retention strategy, cost can range in value from the 'simply appreciating', and having a formal recognition system in place to the 'sophisticated information technology systems' worth millions of dollars that are available on the market today. How much the system costs depends on what Flint is willing to commit to utilizing. Nevertheless, can Flint afford to continue its recruiting strategy while not investing in the retention of its current employees? Flint could adjust from its recruiting commitments to retaining commitments.

5.4 Alternative Labour Source

5.4.1 Description

As previously discussed, there is a tight labour market to date in Alberta, as the unemployment rate is at a record low of 3.2%. The utilization of new sources of labour, combined with renewed training and education efforts will undoubtedly become more prominent in the years to come. These new sources may be what Flint needs to fulfil its workforce requirements in this time of shortage. In the Social segment of the Macro-Environmental Analysis, women, Aboriginals, immigrants, and older workers were suggested as alternate sources of labour. This strategy discussion will look at these four labour sources within Alberta.

There are barriers to these alternative labour sources such as a lack of work experience and training. Oil and gas employment positions are primarily assessed based on their formal

training requirements and/ or work experience. The key barriers to employment of the non-traditional sources of labour are the traditional reliance on credentials and the emerging approach of behavior-based assessment for selection, which generally requires relevant experience.

For the first barrier listed, difficulty-attending school can be a major barrier to receiving the specific training that is required for the appropriate credentials. Potential applicants claim that the cost, lack of information, location, and dislike of the traditional school environment are reasons for not applying or not completing a program.

For the second barrier, work experience, there are culturally based biases, that create obstacles for the non-traditional sources of labour to overcome to achieve the number of hours required to be considered 'experienced'. As stated in the Manitoba Department of Justice Aboriginal Employment Strategy without employment equity, employers largely, will not hire from alternative labour sources. Employers have tendencies to recruit and promote individuals that they perceive best resemble the social, economic and cultural characteristics of themselves, recruiting from informal networks that minority groups generally do not have access to. As well, employers and many of their employees, generally exhibit negative stereotypes towards minority groups. Workplaces are generally built on dominant cultures, values, and principles that produce barriers for people of minority cultures. (St. Louis, Joanne, 2000, p2) Thus, breaking into the industry is made particularly difficult where the work is always temporary, and the continuous process of finding a job is particularly onerous for workers who face a succession of hiring barriers not typical in other discriminatory workplaces.

5.4.2 Advantages

One of the major advantages of utilizing these alternative labour forces is the number of available personnel in a time of shortage and the potential to increase supply while reducing costs. Governmental programs may support these sources of labour. Therefore, through educational and work related government subsidies, an organization can reap the benefits of subsidized labour. As well as the reduced costs of labour, these alternatives will be enthusiastic about working and equally skilled as the traditional labour force utilized today.

Of course, utilizing these alternative labour forces will reap the same advantages listed in the Retention Strategy above. Such benefits within Flint as: long-term learning, specialization increasing efficiencies, superior access to information about the 'true' abilities of the employee, better personnel allocation decisions, reduced hiring and firing costs. These benefits for Flint will

result in: potential attraction to better employees, overall employee satisfaction, increasing morale in the work place environment and achieving increased productivity. Flint can reduce the level of risk that it faces in the industry by having complete control over its employees, their experience, knowledge, and training.

However there are additional advantages that are suggested in each alternate labour group in the following sections.

5.4.2.1 Aboriginal

Alberta's Aboriginal population has potential to be part of the solution to Flint's concerns about the future availability of skilled workers. Western Canada has a large and rapidly growing population of Aboriginal people, both on and off the reserves. This group represents a significant pool of young, capable workers that could potentially help alleviate skill shortages. It is important to take advantage of the pool of Aboriginal people in Alberta available to fill the jobs, many of which are entry-level positions that require only limited skills and experience. As nearly, two-thirds or 62.2% of Alberta's Aboriginal people live in the Northwest or the Northeast regions of Alberta, this is an opportunity for Flint to satisfy its remote location issues by utilizing a work force that is local (Statistics Canada, 2001).

By hiring Aboriginals, Flint may be able to reduce its overhead costs in a couple of ways. First, by eliminating the travel, housing, camp, boarding, and isolation costs as Flint would be providing opportunities to local contractors that would not require such payments. Second, by hiring local Aboriginals Flint could also establish partnerships with the local government; similar to the Cameco Corporation did in 1988. Cameco, a uranium mining operation that explores resources in the proximity of Aboriginal communities, integrated Aboriginal employment as a corporate strategic objective to minimize the risk of lost investment and exploration opportunities (Ali, Saleem H., 2000). This could be considered a competitive advantage for Flint having successful partnerships in place to further develop contracts in the specific regions. Availability of government funding for training of Aboriginals, both pre-employment and as employees is a significant advantage.

5.4.2.2 Women

The entry of large numbers of women into the paid workforce has been one of the most significant social trends in Alberta during the last century. During the two World Wars, an acute

workforce shortage encouraged the hiring of women for many jobs once done exclusively by men. It was then that women made most progress in proving their value as workers.

There is still a growing opportunity for Flint to take advantage of this under-utilised labour force in the construction industry. By hiring women, Flint may be able to reduce overhead costs. First, by sourcing an alternative labour force that is experiencing significant growth in participation rates provides Flint with opportunities for an increased labour pool that is easily accessible. Second, women, in a majority of cases, are looking for part-time work which provides Flint with an opportunity to hire part-time workers that could possibly increase working hours to fill the peak periods and reduce their hours during the low seasons, ideally the summer months. This works well with the majority of women who are secondary incomes to their families and will potentially be looking to have the summer months off to take care of their school age children during summer break. Third, by working government agencies calling for equity in the workforce, Flint may find subsidized labour for a percentage of its workforce, cutting its costs in overhead.

5.4.2.3 Provincial Migration, Immigrants or Foreign Workers

Because of the contribution of migration, Canadian population growth kept pace with that of the United States, over the past decade. Whereas United States growth was primarily due to a high rate of natural increase, the growth of the Canadian population was largely and increasingly due to its net international migration. With the fertility rate remaining around 1.5 children per woman for a number of years and with the population inevitably aging as a result, the contribution of international migration will have to increase to maintain the levels of Canada's population growth in the decades to come.

Alberta was the province with the fastest population growth between July 2004 and July 2005, due to the soaring oil prices and employment in the oil patch. By increasing at a rate of 1.62%, the population of Alberta grew by 52,000 to 3,256,800. (The Daily, September 2005) Again this is an opportunity for Flint to take advantage of both the provincial migration and immigration as an under-utilised labour force in the construction industry.

By take advantage of this under-utilised labour force Flint will be able to reduce costs by hiring foreign workers. First, this under-utilised workforce is growing significantly in Canada, particularly in Alberta. Flint could target this group directly, ensuring that Flint is a 'welcoming' environment and a stable choice for migrants, thus increasing the labour pool for Flint. Second,

by sourcing an alternative labour force that is highly trained and experiencing significant growth in participation rates provides Flint with opportunities for an increased skilled labour pool. Third, by working with government agencies calling for equity in the workforce, Flint may find subsidized labour for a percentage of its workforce, cutting its costs in overhead.

5.4.2.4 Aging Population

Since the economic recovery began in the late 1990's, there has been a focus on the large generation, now between 35 and 55 years old, that will soon begin retiring. Over the next 10-15 years, there will be increased pressure on skilled trades to replace those that are retiring. Many trades are already experiencing skills shortages and others are anticipating shortages that are expected to become more critical as today's construction workers begin to retire. (Construction Sector Council, 2001)

In developed countries, there has been a marked shift towards proactive labour market programs focused on increasing the supply of older workers and stimulating the demand for older workers by lowering the costs of employing them. Most developed countries have introduced policies and organizational practices that target older workers, including: reducing incentives for workers to take early retirement, encouraging later retirement and flexible retirement, passing legislation to counter age discrimination and helping older workers find and keep jobs, therefore removing both demand side and supply side barriers.

As an example, Volvo's Torslandaverken plant in Sweden coped with a severe labour shortage in the early 1990's by having older employees, as well as those with acute medical problems, perform specialized service or preparatory tasks on vehicles before they were moved to the assembly line. This left the heavier work to the younger and fit employees. In addition to retaining the experience of older workers, the plant saved money by reducing early retirements and sick leave. The younger workers also gained valuable knowledge from their more experienced colleagues. Finally, intergenerational work teams were found to increase harmony in the working environment. (Conference Board of Canada, 2005, p142)

With respect to the aging workforce, phased in retirement provisions, mentoring, and training have been identified as measures that could help ease the demographic crunch.

5.4.3 Challenges

There are challenges to Flint sourcing from alternative labour pools. The same can be listed from the Retention Strategy: this is a long-term investment, capital cost requirements, Union or collective bargaining, as well as the increased overhead, and the inflexibility in employing a person full-time. Utilizing employees can be a cumbersome process when Flint is looking to quickly mobilize or demobilize its workforce. Flint is concerned about the bottom line, and shareholders are critical of layoffs to cut payroll costs, as layoffs can damage stock prices, while increasing costs.

However there are additional challenges that can be seen in each suggested alternate labour group.

5.4.3.1 Aboriginal

There are indications that Aboriginals will not be able to reap the benefits of the economic boom if the training and education levels do not improve. Education levels of Aboriginal people have risen but remain lower than the non-Aboriginal population. Just over half of Aboriginal people age 15 and over have completed high school compared to 70% of non-Aboriginal people.

There are several factors that contribute to this: the ability of universities to attract and retain Aboriginal clientele for the required educational programs, the reluctance of Aboriginals to leave their homelands in pursuit of the education, the length and timeframe of apprentice programs (approximately five years) and the approximated two years for universities to catch up with technologically advanced training facilities.

Providing the necessary skills and training for Aboriginal workers is one element, but integrating Aboriginal workers into Flint's business environment may require special cultural and social awareness on the part of the hiring process. Flint will need to develop targeted prerequisites and bridging programs that meet the cultural needs of the Aboriginal people and the occupational needs of the region so that Aboriginal candidates qualify for training and employment opportunities. Flint will need to work with governments, industries, and stakeholder associations to integrate and provide access to information and contacts with respect to recognition of educational levels. A focus on building partnerships with such organizations as the

Alberta Aboriginal Apprenticeship Program and the First National Trades Training Program will be a necessity for Flint to be successful in this strategy.

As well, Cameco has found that it requires commitment throughout the organization to deal with internal and external barriers of hiring Aboriginal people. In order to ensure the required commitment, Aboriginal employment targets are communicated to all managers, with managers being held accountable for achieving targets (annual performance evaluation). (St. Louis, Joanne, 2000, p7)

5.4.3.2 Women

In the area of education and skills training, women are doing better than ever, however, they continue to be underrepresented in non-traditional occupations. In 2004-2005, women made up only 8.6% of the total number of apprentices.

Despite the gains of the past century, Canadian women continue to face many challenges in the new millennium. Some of those challenges include the following:

- Balancing work and family responsibilities
- Eliminating the wage gap between women and men
- Increasing the participation rate of women in non-traditional fields
- Addressing the increasing phenomenon of feminisation of poverty

Thus, attracting more women into the workforce has potential social policy implications, such as an increased need for early childhood development programs, provision for longer parental leaves and pension reforms.

Research indicates that employment equity initiatives are likely to fail when organizations do not demonstrate the necessary commitment towards its implementation. According to a recent report, employment equity initiatives are often administratively isolated creating additional costs and limiting the dissemination of knowledge and expertise. (St. Louis, Joanne, 2000) Separate organizational units can be seen as additional administrative burdens rather than benefits for overworked managers. Discrimination as a cost needs to be better quantified to rebut the assumption that it is not cost effective. Employment equity has enhanced the capacity of organizations to be competitive yet this is underemphasized. The extent to which employment equity is essential to the core corporate values is the measure of how managers integrate it.

