SCHEIN'S CAREER ANCHOR MODEL AND ITS RELEVANCE

TO CAREER SATISFACTION: A CASE STUDY OF ENGINEERS AT MICRO MOTORS

by

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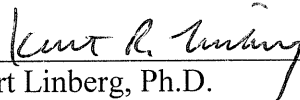
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Abstract

This case study used Schein's career anchor model to examine levels of career satisfaction within 129 direct and contingent members of an engineering workforce. Schein's Career Orientations Inventory was used to provide an indication of the respondent's career anchor. Additional survey questions provided levels of career satisfaction. These results were compared to indicate the level of career satisfaction, by career anchor. This case study concluded that both direct and contingent members of the workforce were satisfied with their career, and that an individual's career anchor did play a part in career satisfaction. The results of this case study will give human resource managers valuable information regarding members of the direct, and contingent workforce, their career anchors, and corresponding levels of career satisfaction.

Dedication

I dedicate this dissertation to my lovely wife Cathy, the girl next door, and my best friend. You have made me the person that I am today. Your support, tolerance, and understanding have allowed me to aim for goals that I thought impossible to reach. Your constant love, companionship, and infectious laugh have taken me through the toughest of times to receive the richest rewards. Cathy, you will always be in my thoughts, and remain forever in my heart.

This dissertation is also dedicated to my children, and grandchildren who have had to sacrifice in my quest for knowledge. Let this effort indicate to you that learning never stops, and that good things happen to people who dare to dream.

Acknowledgements

Table of Contents

List of Tables

CHAPTER 1. DEFINITION OF THE PROBLEM

Introduction

Most individuals have some indication early in life what careers are interesting to them. It might be the exciting career of a firefighter, a physician, or perhaps a professional athlete. Early career aspirations that appear exciting or interesting to an individual, provide an early indication to where that individual's career interests lie. Schein (1978) believes that these early indications of career interest provide direction as to what career the individual might follow to secure some measure of career satisfaction later in life.

During the individual's career span, career goals might be sidetracked by opportunity, necessity, or economic downturn. These are events, which could derail career aspirations, drive an individual outside of their realm of interest, and perhaps lessen their level of career satisfaction. This "side bets" model identified by Becker in 1960 suggests that these individuals may continue these alternate career paths, outside of their career anchor area of interest and never reach the level of career satisfaction that might have been available to them if areas of necessity or opportunity had not sidetracked their career goals (Drummond & Chell, 2001).

Another area of interest is the level of career satisfaction during the career span of the employee. If the employee's career span can be broken down into four distinct areas, entry into the workforce, achieving a level of comfort in their career, gaining tenure in the career position, and disengaging from the career path, would there be a greater level of career satisfaction in one specific area of an employee's career path over another?

Another situation that is common in the business environment today is the use of contingent employees, who work at a business location, but who are employed by a contract

house, or supporting organization. These contingent employees work in an environment that generally prohibits their advancement in the organization in which they are currently working, since they are not direct employees of that organization. This lack of advancement opportunity, one aspect of career satisfaction, might be an indicator of potentially lower levels of career satisfaction in contingent employees.

Schein's efforts at defining eight specific areas of career interest and suggesting that career satisfaction might be heightened in individuals that follow that career interest, provides avenues of additional research into the unique characteristics that make up career satisfaction. This study has surveyed a number of direct employees and contingent support personnel of Micro Motors to answer these questions. This case study has gathered and investigated data regarding the levels of career satisfaction as impacted by career anchors, and career satisfaction levels in direct versus contingent employees, to determine if these factors influence an individual's level of career satisfaction.

Background

Career satisfaction can be defined as a fulfilling experience in a sequence of positions occupied by a person during the course of a lifetime (Cascio, 1998). This definition provides broad meaning to the concept of a certain level of satisfaction obtained by choosing a career that provides a fulfilling experience. Lee and Wilbur (1985) go one-step further in defining the span of career satisfaction to state that career satisfaction decreases initially in the individual's career, and then increases as the employee ages. The reason behind this phenomenon identified by Lee and Wilbur is that a new hire has a limited knowledge of certain aspects of the position, but over time becomes more satisfied in the career choice once the initial confusion or hesitation subsides.

Career satisfaction can therefore be generalized as the satisfaction of the needs and wants of the individual as realized in the career choice of that individual (Cascio, 1998).