As well, once hired these women will face many day-to-day challenges on the job, merely supplying an opportunity for employment will not be sufficient to overcome the enormous barriers to employment from those traditionally excluded from construction jobs. As stated in the *Labour Studies Journal* in the Fall of 2000, entitled *Training and Equity Initiatives*, "...challenges that went on with every new employee to see how they 'fit' was called 'testing.' Women who experienced this identified it as 'harassment.' Men on the job called it 'tradition'." (Cohen, M.G. and Braid, K., 2000, p93) Culturally, is Flint going to be able to overcome the significant barriers to achieve employment equity and the additional labour source this group can supply?

5.4.3.3 Provincial Migration, Immigrants or Foreign Workers

Structurally, labour mobility complications arise from the fact that each of the provinces and territories is responsible for setting the professional standards within many of their own regulated occupations. Regulated occupations are defined as occupations that require individuals to obtain licenses to be employed as professional in the field, and usually include specialized education and experience. Regulated industries account for approximately 20% of the workforce. Provincial governments set licensing and certification requirements for apprenticeship trades programs and select the occupations that qualify as apprenticeship trades occupations. At some points, these requirements inhibit labour mobility by forcing professionals who are educated out-of-province to incur supplementary licensing costs or undergo (often unnecessary) skills upgrading. Re-certification in Canada may be required, as their training and education will not be recognised and this can take years to complete.

Progress has been made in reducing the barriers to labour mobility in the apprenticeships trades. The Provincial Nominee Programs (PNP) are inter-governmental agreements between the provinces and the federal government, allowing the provinces greater input into selecting and recruiting immigrants. The Inter-Provincial Standards "Red-Seal" Program provides a standardized endorsement on apprentice and journeyperson certificates, which allow qualified trades people to practice the trade in any province or territory in Canada. In addition to the Red Seal program, there have been other efforts to enhance mobility between provinces. There is the agreement on Internal Trade implemented in 1995, which was mandated to reduce barriers in two ways: by limiting residency requirements and by establishing a process for qualification recognition of workers. For trades not covered by the Red Seal program, the Canadian government is working to ensure more consistent apprenticeship requirements and exams to reconcile occupational standards. (Hirsch, T., Brunnen, B., & Molin, K., 2004)

New immigrants are not currently a viable source of labour for the construction industry. Due to language barriers and concerns surrounding credential recognition, safety issues, lack of training in Canadian construction techniques and skills upgrading, new immigrants are only a potential source of labour in the long term. There are more options for new immigrants who have been trained in apprenticeship systems similar to Canada's, however, for them the challenges lie in the formal recognition of their skills and in working to make necessary upgrading and training more efficient. These individuals are already familiar with the nature of the work and make excellent candidates if their language skills and experience are up to Canadian standards.

However, many are forced to work in other areas until they gain enough Canadian work experience and language skills to qualify for programs sponsored through Employment Insurance. If the construction industry could provide either programs or access to the industry by working in conjunction with organizations providing settlement and training to new immigrants, the industry could potentially access and utilize new immigrant labour more efficiently; none of which Flint has any direct control over and is left to lobby governments in the hopes of change.

While some preliminary steps have been taken to integrate immigrant labour in the oil and gas industry, there is no sign the situation will change soon. The number of stakeholders who must cooperate to remove barriers so that immigrants can be a source of labour suggests little positive, short-term change.

Once recognized as qualified, an immigrant can face other challenges, specifically the manager's perceptions to hiring foreign trained workers, such as:

1. Security concerns
2. Persistent negative attitudes to immigrants (job stealers)
3. Difficulties assessing foreign credentials
4. Cultural differences
5. Lack of Canadian experience
6. Too difficult to recruit abroad
7. Language difficulties

Attracting, retaining, and integrating immigrants requires action on several fronts. There are culturally biased issues with hiring a foreign worker. The communities need to be welcoming, as skilled workers would rather change professions than relocate. Remote locations with limited social infrastructure will not be able to retain the personnel for any length of time. The regional density of immigrants also needs to be taken into consideration. New immigrants are not a viable source of labour in regions and areas where they do not settle. Realizing that these immigrants can be dual income families, the regions and organizations need to have viable

options in place for the spouse. Consequently, accessing this source of labour is more likely to be successful in the larger centers of Toronto, Vancouver, Montreal, Calgary and Ottawa, where new immigrants are more plentiful as are the programs that serve them.

5.4.3.4 Aging Population

While workers of all ages deserve good working condition, older workers sometimes need a less physically and psychologically demanding workplace if they are to work at all. Day to day management practices will have a significant impact on the work environment and therefore changes will have to be made within Flint's organization. Job Redesign is an effective organizational response to the aging workforce. Flint will be forced to reorganize the division of labour within work teams so that individuals with less physical capability can contribute to the work process. This cultural change will have to be championed by top management to ensure that it is followed through.

5.4.4 Costs

The costs of managing a human resource strategy can be expensive, with measurements of success that are difficult to evaluate. These alternative labour forces are substantially different from the traditional workforce that Flint's human resource team will be used to dealing with. These alternative labour forces will have substantially different needs and requirements to support their work endeavours. It becomes a shift in focus; no longer what Flint shareholders need or require, but what does the employee need. This shift will need to cover three key points; communication, support and retention.

First, there are the overall cultural differences, not only in the geographical sense but also within the change of industries for some labour sources. Cultural change will be difficult for both the current and potential employees. It will take a vast investment in different communication styles, cultural training, and development. Management will need to become supportive of the strategy; this will require investments in their time and commitment.

Second, there are the costs of supporting such alternative labour sources. Flint will have to re-evaluate their recruitment strategies and develop a new set of recruitment policies that will focus on the needs of these alternative labour sources. This may require increasing the Human Resource Department within Flint to establish a specific recruiting team for these alternative groups. As well, Flint will endure the costs of supporting educational programs specifically

generated for these differing groups of potential employees; investing in such sponsorships programs as mentors, scholarships, coop terms, and interim employment opportunities. These costs may also occur in the lobbying of governments, building of partnerships, and alliances of specific groups to establish cooperation and understanding for future benefits.

Third, is the intensity of retention strategies for these alternative groups. Although the Aboriginal group may reduce accommodation costs for Flint, there are additional costs for the alternative sources, that is:

- Availability of Child Care
- Increase in days required off
- Management of flexible hours, flexible work
- Costs of mobility
- International flights for home visits
- Family benefits
- Coordinating housing, restaurants, and entertainment
- Pay incentives

Overall, the alternate labour force is a different culture for Flint, recruitment is different, management is different, and therefore the costs may not be directly financial but large none the less.

5.5 Summary of Strategies

These strategies do not cover all possibilities, but they do address the overall opportunities for Flint to avoid the potential cost increases and profit decreases due to a labour shortage. The strategies chosen for discussion are segregated purely to ease the analysis and the decision-making process. These strategies are not isolated or mutually exclusive, and as such are meant to ultimately aid in the creation of an overall strategy for Flint that could encompass contributing factors of each. However, Flint needs to be aware that it has limitations on capabilities and will need to be selective in its priorities creating a concise overall strategy that meets Flint's objectives. The overall strategy for Flint may be a mix of differing short-term and long-term strategies. Flint may utilize a strategy that helps it cope for the interim period, while it moves in to a different long-term strategy or in the end a mix of the two, benefiting from the assets and the liabilities of each.

6 EVALUATION

6.1 Weighted Evaluation

The strategic alternatives evaluation matrix is a method to score different business strategies. Important factors are listed, weighted and the strategies are then scored based upon how they align to each of the goals. This matrix will evaluate the previously discussed strategies: outsourcing, independent contractors, employee retention, and alternate labour sources. Although these strategies will be weighed against each other, and might be seen as competing strategies, they are only competing against each other in the sense that a company cannot do everything and needs to choose its priorities.

The following segment will first cover a discussion of the different strategies and their relationship with the goals, weightings, and probabilities. Then this analysis will discuss the evaluation of each strategy in the short run, and then the long run.

The goals are selected because they are important factors to the industry but they may not necessarily cover all possible issues and outcomes. The goals are not independent variables, i.e. Economies of Scale/Brand, Economic Profit, and Market Share. Weightings are selected, but may not necessarily be based on quantitative requirements for the business, its industry, or the strategies being discussed. Much is based upon Porter Analysis of the Industry, which highlights key success factors of the industry. These key success factors are selectively weighted relative to each other, emphasizing what appears to be the most important, and placing less emphasis on those goals that may not be as important.

Although the weighted analysis is a great tool, acknowledgment has to be given to the biases that occur in such an evaluation, as it does have its limitations. The scoring will contain mental biases and it is impossible to have all the information for all of the strategies. As well, it puts Flint into a capsule and does not acknowledge the independent influences that Flint faces, for example the competing economies for labour, US economy, oil supply and demand, natural disasters, and government regulations.

The weighted evaluation is shown in Figure 35. There are six major goals established in this evaluation to weigh the different strategies in both the short term and long term. The goals are selected because they are important factors to Flint. 'Safety' is simply the expectation that all stakeholders have; it is first in qualifying tenders to develop growth and economic profit. Without safety, the following two objectives would not happen. 'Growth' is the primary objective of Flint, as it is strategizing to double revenue in 5 years. 'Economic Profit' is the cornerstone for any business to have long-term sustainable profits. 'Market Share' is then a quantifiable outcome of the first three goals. This doubling of revenue is recognized in all of the first four goals listed. 'Safety', 'Economic Profit', and 'Growth' each have a weighting of 20% with 'Market share' at 15%. This totals 75% of the weight for Flint's objective of doubling revenue by becoming the Service Provider of Choice. 'Fit' is the next goal with 15% of the weight, it is a qualitative look at the strategies and if they will work together for a competitive advantage within the industry. The final goal is the 'Impact on Employees' with a weighting of 10% that acknowledges Flint's second goal of becoming the Employer of Choice. The impact on employees is a measure of the impact of change on the existing management and workers. As well, the assumption is that within each of these goals are the 'Values to Vision' of Flint: Integrity, Excellence, Success, Dynamic and People while working towards zero injuries.

The weighting factors of the goals are based upon relative importance, estimated selectively and sum to 1.00. These goals were considered for the short term and long term scale, where selectively 1 to 2 years considered short, with 4 years and beyond considered long.

Figure 35: Weighted Evaluation of Strategies

FLINT ENERGY SERVICES, LTD							
		Legend		1 = low			
				5 = medium			
				9 = high			
Goals	Description	Weight	Time Frame	Independent Contractors	Outsource	Employee Retention	Alternate Labour
Safety		0.20	Short Term	3	5	7	5
			Long Term	1	3	9	7
Growth	double revenue	0.20	Short Term	7	9	2	2
	success		Long Term	7	9	5	9
Economic Profit	shareholders profits	0.20	Short Term	5	2	2	1
	excellence		Long Term	2	5	2	5
Market Share	supplier of choice	0.15	Short Term	2	9	5	5
	integrity		Long Term	1	5	9	9
Fit	to support first four	0.15	Short Term	5	7	5	2
	dynamic		Long Term	1	7	9	9
Impact on Employees	employer of choice	0.10	Short Term	7	5	9	9
	people		Long Term	2	2	9	9
Score		0.80	Short Term	4.8	6.1	4.6	3.6
			Long Term	2.5	5.4	6.8	7.8

Figure Created by Author

6.1.1 Independent Contractors

The first strategy to be weighted is the Independent Contractors. This strategy scored 4.8 in the Short Run. This medium to high score is achieved due to the high scoring in the Growth category. It achieves cost minimization and flexibility for growth opportunities, the flexibility to reduce or increase work force with little responsibility and financial burden is a key factor in the growth category. A major risk to Flint is the evolving discussions and court rulings on defining the relationship between an employer and an independent contractor, but if Flint can stay abreast of the paperwork and manage this strategy, it could be successful in the short-term.

However in the long-term, this strategy of Independent Contractors scores a low 2.5 due to the factors that affect the labour issues within a construction organization. Flint has acknowledged that over the long run this type of employee treatment will begin to reflect a culture different from what Flint is striving to achieve. Safety concerns will increase due to a lack of knowledge retention, resulting in a loss of production, quality, market share and overall a reduction in employee satisfaction. From a strategic standpoint, this strategy does not create a sustainable competitive advantage and carries with it multiple risk factors. Using independent contractors that are available to Flint's competitors is not creating differentiation in regards to

labour for Flint. Already competitors are utilizing independent contractors in a similar fashion, thus imitating Flint's cost structure. Flint's finds itself competing for these independent contractors against the requirements of other competitors, for instance, the dollar amount of insurance required, the length of pay periods and the necessity to provide incorporation documentation. This strategy does not allow for a sustained cost advantage, as independent contractors are free agents in the sense that employees are not.

As well, it can be regarded as a poor choice in corporate responsibility. Flint has acknowledged the risks and yet it is willing to allow errors in paperwork and risks in safety by allowing independent contractors to come on site. Pressures from stakeholders will continue to increase, focusing on how Flint handles employees or independent contractors, as corporate responsibility is becoming increasingly important. Organizations are to be held accountable and responsible for their impact on society, directly or indirectly.

Although this strategy of using independent contractors seems to be the easiest and the most economical, this strategy alone, based on the reasons that have been stated, will not lead to long-term cost advantages to Flint and will in the longer run be contrary to some of its core objectives. In fact, tighter controls and more selective use of DSPs will be required to minimize risks and achieve Flint's goals around improved performance and differentiation.

6.1.2 Outsourcing of the Human Resource Function

The second strategy evaluated is the Outsourcing Strategy. In both the short run and the long run, this strategy scored high at 6.1 and 5.4 respectively. This is a result of having the flexibility of independent contractors while mitigating a number of risks associated with them.

Flint will achieve an even greater access to qualified labour pools with sophisticated human resource management system capabilities. These management system capabilities that the outsourcing agency can provide will allow for strict management of the documentation for independent contractors holding the experts in human resources accountable while simultaneously allowing focus on quality hires and increasing Flint's differentiation in the field. Flint remains flexible financially and has the management capabilities to evaluate independents for future hires. Flint will also reap the benefits of management information and reporting. This includes tracking quality of work, skill assessments, and the possibility of a future full-time hire. As well, allowing Flint to focus on managing its projects with increased intensity. This will increase its competitive advantage through quality productivity instead of trying to constantly

source labour. Although this human resource strategy is easily copied or imitated by competitors, it will allow Flint to concentrate on other aspects of its business to create competitive advantages, such as project management and market opportunities. As well, this option can also be achieved in a timely manner as projects such as these can be implemented within the short term, or under 2 years which is key to Flint's growth strategy and the labour crunch that it is experiencing.

There are two major downsides to this Outsourcing strategy. First, is the investment that outsourcing requires. There is a substantial cost associated with outsourcing any part of organizations business processes both financially and culturally. This costly venture could be unsuccessful if handled incorrectly or implemented poorly, and ultimately may not increase Flint's differentiation. As well, there are costs associated culturally as this will be a major change affecting all employees of Flint. Some may not like the new ways of doing business or may feel uncomfortable with the future situation. Therefore, there may be a loss of current employees and a decrease in morale, a very costly situation for Flint. Second, although this strategy allows for short-term gains, this type of management in the long term reduces Flint's ability to control the quality of its Human Resource abilities or learn from it, because the agency is managing this business process for Flint.

This strategy is likely to have the biggest impact on Flint in the short-term and if handled correctly the benefits could outweigh the costs associated with outsourcing, establishing a competitive advantage through project quality.

6.1.3 Employee Retention

The third strategy is Employee Retention. This strategy scored 4.6 in the short-run for a medium to high range due to the expected success of achieving Flint's objective of Employer of Choice. It is thought that with this cultural change, there will be an increase in morale in both the short and long term.

Specifically in the short term, there will be a direct change in the atmosphere or work environment, an increase in employee morale and in direct relation to this positive working environment an increase in production and production quality. These are all attributes that Flint is looking for in establishing a lean cost environment with differentiation.

With Flint focused on its people the productivity will likely increase, but this can be costly from a management point of view, as some retention strategies will require a financial investment. In this strategy, Flint would be required to target long-term employment in a project

environment. This sets two differing objectives for Flint. In a project environment, organizations are looking for flexibility with a short-term turn over of the work force when a project ends. With a focus on long-term employment that does not create a lot of flexibility, as there is no short-term turn around and retention of employees can be costly to maintain with no tangible payoff. There will be an increase in costs due to the hiring in project peak periods, while maintaining employment levels in the down time, and the capital expenditure incurred by Flint in doing so. Flint would need to start diversifying its projects to ensure fulltime project work 12-months of the year. This diversification may dilute Flint ability to manage projects with high quality.

In the long-term this strategy scored quite high at 6.8, the second highest of all the strategies for the long run. Even though this strategy requires an investment in time, as the culture changes Flint will reap the benefits of employee loyalty, commitment and therefore increased productivity and quality increasing Flint differentiation.

The costs of managing a human resource strategy can be expensive, costs are relatively tangible, but the measurements for success are intangible. There is the capital cost requirements, Union or collective bargaining, as well as the increased overhead as the ability to charge out the work hours is at a lower gross margin. Investing in a Human Resource Planning System is a decision that Flint will have to make, as there are varying types of systems available in the market today ranging in price and capabilities. Depending upon Flint's finalized strategy will depend upon the financial investment it will need to make in a Human Resource Planning System.

With the different retention incentives available to utilise, Flint will need to decide what cost it is willing to pay for a specified benefit and is that cost investment a viable option for Flint?

Flint will need to choose between a number of competing alternative means for retaining employees. Among them, are the following options that appear to have the greatest hope for maximizing retention per dollar spent:

- Competitive compensation
- Additional benefits
- Work environment
- Training and development
- Mentorship programs
- Apprenticeship opportunities
- Co-op placements
- Work/life balance
- Specialized skill areas or geographic areas
- Continuous 12-month employment

Additionally, the upstream oil and gas industry reports an optimal planning horizon of three to five years for workforce size and demographics. This is a serious observation when applied to the education, training and development model, which require significant lead-time to respond to industry needs. Achieving expertise in the work force does not happen in timely fashion and should Flint require expertise quickly, it will have to look outside of its employees.

This strategy has great benefits and competitive advantages that can come at a low cost if Flint is willing to take the time to think outside the box, however, this time is something that Flint does not have.

6.1.4 Alternative Labour

The fourth strategy, Alternative Labour scored poorly in the short run with the lowest score of all the strategies at 3.6. This strategy received this low score due to the short-term implication of trying to implement alternative labour into the construction industry. There are few advantages in the short term for this strategy as there are substantial changes required from both Flint and the potential employees. All of the changes will require long-term investments of longer than 5 years to complete. This can be considered a major down side to this strategy, as it requires an output for training with no initial labour to hire. As well, this strategy is reflective of the retention strategy and is not flexible enough to allow fast growth and increased training or apprenticeships are not fully beneficial in the short term.

However, this strategy scored the highest overall in the long-term with 7.8. It reaps all the long-term benefits of the retention strategy with creating more flexibility in the available number of qualified, and enthusiastic workers. These new sources may be what Flint needs to fulfil its workforce requirements in this time of labour shortage.

However, there are barriers to these alternative labour sources such as a lack of work experience and training that make this long-term viability difficult to achieve. Breaking into the industry is made particularly difficult where the work is always temporary, and the continuous process of finding a job is particularly onerous for workers who face a succession of hiring barriers not typical in other discriminatory workplaces.

One of the major advantages of utilizing these alternative labour forces is the number of available personnel in a time of shortage and the potential to increase supply and reduce costs. As well, these sources of labour may be supported by governmental programs looking to enhance the social well being of under represented or under-utilised citizens. Therefore, through

educational and work related government subsidies, an organization can reap the benefits of subsidized labour.

Of course, utilizing these alternative labour forces will reap the same advantages listed in the Retention Strategy above. Such benefits as:

- Long-term learning, specialization increasing efficiencies
- Superior access to information about the 'true' abilities of the employee
- Better personnel allocation decisions
- Reduced hiring and firing costs
- Potential to attract better employees
- Employee satisfaction
- Increasing morale in the work place environment
- Increased productivity

Particularly, Alberta's Aboriginal population has potential to be part of the solution to Flint's concerns about the future availability of skilled workers. Aboriginal employees from the region are unlikely to see the location of work as a disadvantage, quite the contrary, and therefore are much more likely to stay with Flint. By hiring Aboriginals, Flint will be able to reduce its overhead costs by eliminating the isolation costs and establish partnerships with the local government, integrated Aboriginal employment as a corporate strategic objective to minimize the risk of lost investment and exploration opportunities. This could be considered a competitive advantage for Flint having successful partnerships in place to further develop contracts in the region.

There are a number of challenges that Flint may experience due to the use of alternative labour forces, many issues previously listed in the retention strategy and such differing issues as: unbalanced culture, decreased quality and overall lack of differentiation. The issues from the Retention Strategy can be listed as:

- Long-term investment
- Capital cost requirements
- Union or collective bargaining
- Increased overhead
- Inflexibility in employing a person full-time

Specifically, with this alternate labour force strategy a major concern is the construction industry's traditional nature of inequity. Flint will need to develop targeted prerequisite and bridging programs that meet cultural needs of the Aboriginal peoples and the occupational needs of the region so that Aboriginal candidates qualify for training and employment opportunities. Flint will need to work with government, industry, and stakeholder associations to integrate and provide access to information and contacts with respect to recognition of educational levels. As well, Flint can build on partnerships such as the Alberta Aboriginal Apprenticeship Program and

the First National Trades Training Program to enhance the number of qualified labourers from alternate sources.

The biggest challenge that Flint will face is the changing of its culture to commit to such a non-traditional source of labour, initiatives are likely to fail when organizations do not demonstrate the necessary commitment towards its implementation. Discrimination as a cost needs to be better quantified to rebut the assumption that it is not cost effective. Day to day management practices will have a significant impact on the work environment and therefore changes will have to be made with in Flint's organization. Job Redesign is an effective organizational response to the alternate workforce.

Overall, the alternate labour force is a different culture for Flint and the industry itself; recruitment is different, management is different and therefore the costs may not be directly financial but the impact may be the same. However in the long run, this strategy has potential to create competitive advantages through the working relationships that Flint will develop that will not be easily copied by competitors.

6.2 Summary of Evaluation

In summary, the weighted evaluation indicates that a single strategy alone will not provide Flint with a competitive advantage in both the short and long run, but that a mixture of strategies may be the best option for Flint. When industry dynamics are assessed versus their probable occurrence, outsourcing is the most promising option in the short run, while alternative labour sources and employee retention are the most promising in the long run.

7 RECOMMENDATIONS

For Flint Energy Services to double revenue as Service Provider of Choice and Employer of Choice, a Human Resource Strategy is fundamental. The most critical issue for Flint is the number of qualified personnel it can hire. Flint is in a challenging labour market and without the right people, Flint's overall strategy will not succeed. This primary business concern for Flint will require investment in its people, without this investment, Flint's current statement of values, marketing slogans, and dependence on DSPs will not provide long-term solutions.