Career satisfaction plays an important part in motivating the individual to their highest level of achievement. Employees who are not satisfied with their career will struggle with the day-to-day activities of that career and probably not reach their full potential because of that constant struggle. On the other hand, individuals that find fulfillment in their career choice may tend to obtain greater levels of satisfaction through the enjoyment of their day-to-day activities. The factors involved in choosing a specific career are therefore very important in finding a career that will interest, and motivate the individual toward higher levels of satisfaction and achievement.

Numerous career assessment tools are available to provide some level of direction to the individual searching for their areas of career interest. The National Career Aptitude System is a proven model that directs the individual toward a specific group, or cluster of careers. The career groupings identified within this career assessment tool direct the individual toward a specific career section. These career sections require periodic updating as the nature and identification of careers change (Gale, 1990).

The Self-Directed Search career assessment tool developed by Holland (1990), categorizes the individual into one of six basic element types, and directs the individual into career categories that compliment that career type. The Self-Directed Search career assessment tool provides a code that defines the general career area, and specific career choices that best satisfy the individual's values, interests, and attitudes (Holland, 1990).

The career anchor model developed by Schein (1978) provides the individual searching for career direction with a generic category of career interests, values, and areas of motivation. This career direction transcends the specifics of individual career choices, which is prominent in both the Holland and National Career Aptitude System model, and focuses instead on the generic areas of individual interest, and motivation. The career anchor model provides the researcher with a generic model of career interests that is broader, and covers a wider spectrum of interests, and motivations, values that best suit the sample population of the employees at Micro Motors.

The choice of utilizing the employees at Micro Motors for the sample population was significant because, as one of the largest of the automotive organizations, Micro Motors covers a wide range of employees within the sample population. Micro Motors has been in continuous operation for over 100 years, and has many employees that have spent their entire careers working for the organization, as well as new hires just entering the career field. Because of its size, Micro Motors also has a large number of contingent, and female employees, elements that formed an important part of the sample population.

Matching the career anchor model with its generic career assessment capabilities, with the employees of Micro Motors, an organization that encompasses a wide range of employees from all facets of the career span was the logical choice. The matching of this career assessment tool, with the unique characteristics of a large, well-established organization provided the researcher with the tools and sample population that compliments the intent of this case study.

Schein (1978) developed the career anchor model to assist individuals searching for their career interests, motivations, and values, to determine which career best fit their individual traits. Schein believed that career decisions should be based on areas of interest, values, and

motivation, and that these discerning factors could lead an individual to a satisfying career. Schein (1978) identified eight distinct categories that he believed most individuals could identify with their unique areas of interest, values, and motivation. These eight categories identify areas of motivation that are inherent to the individual and may contain interests that could prompt, or provide a higher level of satisfaction to an individual in their career choice. These eight types of career anchors are:

1. Technical/Functional Competence

2. General Managerial Competence

3. Autonomy/Independence

4. Security/Stability

5. Entrepreneurial Creativity

6. Sense of Service, Dedication to a Cause

7. Pure Challenge

8. Lifestyle

Each individual generally has an interest in each of these categories, but Schein believed that one specific career anchor contained values, and interests that an individual would not sacrifice. That one career anchor best defines the character of the individual and would therefore be considered the best choice for a career that would provide the greatest degree of career satisfaction.

Taking Schein's career anchor model one-step further, it might be safe to assume that individuals that are in career positions that do not match their career anchor may experience lower levels of career satisfaction. An individual whose career anchor was identified as requiring some measure of security, or stability in their occupation, may not be satisfied in a career

position that was prone to cyclical layoffs, or constant periods of job insecurity. These individuals may not be experiencing a satisfying career because the lack of stability, or security that is one of the core traits of who they are, is missing from their current career.

Another factor that influences the level of career satisfaction in individuals today is the different stages that a person goes through during their working life. If the working span of an individual can be broken down into four distinct categories such as entry into the workforce, achieving a level of comfort in the career, gaining tenure in the career position, and disengaging from the career path, the career satisfaction levels within these four stages of career span would most certainly see some differences in the levels of career satisfaction.

Lee and Wilbur (1985) suggest that an individual in the initial stage of the career span, or the entry into the workplace stage, would experience lower levels of career satisfaction due to the uncertainty of their position. That same lower level of career satisfaction may be evident in the last stage of the career path, disengagement from the career path. This may occur because many of the variables that make up the measure of career satisfaction, such as advancement, higher pay levels, and security are missing, or have taken on lesser levels of importance once the opportunity for retirement presents itself. The levels of career satisfaction during the career path, and their relationship to the career anchor model present another interesting area for future research.