Thus, the recommendation is that Flint establishes a Human Resources Strategy to communicate to all stakeholders in support of Flint's objective to be the Employer of Choice. This strategy will combine the three previously discussed opportunities of Outsourcing, Retention, and Alternate Labour Forces resulting in one overall human resource strategy for Flint.

As a basis for comparison, assuming Flint remains status quo, or makes simplistic changes to its Human Resource Department, for example, implementing a human resource policy, the implementation costs will be minimal. The only cost will be added is the time in preparing and marketing the new policy, adding an assumed project cost of \$100,000. The current budget is \$10.4 million for a total of \$10.5 million.

Figure 36: Current Strategy Cost Evaluation

Current Strategy	Base Costs
Recruiting - 377 ads @ \$5,104 per ad	\$ 1,924,208
Human Resource Staff - 79 @ \$108,000	\$ 8,532,000
Project Cost - Human Resource Policy	\$ 100,000
Sub-Total	\$ 10,556,208
Forecast Lost, Net Revenue \$743 million, 10% market growth, 2% net profit	\$ 1,487,682
Total	\$ 12,043,890

Figure Created by Author

The benefits of such a policy will also be minimal in this current labour market environment. With only this policy, Flint will not have addressed the risks of independent contractors, the need for labour retention in such a competitive market and the potential loss of market share in a growing industry. Therefore, it stands to reason that Flint will not be able to reap the growth in

the market, achieving only 10% growth, and not the forecast 20%. This is calculated as a loss of net revenue at the current net profit margin of 2%. Overall, the total cost for the current strategy is \$12 million.

The recommended strategy, changing status quo, will contain three parts: Outsourcing, Retention, and Alternative Labour Forces. First, Outsourcing most of Human Resources will result in a net cost savings of \$4.7 million. This is a result of the improved performance because of the:

- Gained access to outside expertise
- Clarification and proper management of DSPs
- Increased labour resource pool to chose from
- Maintained flexibility in workforce management, seasonal fluctuations
- Capital cost avoidance with certain trades, i.e. welders.
- Potential reduction in safety incidents from guaranteed safety trained personnel
- Limitations of risks in hiring independent contractors
- Measurable quality of skilled labour provided by an outsourcing agency
- Supporting documentation to ensure liabilities are covered
- Reduction in paperwork and follow-up for Human Resource Department
- Focus on core business opportunities
- Increased concentrations of project managers on productivity rather than the desperate need to hire personnel
- Contribution to a 27% increase in productivity due to a reduction in idle time
- Reduction in overall project costs – reduction in insurance premium costs and reduction in schedule
- Better financial reports and analysis, with more accurate and timely information leading to better and more informed decisions
- Increased customer satisfaction and market share

All of these points will contribute to Flint's overall competitive advantage and objective of doubling revenue.

With this performance improvement, there are risks that Flint will need to manage. The largest risk is the contract arrangement with an outsourcing agency. Flint will need to establish a strong agreement to ensure that the agency is meeting Flint's expectations and that there are measurements in place to recognize poor performance. Flint cannot become complacent about

managing an agreement. Flint will need to establish measurements of success, and monitor these measurements to ensure excellence from its partnership.

Another manageable risk is the possibility of independent contractors negotiating in the market place. By utilizing a human resource provider Flint will compete directly with the market place for employees and may be faced with a lack of loyalty from its labour force, thus increasing the costs to Flint in the long term. This is an issue that Flint needs to acknowledge and ensure management decisions are in place to justify cost increases or moving towards permanent employees versus independent contractors.

Engaging an outsourced human resource provider will result in the following financial costs based at today's market, as calculated in Figure 37:

- Additional \$2 per hour per hired DSP/ employee for a total of \$6.6 million dollars per year
- Human Resource Department of 8 personnel to manage the agreement and other strategies, for \$864 thousand per year
- Potential increased wages in the long-term

An outsourced human resource provider will result in the following financial benefits based at today's market:

- Reduction in the Human Resource Department of 71 staff, \$7.6 million
- Elimination of recruitment costs for new employees, \$1.9 million
- Reduction in required employees wages due to increased productivity of 27% for a savings of \$1.8 million

Second, the focused Retention strategy for the workforce is more realistic to create a competitive advantage, than a more general human resource strategy concentrated on hiring tactics. This strategy will result in a net cost of close to \$836, 000, simply evaluating the direct costs of the strategy. This is an investment in Flint's employees and as a result of the improved performance because of the:

- Access to information about the 'true' abilities of the employee, better personnel allocation decisions, reduced hiring and firing costs, potential to attract better employees because of better opportunities in a large, diversified company
- Employee satisfaction, increasing morale in the work place
- Improved loyalty among key staff

- Reduction in turnover to 10% compared to the current 30%
- Long-term learning, and specialization
- Increased efficiencies in better project management
- Twenty-seven percent increase in tool-time of the labour force on the project
- Development of good planning standards and a well trained workforce
- Increase in training, resulting in increased quality and safety requirements
- Increased profits, market share, and overall competitive differentiation

Counter to the performance improvements are the manageable risks that Flint will face in the retention of employees. There is the inflexibility in employing a person. As a construction and project oriented organization Flint will need to focus on manpower requirements and a full 12 months worth of project work to ensure there are no unnecessary layoffs or projects lost due to an over abundance or lack of labour. Potential labourers and shareholders are critical of layoffs where clients are critical of lack of capacity to perform the job.

A focused retention strategy will result in a financial cost and benefit of investment based at today's market. This investment in retention programs will cost approximately \$1,200 per employee for a cost of just over \$5 million dollars. The financial benefits of a focused retention strategy will reduce turnover from 30% to 10% for a 20% reduction in cost of recruiting, and a savings of \$4.2 million dollars.

Third, the Alternative Work Force is a long-term strategy with greater ramp-up time and longer-term pay off. This strategy will result in a net cost of \$341,000 calculated against the direct costs and benefits of such a strategy as seen below. Again, this is an investment by Flint that will result in improved performance because of:

- Maintaining its workforce requirements in this time of shortage
- Benefits from educational and work related government subsidies
- Long-term learning, and specialization increasing efficiencies
- Opportunity for Flint to satisfy its remote location issues by utilizing a work force that is local
- Eliminating the travel, housing, camp, boarding, and isolation costs as payments
- Establishing partnerships with the local government
- Competitive advantages for Flint having successful partnerships in place to further develop contracts in the specific regions

With these performance improvements are the following manageable risks for Flint. This alternative labour strategy is a long-term investment. Therefore, this process will be difficult to manage when Flint is looking to quickly mobilize or demobilize its workforce. As well, Flint will need to deal with the integration of the alternative workers into Flint's business environment, including the cultural change, both internally and externally, and the current barriers of hiring Aboriginals, Women, Immigrants and Aging personnel.

An alternative work force will result in the following financial costs based at today's market:

- Specialized human resource workforce to recruit, train, retain and support cultural needs and requirements, 2 human resource employees at \$54 per hour which includes wages, benefits and premiums
- Cultural sensitivity training for all personal to support and manage the change to Flint's workforce demographics, this would require \$150 per employee for a total of \$627,000
- Tuition investment, for a four year program at \$1,200 per year for 10% of the labour force totalling just over \$2 million

As shown in Figure 37, these costs outweigh the following financial benefits based on today's market for an alternative work force:

- Reduction in living out allowance, 3% of labour force will be targeted for local hires and at \$10 per hour for living out allowance working an average of 2,000 hours, totals just over \$2.5 million annually

However, overall this recommended strategy will aid in increasing profitability through improvements in performance. The improved performance will result in a competitive advantage for Flint gaining revenue, market share, and profit in the end. The calculated gain in profit in Figure 37 indicates that Flint will increase by \$4.4 million, a 20% increase in market share at a 3% net profit margin. This in turn calculates an overall savings, should Flint invest in the recommended strategy versus its current strategy, of approximately \$9.5 million dollars based on the current market situation (Total of Current Strategy, \$12 million, minus Total of Recommended Strategy, \$2.4 million). However, this market as stated before is volatile and therefore experiences market fluctuations that directly affect Flint's revenue, costs, and profits.

Figure 37: Recommended Strategy Cost / Benefit Analysis

Recommended Strategy		Base Costs
Outsourcing	Outsource Agency - additional \$2 per hour per DSP/ employee	\$ 6,696,036
Outsourcing	Retained Human Resource Staff - 8 staff per year	\$ 864,000
Outsourcing	Increased Productivity - 27% reduction in labour required	\$ (1,807,930)
Retention	Retention of staff - \$1,200 average per employee	\$ 5,018,400
Retention	Reduced Turnover - from 30% to 10%	\$ (4,182,000)
Alternative	Specific Alternative Labour HR Group - 2 specialized employees	\$ 216,000
Alternative	Cultural Sensitivity Training for Existing Work Force - \$150	\$ 627,300
Alternative	Tuition Payment Plan - 10% labour subsidized	\$ 2,007,360
Alternative	Reduction Living Out Allowance - 3% local labour	\$ (2,509,200)
	Sub-Total	\$ 6,929,966
	Forecast Increased, Net Revenue \$743 million, 20% market growth, 3% net profit	\$ (4,463,046)
	Total	2,466,920

Figure Created by Author

Assuming the demand for oil increases, in turn increasing the need for Flint's services, it's Human Resource Department in the current strategy will not be able to keep up with the organizational demands of an increasing workforce. Therefore, it can be assumed that the current issues will multiple exponentially causing a greater loss of opportunities. It is reasonable to expect that Flint will be restricted in project completion in both capacity and deliverables by the number of qualified personnel it can retain. There will be an increase in risk by allowing untrained workers on site, increasing the dangers of having unsafe work habits occur unmonitored and increasing the liabilities of Flint. These risks will then decrease Flint's share of a growing market place due to unsatisfied stakeholders.

In the recommended strategy, should the market increase substantially Flint would still be able to maintain the strategy with viable solutions to handle the demand on the workforce without concern for the availability of qualified workers. The outsourced human resource provider, as the contracted supplier, would be responsible for providing the necessary opportunities to support the growing demand for Flint's services. This increase in supply would increase the costs to Flint directly but would also provide the ability to grow with demand and increase revenue while maintaining a competitive advantage for Flint.

Should the demand for Flint's services decrease dramatically, in the current strategy the Human Resource Department will again be overwhelmed with laying off employees as well as the loss of skilled employees to more stable employment. Morale will deteriorate and workers will become less productive, again contributing to the poor project completion and unsatisfied stakeholders.

Implementing the recommended strategy, should the demand for Flint's services decrease, Flint would be in a good position to manage the risks of the declining demand for its services. It is reasonable to expect that losses will occur, however this strategy would create a competitive advantage allowing Flint the necessary focus on its business strategies to be well aware of what is happening and be proactive in the marketplace. Although losses would occur they would be far less than if Flint does nothing.

In conclusion, a Human Resource Strategy is a key component for Flint's over all strategy. The recommended strategy has 3 key pieces including: outsourcing the human resource recruitment function including the controls of the DSP system (rather than allowing it to develop out of control); focusing on retention, especially of key personnel; and building programs to successfully recruit and retain employees from non-traditional segments of the labour force, especially Aboriginals from the region. Flint is in a challenging labour market and without the right people, Flint's overall strategy will not succeed. Should Flint choose not to focus on a specific Human Resource Strategy to ensure differentiation in the future, Flint will see its competitive advantages diminish and its profit margins decline as competitors increase their capabilities and customer expectations intensify.