The automotive industry, of which Micro Motors is a member, is experiencing a reduction in the number of contingent, or temporary employees due to economic or cost reduction efforts (Crain, 2003). The automotive industry traditionally maintains up to 35% of its workforce as contingent employees, or individuals that work within the automotive facilities but

are employed by outside contracting firms. These contingent employees are considered the buffer between the direct employees and the layoff's that occur every few years within the automobile industry due to changing economic conditions (Allan & Sienko, 1998).

The level of career satisfaction within the ranks of contingent employees has come under greater levels of scrutiny over the past few years. This is because the contingent workforce represents a growing trend within business today. The ability to hire technically competent employees, without the legacy costs of health care, retirement benefits, and vacation pay, has become increasingly popular to organizations that are trying to cut costs in an effort to become more competitive (Allan & Sienko, 1998).

There are several reasons why individuals are hired as contingent employees. Some individuals enjoy the freedom that comes from working for different organizations every few years because of the variety of job assignments, differing locations, and the ability to interact with different co-workers (Allan & Sienko, 1998). Another reason is the flexibility that comes with working for a contract firm, working in a sponsoring organization, and the ability to leave the job with little or no advance notice. Another reason why individuals choose the contingent or temporary worker lifestyle is that they hope to be hired directly into the organization once they have proven themselves in the workplace. Many individuals cannot be hired into an organization directly due to education qualifications, economic conditions, or other hiring restrictions, so working within the chosen organization, as a contingent employee is one way of being noticed, and possibly being hired directly.

The level of career satisfaction that is associated with individuals that have chosen this career path is varied based on the reasons chosen for this type of career. Individuals that have

chosen this career lifestyle because of the freedom that it offers have higher levels of career satisfaction because of the flexibility that this career choice provides. These individuals are generally not interested in advancement, or worker recognition, two of the items that would generally be associated with higher satisfaction levels, but enjoy the freedom, and flexibility that comes with a transient career style (Allan & Sienko, 1998).

On the other hand, individuals that are engaged as contingent employees working in an organization with hopes of future direct placement within that organization may experience lower levels of career satisfaction due to the lack of opportunity, advancement, and security that comes as a result of working as a contingent or temporary employee.

These differing situations provided an interesting backdrop for the study of employee career satisfaction levels, and the impact that Schein's career anchor model, and direct or contingent employment has on the career satisfaction levels of individuals engaged in the world of business today.

<div align="center">Statement of the Problem</div>

The background information provides an indication as to the varying degrees of career satisfaction that exist in business today, and how differing situations, and personal career choices can influence the level of career satisfaction experienced. Employees are challenged to find career areas that provide them with the greatest level of career satisfaction while juggling financial obligations, physical work locations, and economic conditions. The choice of a career based on an area of interest or career anchor, and the differing levels of career satisfaction experienced within the span of an individual's career, or working as a contingent employee, has a dramatic effect on the level of career satisfaction experienced by that employee.

Motivating employees to higher levels of career satisfaction while maintaining cost-reduction efforts, combating competitive pressures, and satisfying stockholder concerns remain the challenge of organizations in today's business climate.

Purpose of the Study

The purpose of this case study was to investigate the relationship between the levels of career satisfaction in the engineers of Micro Motors, their career anchor, and the levels of career satisfaction in employees whose career is outside of their areas of interest and passion. Additional issues that were studied within this case study are the levels of career satisfaction of the contingent employees who work within Micro Motors, for an outside contracting organization.

The data for this case study was collected from employees working in the engineering discipline of a global, multinational organization referred to as Micro Motors, a pseudo name used only for this research document. This global organization employs a large number of salaried employees in North America, maintains a significant presence worldwide, and is centered in North America (Gersten, 2004).

The data from this case study was communicated to the managers of the engineering organization queried, to promote a greater awareness of the varying levels of career satisfaction levels within their organization. The results of this case study will provide valuable insight into the levels of career satisfaction within individuals that are in various stages of their career span, individuals that are outside of their areas of interest, and the levels of career satisfaction among contingent employees who are not directly tied to the parent organization. This information can be used to direct employees to areas of greater motivation, rotating employees within different

periods of their career span to areas of greater interest, maximizing the productivity and efficiency of the organization, and initiating efforts at increasing the levels of career satisfaction among contingent employees who find themselves working outside of their employing organization.

<div align="center">Research Questions</div>

1. What are the differences in the career satisfaction level of engineers whose career anchor is not technical/functional competence?

2. What are the differences in the career satisfaction level of engineers whose career does not reflect individual interests or passions?

3. What are the differences in career anchors in individuals working within an engineering environment?

4. What are the differences in career satisfaction levels of direct versus contingent engineers?

<div align="center">Assumptions/Limitations of Study</div>

The assumptions underlying this case study were based on the belief that the information received from this research is representative of similar departments within Micro Motors and therefore will provide some direction for future career satisfaction enhancements. The data obtained, while it may reflect similar situations within the automotive industry, can be generalized within organizations that face the same challenges of competition, cost reductions, rightsizing, economic conditions, and a mature workforce. This generalization can also serve as a limitation due to the unique situations that surround today's automotive industry. The loss of market share, the relentless pursuit of product excellence by foreign automakers, and the

fluctuation of product sales based on the prevailing economic conditions, are conditions that Micro Motors faces daily, which may differ from other large organizations.

The data obtained was extracted from all socioeconomic and ethically diverse levels of individuals employed for, or working within the engineering organization at Micro Motors. The data for this case study was gathered from a wide range of experience levels within the organization from new hires, to individuals contemplating retirement.

The employees sampled for this research study are located within an engineering organization of Micro Motors within the North American region. Participation in the study was voluntary. Every effort was made to guarantee both the anonymity and confidentially, of the survey participants who have been offered access to the research results. The data used in this case study was collected from one company, which is a limitation for generalization.

Definition of Key Terms

Career Anchor. Combination of perceived areas of competence, motives, and values, or a definition of the value system, which the individual holds dear (Schein, 1978).

Career Path. A sequence of jobs held over time during a career (Schermerhorn, 1996).

Career Plateau. A point in a person's career when the likelihood of promotion is very low (Lemire, 1999).

Career Span. The sequence and combination of roles that a person plays during the course of a lifetime (Super, 1986).

Contingent Employees. Employees hired by companies to cope with unexpected or temporary challenges, also identified as part timers, freelancers, subcontractors, temporary workers, and independent professionals (Jackson & Schuler, 2000).

Likert Scale. A summated rating scale that requires the respondent to chose between numeric degrees of attitudinal favorableness (Cooper & Schindler 2003).

Market-Pay-Leader. An organization where the level of pay and benefits offered is higher than the norm for similar organizations providing the same types of goods or services (Leavitt, 1996).

Nearing Retirement. Approaching the termination of employment (Schermerhorn, 1996).

New Hires. An individual is considered a new hire on the first day in which an individual performs services for remuneration. This is also the first day in which an employer begins to withhold amounts for income tax purposes (Internal Revenue Code, 1986).

Side Bets Model. Refers to a situation where an individual fails to meet career expectations and changes careers because of economic or market conditions (Drummond & Chell, 2001).

Socioeconomic. Pertaining to, or signifying the combination or interaction of social or economic factors (Schermerhorn, 1996).

Chapter 1 Summary

Chapter 1 provides an overview of the problem identified, and the research method that was utilized to study the problem. The results of this case study provide important information regarding the importance of individuals selecting a career based on their areas of interest, values, and motivations. This information can be used to direct new hires, and other individuals who seek greater opportunities for career satisfaction into positions that maximize their interests, values, and motivations.

Chapter 1 also identified the research questions that formed that benchmark of this case study. Background information regarding the aspects of the differing levels of career satisfaction, and the factors that make up this fascinating research subject were presented. The identification of the study assumptions, and limitations was provided to identify the boundaries of the research, and the conditions under which the study was conducted. The first chapter concluded with a definition of terms to aid the reader in understanding the unique jargon of the automotive workplace.

CHAPTER 2. LITERATURE REVIEW

Introduction

The literature review for this case study contains reference material that comes from

books, professional publications, and Internet sources in the field of career satisfaction, and

career selection. The study of career choices, and understanding the methods of experiencing

greater satisfaction in that career choice has received a great deal of attention recently. This is

due to the increased need of employees to tailor their career choice to areas that will provide

them with the greatest degree of career satisfaction. This is due in part to the extra workload that

is being placed on employees by organizations that, because of stiff competition and economic

consequences, find that they must ask their employees to do more, with less. This extra burden

upon the employees has caused new hires to place greater emphasis on selecting just the right

career so that these extra efforts demanded by the employer occur in a career that provides them

the greatest degree of satisfaction, therefore lessening the burden (Stokes, 1997).