APPENDICES

Appendix 1 - Chronological History

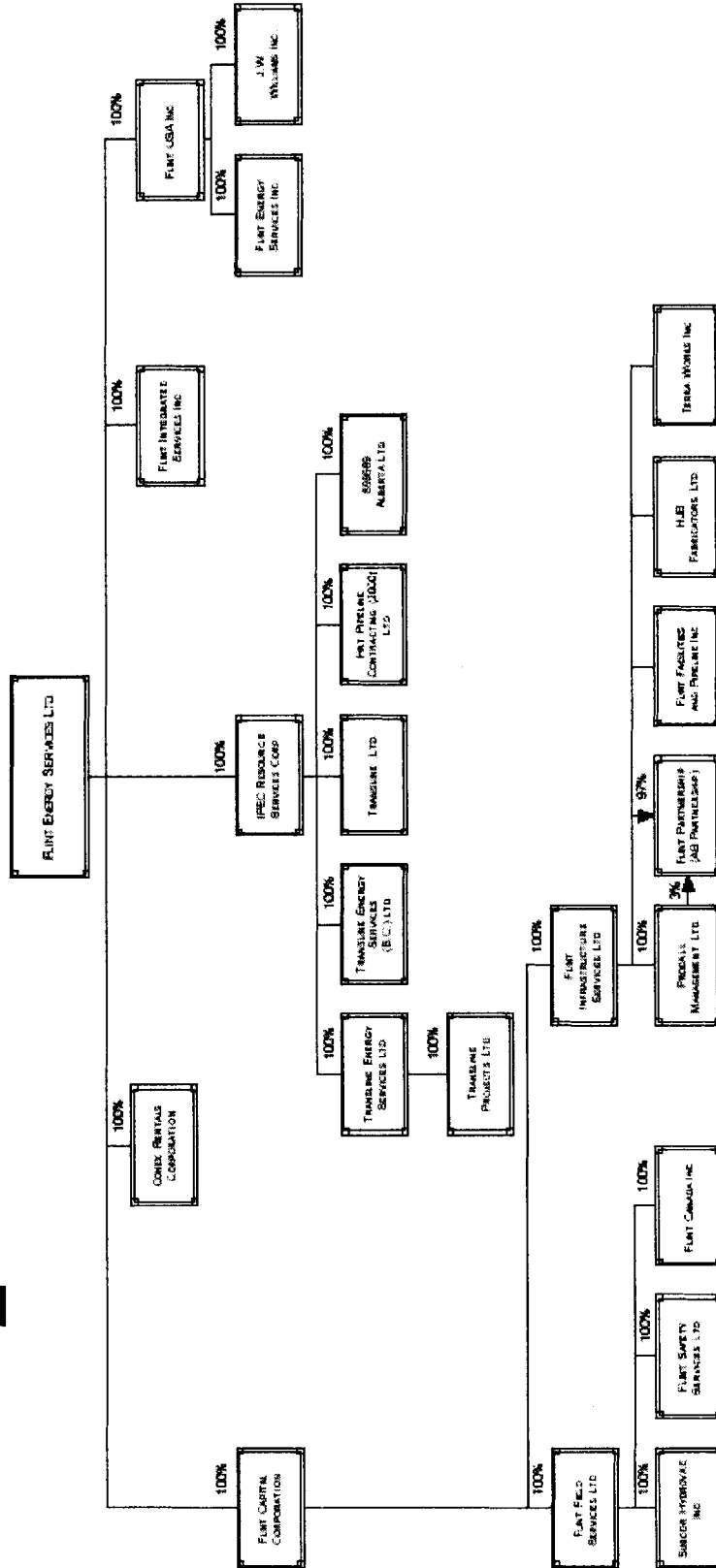
Year	Organizational Name	Action	Location	Industry Focus
1908	Tulsa Rig, Reel and Manufacturing Company	developed	Tulsa Oklahoma	Oilfield
1936	Fornier Construction Company	purchased	Tulsa Oklahoma	Oilfield/ Construction
1972	Flintco Inc.	changed name	Tulsa Oklahoma	Oilfield/ Construction
1981	HMW Services Group Ltd	developed	Sherwood Park Alberta	Oilfield/ Construction
1996	Locksley	incorporated	Calgary Alberta	Oilfield/ Construction
1997	Chriscor Production Enhancement Technologies	acquired by Locksley	Calgary Alberta	Oilfield/ Construction
1998	IPEC	Locksley changes name to IPEC	Calgary Alberta	Oilfield/ Construction
1998	HMW find investors - SCF/FLINTco	consolidation	Calgary Alberta	Midstream Oil and Gas Service
1998	Flint Construction Company	HMW changed name to FLINT	Calgary Alberta	Midstream Oil and Gas Service
1999	Braidnor Construction Ltd	acquired	Calgary Alberta	Midstream Oil and Gas Service
2000	Reids Construction Group	amalgamation	Calgary Alberta	Midstream Oil and Gas Service
2000	Titan Electric	acquired	Calgary Alberta	Midstream Oil and Gas Service
2000	IPEC began trading on the TSE	incorporated	Calgary Alberta	Midstream Oil and Gas Service
2001	IPEC and FLINT merger	merger	Calgary Alberta	Midstream Oil and Gas Service
2001	FLINT ENERGY SERVICES	Publicly traded on TSX - FES	Calgary Alberta	Midstream Oil and Gas Service
2001	Hawke Safety	acquired	Calgary Alberta	Midstream Oil and Gas Service
2001	Klingers Oilfield	acquired	Calgary Alberta	Midstream Oil and Gas Service
2001	Chaparral Equipment & Service Co.,	acquired	Calgary Alberta	Midstream Oil and Gas Service
2004	Western Slope Oilfield	acquired	Calgary Alberta	Midstream Oil and Gas Service
2005	FLINT ENERGY SERVICES	Currently	Calgary Alberta	Midstream Oil and Gas Service

Figure Created by Author
Data Source: Flintco Website, 2005

Appendix 2 – Current Flint Organizational Chart

Revised July 22, 2004

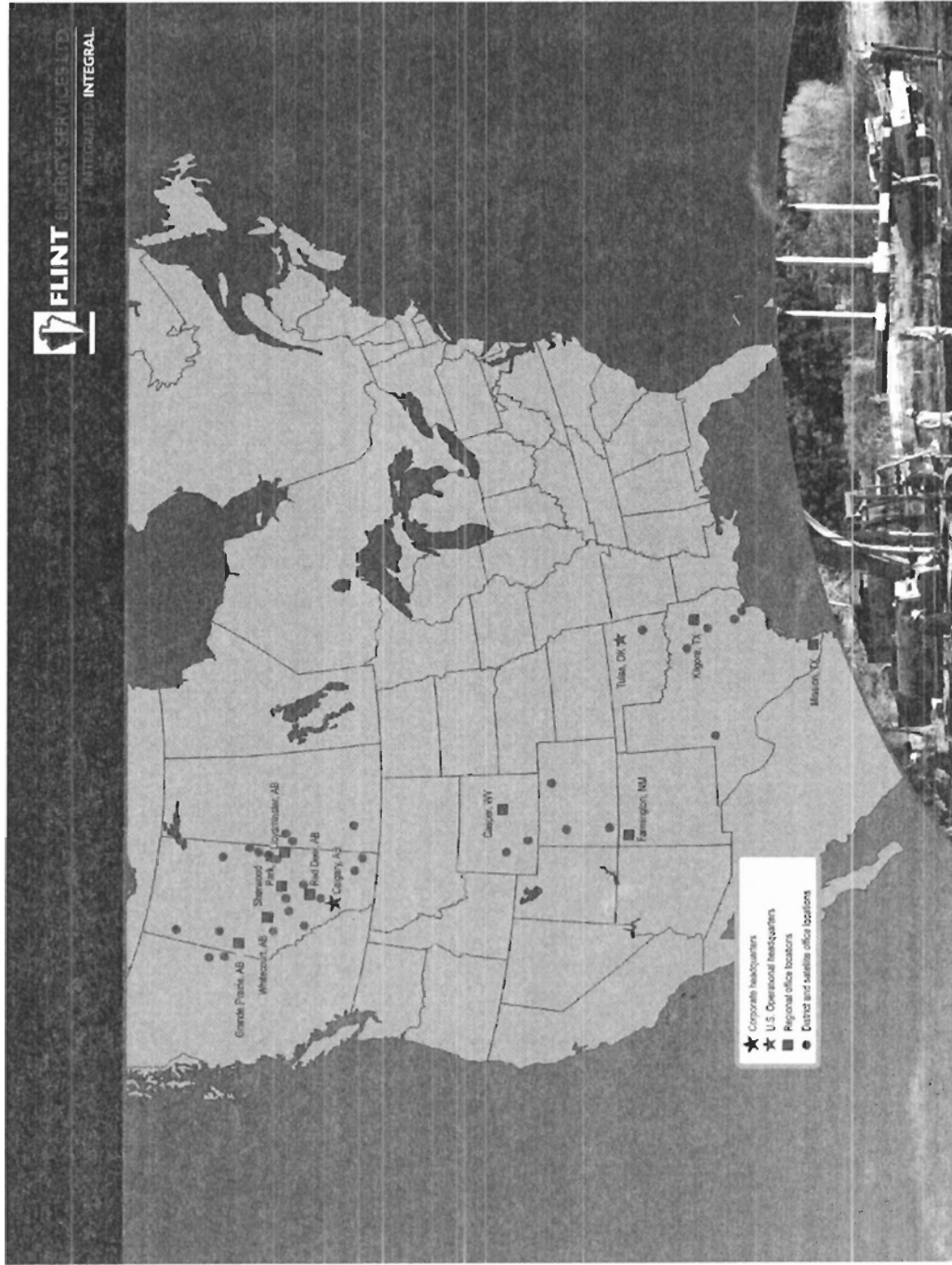
FLINT ENERGY SERVICES LTD. AS AT JULY 31, 2004



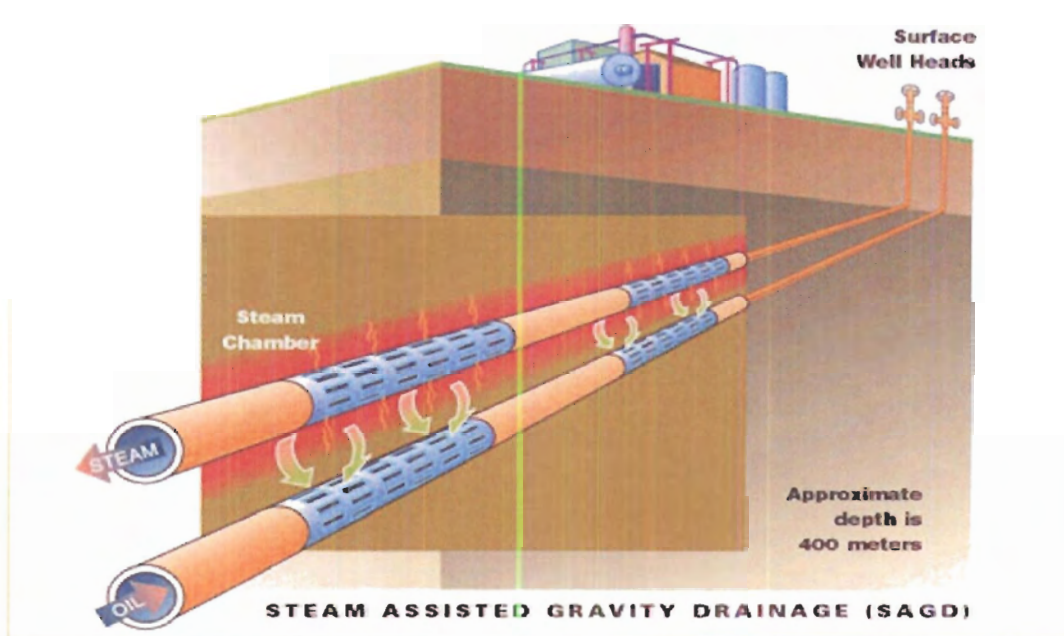
FLINT - Chart 145C

Source: Flint Energy Services, 2004

Appendix 3 – Geographical Map of Flint



Appendix 4 – Unconventional Oil Industry



SAG-D or in-situ: Steam Assisted Gravitational Drainage; the process by which steam is used to extrude bitumen or crude oil from the tar sands. This extraction combines horizontal drilling with thermal steam injection. A pair of wells is drilled into the ground about five metres apart and steam is injected into the reservoir through the top well. The steam softens the tar-like bitumen and enables it to flow out of the reservoir and into the lower well. From there, it is produced to the surface. One way to think of SAGD is “heating the oil and catching the drips”. In-situ literally means ‘in place’ in Latin.

Source: Petro-Canada, 2005

Appendix 5 – Financial Analysis Flint

FLINT ENERGY SERVICES, INC.

Income Statement

Years ended December 31

(in thousands of dollars)

	2000(A)	2001(A)	2002(A)	2003(A)	2004(A)
Gross revenue	274,054	637,011	697,112	651,203	743,841
Costs of Sales and Operatin	(224,597)	(498,902)	(554,092)	(513,422)	(596,541)
Depreciation of property an	(12,288)	(20,763)	(27,129)	(28,080)	(32,195)
Administrative and marketi	(22,537)	(55,281)	(66,697)	(69,406)	(77,518)
Net interest expense	(4,105)	(7,527)	(11,756)	(10,650)	(13,358)
	10,527	54,538	37,438	29,645	24,229
Total Income Taxes	(4,706)	(22,247)	(10,216)	(7,761)	(5,309)
Minority Interests					
Net income for the year	5,821	32,291	27,222	21,884	18,920

Breakdown by segment:

	2001	2002	2003	2004
Production Services	\$ 63,590	\$ 43,904	\$ 49,584	\$ 49,517
Infrastructure	\$ 19,238	\$ 32,419	\$ 17,126	\$ 18,308
Total	\$ 82,828	\$ 76,323	\$ 66,710	\$ 67,825
		\$ (6,505)	\$ (9,613)	\$ 1,115
Change		-9%	-14%	2%

Figure Created by Author
Data Source: Flint Financials, 2005

Appendix 6 – Ratio Analysis Flint

FLINT ENERGY SERVICES, INC.		2000(A)	2001(A)	2002(A)	2003(A)	2004(A)	2005(F)	2006(F)
PROFITABILITY RATIOS								
ROE	= $\frac{\text{Net Income}}{\text{Equity}}$	= 9.34%	13.39%	10.01%	7.66%	6.26%	11.99%	11.84%
ROIC	= $\frac{\text{NOPAT}}{\text{Invested Capital}}$	= 8.38%	6.89%	5.74%	5.09%	4.46%	8.82%	8.65%
RONA	= $\frac{\text{EBIT}}{\text{Net assets}}$	= 6.33%	12.45%	9.83%	8.21%	6.80%	14.29%	14.00%
ROA	= $\frac{\text{Net Income}}{\text{Total Assets}}$	= 2.15%	5.60%	4.90%	3.95%	3.01%	5.69%	5.70%
Financial leverage	= $\frac{\text{Total Assets}}{\text{Equity}}$	= 4.34	2.39	2.04	1.94	2.08	2.11	2.08
Asset turnover	= $\frac{\text{Sales}}{\text{Total Assets}}$	= 1.01	1.10	1.25	1.18	1.18	1.32	1.30
Net profit margin	= $\frac{\text{Net Income}}{\text{Sales}}$	= 2.12%	5.07%	3.90%	3.36%	2.54%	4.32%	4.38%
Op Profit margin	= $\frac{\text{EBIT}}{\text{Sales}}$	= 5.34%	9.74%	7.06%	6.19%	5.05%	7.00%	7.00%
Gross margin	= $\frac{\text{Gross profit}}{\text{Sales}}$	= 18.05%	21.68%	20.52%	21.16%	19.80%	20.00%	20.00%
Depreciation	= $\frac{\text{Depreciation}}{\text{Sales}}$	= 4.48%	3.26%	3.89%	4.31%	4.33%	2.00%	2.00%
SG&A	= $\frac{\text{SG\&A}}{\text{Sales}}$	= 8.22%	8.68%	9.57%	10.66%	10.42%	11.00%	11.00%
tax ratio	= $\frac{\text{Tax}}{\text{EBT}}$	= 44.70%	40.79%	27.29%	26.18%	21.91%	36.50%	36.50%
ASSET TURNOVER RATIOS								
Asset turnover	= $\frac{\text{Sales}}{\text{Total Assets}}$	= 1.01	1.10	1.25	1.18	1.18	1.32	1.30
Net asset turnover	= $\frac{\text{Sales}}{\text{Net assets}}$	= 1.18	1.28	1.39	1.33	1.34	2.04	2.00
PPE turnover	= $\frac{\text{Sales}}{\text{PPE}}$	= 3.22	3.44	3.84	3.75	4.35	9.09	9.09
Cash days	= $\frac{\text{Cash x 365}}{\text{Sales}}$	= 0.0	3.8	4.5	1.9	1.6	57.5	61.1
Receivable days	= $\frac{\text{Trade Receivables x 365}}{\text{Sales}}$	= 144.0	89.3	61.9	72.9	83.7	70.0	70.0
FINANCIAL LEVERAGE RATIOS								
Financial leverage	= $\frac{\text{Total Assets}}{\text{Equity}}$	= 4.34	2.39	2.04	1.94	2.08	2.11	2.08
Payable days	= $\frac{\text{Trade Payables x 365}}{\text{COGS}}$	= 44.6	45.7	33.7	41.2	45.2	100.0	100.0
Debt to assets	= $\frac{\text{Total Liabilities}}{\text{Total Assets}}$	= 0.2	0.6	0.5	0.5	0.5	0.5	0.5
Debt to equity	= $\frac{\text{Total Liabilities}}{\text{Equity}}$	= 1.1	1.4	1.0	0.9	1.1	1.1	1.1
Debt to CE	= $\frac{\text{Debt}}{\text{Capital employed}}$	= 27.4%	45.9%	39.9%	35.6%	40.4%	20.8%	20.4%
Interest cover	= $\frac{\text{EBIT}}{\text{Interest expense}}$	= 3.6	8.2	4.2	3.8	2.8	35.0	70.0
Current Ratio	= $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	= 2.416	1.900	2.045	2.064	3.147	1.550	1.582

Figure Created by Author
Data Source: Flint Financials, 2005

Appendix 7 – Flint Flash Newsletter



Our FLINT Employee Newsletter

Issue 25
June 6, 2005

FLINT EXECUTIVE TEAM SETS NEW DIRECTION DURING 5 YEAR PLANNING MEETING

V2V (Values to Vision) – W.J. (Bill) Lingard, President and CEO

Flint will be the **Customer's Service Provider of Choice** and **People's Employer of Choice** in the North American midstream energy services sector. Our future promises exciting opportunities and rewards for team Flint. The executive team of seven (Bill Lingard, Terry Freeman, Gary Foreman, Tim O'Brien, Wayne Shaw, Allan Cleiran and Paul Boechler) locked ourselves away for 3 days late May to look at where we are going as a company. We began by reflecting on where we have been, what our industry is doing and where we want to go. Several key themes and priorities developed out of our discussions.

PEOPLE: First and foremost we identified that to take Flint to the next level our most important asset is the right PEOPLE. Much of our planning was focused on how we develop people. To grow a company we have to train, mentor, and provide opportunities for our people to grow. We need people who are engaged and committed to following Flint's Core Values and living our Safety culture. We can do some recruiting but skilled people are not easy to find and therefore we must develop our own talent. Flint has lots of very capable people with high potential who will have opportunities to develop their skills and take on bigger and more rewarding roles. Having the right people in the right jobs doing things the right way is a tall order. We have decided to make People (recruitment, training and retention) our top priority. We must ensure that Flint people have the three S opportunities, have a SAY, STAY, and STRIVE.

GROWTH: The second big theme of our strategic planning was GROWTH. We identified several pockets of excellence where Flint is the clear leader in the services that we provide, but we have not spread those capabilities across our North American 43 location footprint. Five examples of these are JW Williams Process Equipment Fabrication, Safety Services, Pressure and Vacuum Services, Small Diameter Pipe Capability and large Facility Infrastructure Projects. We will be putting growth plans in place for each of these. The growth will come primarily through organic growth where we spread our current expertise to cover new strategic market areas. By focusing on our key customers and understanding their needs we can create huge opportunities.

We will also look at strategic acquisitions to penetrate targeted markets. How much will we grow? We have so many large opportunities we want to DOUBLE our size over the next 5 years. Yes that is a very bold statement and we believe our people, values and vision will get us there.

With people and growth being the top priorities we identified 3 other corporate priorities that will take us to the next level. **PERFORMANCE MANAGEMENT**, our 10 key deliverables and Lynx performance measurement system; **INTEGRATED/INTEGRAL**, enhancing the interdependence and accountability within our organization by refining our structure; and **TOTAL QUALITY**, how we deliver our services, JPM, C-Sox, control protocol, project execution and customer focus.

Details of our 5-year plan are being developed over the next 90 days including a financial model and plan on a page. Once complete, the executive team will travel to the key Flint locations to directly communicate and share the new strategic direction and answer any questions you may have. Obviously the growth means we will have to make investments in people, facilities and equipment. It is important that every person at team Flint has a clear understanding of where the company is headed, how we are going to get there and the role they can play in the achievement. We are targeting September to have this communication completed.

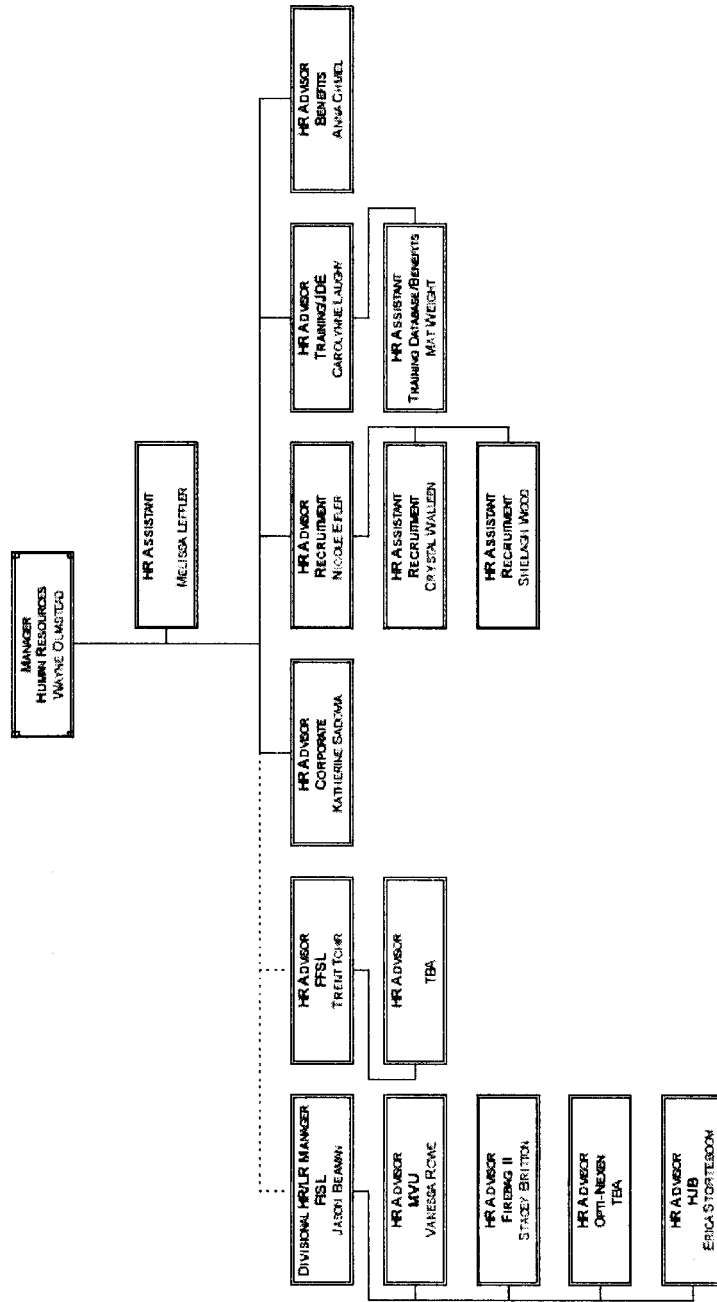
Having gone through the strategic planning session and getting a clear vision of where we want to take the company we revisited Flint's Vision and Core Values statements. Through numerous acquisitions we have pieced together a company that is developing it's reputation and style. We now have the chance to build on that foundation to double the size of our company. With our increased focus on people and customers, we modified our Vision Statement to be more concise and more reflective of the new direction. A new core value of People was added. We then realized that it is through those Values that we will reach our vision and we coined the phrase VALUES to VISION or "V2V". Please take the time to memorize our Vision and know the 5 core values. The next 5 years will be defining, challenging, exciting and rewarding times for team Flint. On behalf of the entire executive team I am happy to report that we are fired up and ready to grow. Lets do it!

Source: Flint Flash, June 2005

Appendix 8 – Human Resources Organizational Chart

Revised April 13, 2004

HUMAN RESOURCES



FLINT - Chart 139

Source: Flint Energy Services, 2005



Appendix 9 - Value Chain

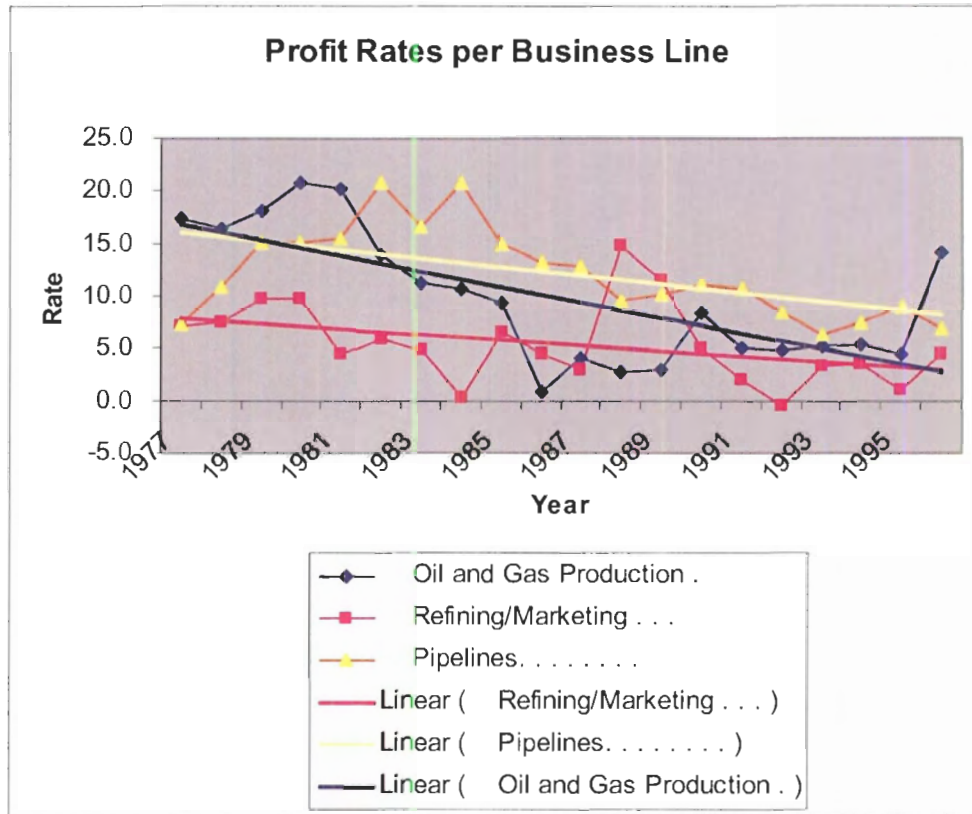


Figure Created by Author
Data Source: Energy Information Administration, Form EIA-28, 2003

Appendix 10 – Ratio Analysis Churchill

Churchill Corporation		2002(A)	2003(A)	2004(A)	2005(F)	2006(F)	2007(F)
PROFITABILITY RATIOS							
ROE	= $\frac{\text{Net Income}}{\text{Equity}}$	-0.41%	-12.00%	-24.81%	-12.10%	-11.77%	-11.58%
ROIC	= $\frac{\text{NOPAT}}{\text{Invested Capital}}$	-1.19%	-8.22%	-12.50%	-8.56%	-8.45%	-8.35%
RONA	= $\frac{\text{EBIT}}{\text{Net assets}}$	-2.06%	-12.63%	-27.06%	-11.99%	-11.73%	-11.73%
ROA	= $\frac{\text{Net Income}}{\text{Total Assets}}$	-0.13%	-3.56%	-5.04%	-6.28%	-6.11%	-6.11%
Net profit margin	= $\frac{\text{Net Income}}{\text{Sales}}$	-0.04%	-1.14%	-1.84%	-7.14%	-7.06%	-7.06%
Op Profit margin	= $\frac{\text{EBIT}}{\text{Sales}}$	-0.21%	-1.52%	-2.99%	-11.00%	-11.00%	-11.00%
Gross margin	= $\frac{\text{Gross profit}}{\text{Sales}}$	6.62%	6.67%	5.38%	5.00%	5.00%	5.00%
Depreciation	= $\frac{\text{Depreciation}}{\text{Sales}}$	0.64%	1.01%	0.95%	5.00%	5.00%	5.00%
SG&A	= $\frac{\text{SG\&A}}{\text{Sales}}$	6.20%	7.18%	7.42%	11.00%	11.00%	11.00%
tax ratio	= $\frac{\text{Tax}}{\text{EBT}}$	77.17%	17.30%	32.57%	36.50%	36.50%	36.50%
ASSET TURNOVER RATIOS							
Asset turnover	= $\frac{\text{Sales}}{\text{Total Assets}}$	3.15	3.11	2.74	0.88	0.86	0.86
Net asset turnover	= $\frac{\text{Sales}}{\text{Net assets}}$	9.68	8.30	9.04	1.09	1.07	1.07
PPE turnover	= $\frac{\text{Sales}}{\text{PPE}}$	35.54	33.38	21.55	1.33	1.30	1.30
Cash days	= $\frac{\text{Cash} \times 365}{\text{Sales}}$	16.5	16.7	17.1	0.0	0.0	0.0
Receivable days	= $\frac{\text{Trade Receivables} \times 36}{\text{Sales}}$	82.7	77.2	84.3	90.0	90.0	90.0
FINANCIAL LEVERAGE RATIOS							
Financial leverage	= $\frac{\text{Total Assets}}{\text{Equity}}$	3.12	3.37	4.92	1.93	1.93	1.90
Payable days	= $\frac{\text{Trade Payables} \times 365}{\text{COGS}}$	61.6	62.4	58.7	65.0	65.0	65.0
Debt to assets	= $\frac{\text{Total Liabilities}}{\text{Total Assets}}$	0.7	0.7	0.8	0.3	0.3	0.3
Debt to equity	= $\frac{\text{Total Liabilities}}{\text{Equity}}$	2.1	2.4	3.9	0.6	0.6	0.6
Debt to CE	= $\frac{\text{Debt}}{\text{Capital employed}}$	1.1%	10.7%	30.3%	16.4%	16.2%	16.0%
Employee Productivity	= $\frac{\text{Sales}}{\text{Number of Employees}}$	141.67	142.27	260.81	166.67	166.67	166.67

Figure Created by Author
Data Source: Churchill Corporation, 2005

Appendix 11 – Ratio Analysis Ensign

Ensign Energy Services		2002(A)	2003(A)	2004(A)	2005(F)	2006(F)	2007(F)
PROFITABILITY RATIOS							
ROE	= $\frac{\text{Net Income}}{\text{Equity}}$ =	10.88%	17.57%	18.29%	19.11%	16.81%	15.49%
ROIC	= $\frac{\text{NOPAT}}{\text{Invested Capital}}$ =	6.75%	12.63%	14.36%	14.00%	12.29%	11.39%
RONA	= $\frac{\text{EBIT}}{\text{Net assets}}$ =	11.57%	20.08%	21.49%	18.85%	16.44%	15.44%
ROA	= $\frac{\text{Net Income}}{\text{Total Assets}}$ =	5.96%	9.57%	10.43%	9.92%	8.72%	8.17%
Net profit margin	= $\frac{\text{Net Income}}{\text{Sales}}$ =	7.94%	10.66%	11.22%	11.28%	10.08%	9.45%
Op Profit margin	= $\frac{\text{EBIT}}{\text{Sales}}$ =	12.98%	18.36%	18.67%	18.00%	16.00%	15.00%
Gross margin	= $\frac{\text{Gross profit}}{\text{Sales}}$ =	23.54%	26.38%	26.69%	26.00%	25.00%	24.00%
Depreciation	= $\frac{\text{Depreciation}}{\text{Sales}}$ =	6.01%	4.76%	4.81%	5.00%	5.00%	5.00%
SG&A	= $\frac{\text{SG\&A}}{\text{Sales}}$ =	4.55%	3.26%	3.22%	3.00%	4.00%	4.00%
tax ratio	= $\frac{\text{Tax}}{\text{EBT}}$ =	37.43%	20.64%	26.93%	36.50%	36.50%	36.50%
ASSET TURNOVER RATIOS							
Asset turnover	= $\frac{\text{Sales}}{\text{Total Assets}}$ =	0.75	0.90	0.93	0.88	0.86	0.86
Net asset turnover	= $\frac{\text{Sales}}{\text{Net assets}}$ =	0.89	1.09	1.15	1.05	1.03	1.03
PPE turnover	= $\frac{\text{Sales}}{\text{PPE}}$ =	1.01	1.25	1.31	1.33	1.30	1.30
Cash days	= $\frac{\text{Cash} \times 365}{\text{Sales}}$ =	12.8	8.5	5.4	0.0	0.0	0.0
Receivable days	= $\frac{\text{Trade Receivables} \times 365}{\text{Sales}}$ =	92.5	89.1	90.2	90.0	90.0	90.0
FINANCIAL LEVERAGE RATIOS							
Financial leverage	= $\frac{\text{Total Assets}}{\text{Equity}}$ =	1.83	1.84	1.75	1.93	1.93	1.90
Payable days	= $\frac{\text{Trade Payables} \times 365}{\text{COGS}}$ =	95.2	84.0	74.0	65.0	65.0	65.0
Debt to assets	= $\frac{\text{Total Liabilities}}{\text{Total Assets}}$ =	0.5	0.5	0.4	0.3	0.3	0.3
Debt to equity	= $\frac{\text{Total Liabilities}}{\text{Equity}}$ =	0.8	0.8	0.8	0.5	0.5	0.5
Debt to CE	= $\frac{\text{Debt}}{\text{Capital employed}}$ =	17.7%	16.2%	12.3%	16.4%	16.2%	16.0%
Employee Productivity	= $\frac{\text{Sales}}{\text{Number of Employees}}$ =	121.83	173.38	141.27	166.67	166.67	166.67

Figure Created by Author
Data Source: Ensign Energy Services, 2005

Appendix 12 – Ratio Analysis Mullen

Mullen Group		2002(A)	2003(A)	2004(A)	2005(F)	2006(F)	2007(F)
PROFITABILITY RATIOS							
ROE	= $\frac{\text{Net Income}}{\text{Equity}}$ =	8.46%	14.13%	17.32%	14.81%	14.69%	14.45%
ROIC	= $\frac{\text{NOPAT}}{\text{Invested Capital}}$	6.79%	12.27%	16.10%	10.89%	10.76%	10.63%
RONA	= $\frac{\text{EBIT}}{\text{Net assets}}$ =	10.84%	16.02%	20.83%	14.55%	14.26%	14.26%
ROA	= $\frac{\text{Net Income}}{\text{Total Assets}}$ =	5.59%	8.30%	11.58%	7.69%	7.62%	7.62%
Net profit margin	= $\frac{\text{Net Income}}{\text{Sales}}$ =	5.44%	7.52%	9.86%	8.74%	8.81%	8.81%
Op Profit margin	= $\frac{\text{EBIT}}{\text{Sales}}$ =	9.39%	12.65%	15.33%	14.00%	14.00%	14.00%
Gross margin	= $\frac{\text{Gross profit}}{\text{Sales}}$ =	25.71%	27.63%	30.16%	30.00%	30.00%	30.00%
Depreciation	= $\frac{\text{Depreciation}}{\text{Sales}}$ =	4.62%	4.23%	4.22%	5.00%	5.00%	5.00%
SG&A	= $\frac{\text{SG\&A}}{\text{Sales}}$ =	11.70%	10.75%	10.60%	11.00%	11.00%	11.00%
tax ratio	= $\frac{\text{Tax}}{\text{EBT}}$ =	41.16%	38.11%	33.80%	36.50%	36.50%	36.50%
ASSET TURNOVER RATIOS							
Asset turnover	= $\frac{\text{Sales}}{\text{Total Assets}}$ =	1.03	1.10	1.18	0.88	0.86	0.86
Net asset turnover	= $\frac{\text{Sales}}{\text{Net assets}}$ =	1.15	1.27	1.36	1.04	1.02	1.02
PPE turnover	= $\frac{\text{Sales}}{\text{PPE}}$ =	2.03	2.24	2.49	1.33	1.30	1.30
Cash days	= $\frac{\text{Cash} \times 365}{\text{Sales}}$	0.0	0.0	0.0	0.0	0.0	0.0
Receivable days	= $\frac{\text{Trade Receivables} \times 365}{\text{Sales}}$ =	74.4	67.4	60.6	90.0	90.0	90.0
FINANCIAL LEVERAGE RATIOS							
Financial leverage	= $\frac{\text{Total Assets}}{\text{Equity}}$ =	1.51	1.70	1.50	1.93	1.93	1.90
Payable days	= $\frac{\text{Trade Payables} \times 365}{\text{COGS}}$ =	47.8	49.1	45.6	65.0	65.0	65.0
Debt to assets	= $\frac{\text{Total Liabilities}}{\text{Total Assets}}$ =	0.3	0.4	0.3	0.3	0.3	0.3
Debt to equity	= $\frac{\text{Total Liabilities}}{\text{Equity}}$ =	0.5	0.7	0.5	0.5	0.5	0.5
Debt to CE	= $\frac{\text{Debt}}{\text{Capital employed}}$ =	14.9%	13.4%	11.9%	16.4%	16.2%	16.0%
Employee Productivity	= $\frac{\text{Sales}}{\text{Number of Employees}}$ =	137.51	175.63	204.72	166.67	166.67	166.67

Figure Created by Author
Data Source: Mullen Transportation Inc., 2005

Appendix 13 – Ratio Analysis Enerflex

Enerflex Systems Ltd		2002(A)	2003(A)	2004(A)	2005(F)	2006(F)	2007(F)
PROFITABILITY RATIOS							
ROE	= $\frac{\text{Net Income}}{\text{Equity}}$ =	-1.65%	0.24%	3.94%	5.02%	5.04%	4.96%
ROIC	= $\frac{\text{NOPAT}}{\text{Invested Capital}}$ =	0.58%	2.48%	5.15%	3.89%	3.84%	3.80%
RONA	= $\frac{\text{EBIT}}{\text{Net assets}}$ =	1.13%	4.38%	8.08%	5.28%	5.17%	5.17%
ROA	= $\frac{\text{Net Income}}{\text{Total Assets}}$ =	-0.96%	0.14%	2.41%	2.60%	2.61%	2.61%
Net profit margin	= $\frac{\text{Net Income}}{\text{Sales}}$ =	-1.32%	0.13%	2.11%	2.96%	3.02%	3.02%
Op Profit margin	= $\frac{\text{EBIT}}{\text{Sales}}$ =	1.34%	3.25%	5.88%	5.00%	5.00%	5.00%
Gross margin	= $\frac{\text{Gross profit}}{\text{Sales}}$ =	21.36%	20.17%	22.48%	22.00%	22.00%	22.00%
Depreciation	= $\frac{\text{Depreciation}}{\text{Sales}}$ =	3.69%	2.85%	2.71%	3.00%	3.00%	3.00%
SG&A	= $\frac{\text{SG\&A}}{\text{Sales}}$ =	16.33%	14.06%	13.89%	14.00%	14.00%	14.00%
tax ratio	= $\frac{\text{Tax}}{\text{EBT}}$ =	689.34%	94.27%	59.37%	36.50%	36.50%	36.50%
ASSET TURNOVER RATIOS							
Asset turnover	= $\frac{\text{Sales}}{\text{Total Assets}}$ =	0.72	1.13	1.14	0.88	0.86	0.86
Net asset turnover	= $\frac{\text{Sales}}{\text{Net assets}}$ =	0.84	1.35	1.37	1.06	1.03	1.03
PPE turnover	= $\frac{\text{Sales}}{\text{PPE}}$ =	2.36	3.77	3.60	1.33	1.30	1.30
Cash days	= $\frac{\text{Cash} \times 365}{\text{Sales}}$ =	5.6	4.8	8.4	0.0	0.0	0.0
Receivable days	= $\frac{\text{Trade Receivables} \times 365}{\text{Sales}}$ =	99.8	85.3	86.9	90.0	90.0	90.0
FINANCIAL LEVERAGE RATIOS							
Financial leverage	= $\frac{\text{Total Assets}}{\text{Equity}}$ =	1.73	1.67	1.63	1.93	1.93	1.90
Payable days	= $\frac{\text{Trade Payables} \times 365}{\text{COGS}}$ =	88.2	60.3	57.4	65.0	65.0	65.0
Debt to assets	= $\frac{\text{Total Liabilities}}{\text{Total Assets}}$ =	0.4	0.4	0.4	0.3	0.3	0.3
Debt to equity	= $\frac{\text{Total Liabilities}}{\text{Equity}}$ =	0.7	0.7	0.6	0.6	0.5	0.5
Debt to CE	= $\frac{\text{Debt}}{\text{Capital employed}}$ =	29.5%	24.4%	22.9%	16.4%	16.2%	16.0%
Employee Productivity	= $\frac{\text{Sales}}{\text{Number of Employees}}$ =	176.60	271.33	278.54	277.78	277.78	277.78

Figure Created by Author
Data Source: Enerflex Systems Ltd., 2005

Appendix 14 – DSP Hiring Process

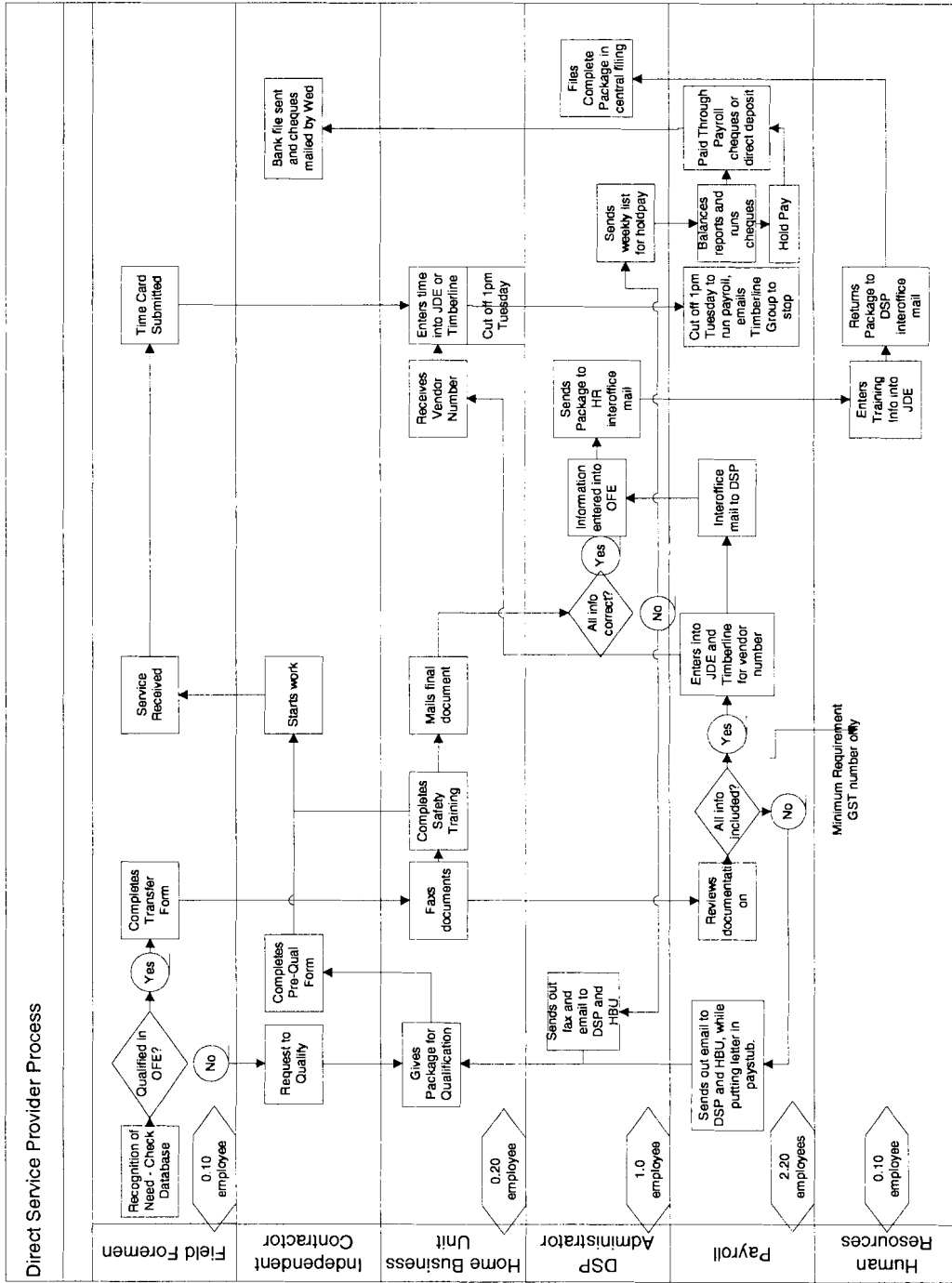


Figure Created by Author
Data Source: Flint Energy Services, 2005

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