This chapter will be divided into seven sections: (a) Career Satisfaction, (b) Career

Anchors, (c) Myers-Briggs Type Indicator, (d) Holland Occupational Code, (e) Career Stages, (f)

Changing Factors of Career Satisfaction, and (g) Contingent Employee Differences. These seven

sections will provide additional information regarding the many facets of career identification

and the tools that are available to assist employees in identifying a career that matches their

unique areas of interest, and motivation. The benefits and differing elements of career

satisfaction will be identified, and the relationship between career identification, and career

satisfaction explored in detail. These efforts will provide background information regarding

career satisfaction, and the differing facets of career satisfaction within industry today.

Career Satisfaction

The work environment is filled with individuals that truly love what they do for a living. Individuals that look forward to being on the job, interacting with fellow employees, and find their daily routine a positive, rather than a negative experience (Ford, 2003). Organizations are also filled with individuals that truly hate what they are doing, and dread the daily journey to work, the drudgery of the task they are asked to perform, and who make, not only themselves, but everyone else around them, miserable as they spend their required time on the job.

What causes one individual to truly enjoy going to work, interacting with peers, and enjoy the effort spent making a living, and another individual to dread each workday waiting until the last minute before punching in for the start of yet another workday? Certainly, the level of satisfaction that an employee receives from the work completed, or the effort put forth, has to play a significant part in their level of satisfaction for their work effort (Burke & MacDermid, 1999).

Career satisfaction has been previously described as a fulfilling experience in a sequence of positions occupied by a person during the course of a lifetime (Cascio, 1998). Career satisfaction can come from being involved in a task that supports an area of passion, or deeply held feelings. Career satisfaction can come from working outdoors, or being able to work in a beautiful environment, factors that makes work more of a positive experience than an effort that merely pays the bills. The satisfaction that an individual derives from their work experience is a factor of a number of different, and complex variables. Realizing these variables, and how an individual is motivated towards obtaining career satisfaction is the subject of continuing investigation.

Different Aspects of Career Satisfaction

Story (2002) has found in his research that the not for profit sector is attracting high levels of top executives who have left their stressful, demanding position and who can now concentrate their efforts toward managing an effort for which they are truly passionate. This ability to utilize ones skills and abilities toward a worthwhile effort that is interesting to the individual can lead to greater levels of career satisfaction.

A study by Leavitt (1996) that focused on high levels of compensation, in both financial rewards and benefits, and the relationship between those levels of compensation and career satisfaction, produced some interesting results. The study focused on the Denver Municipal Water Utility, and found that the employees of that department were compensated beyond the market pay average for municipal workers, but that the employees within that department had lower levels of career satisfaction. One of the questions asked of these employees was if they would transfer to a new position that had similar benefits and work related activities, and the majority of the employees stated that they would transfer if the opportunity presented itself.

Lemire (1999) conducted an extensive survey of the Quebec public sector and found a condition known as career plateauing, or a point in an individual's career when the likelihood of internal or external vertical promotion is very low. This situation may be caused by a number of conditions, such as the threat of retirement, lack of the required computer skills, or lower levels of motivation. This career plateauing caused a negative influence on the career satisfaction levels of the employees who had reached this point in their career.

These different aspects of career satisfaction provide an indication as to the complexity of the issue at hand, and the many factors that come into play in dealing with employees and their

career expectations. The levels of career satisfaction can be tied back to interesting work, adequate benefits, and vertical promotion opportunities. If any of these factors is missing, or less than anticipated in the eyes of the employee, lower levels of career satisfaction may result. These lower levels of career satisfaction can make the difference between someone enjoying the trip, or dreading the journey.

<div align="center">Elements of Career Satisfaction</div>

One very important aspect of career satisfaction that needs to be addressed is the ability to find, and maintain a position within an organization. There are a large number of applicants vying for a successful position, who have skills that they consider adequate to do the job, and who may be applying for the same, or similar position. How do individuals distinguish themselves so that they stand out in a group of job applicants?

Arruda (2003) suggests that branding is the key to an individual's promoting themselves to obtain the best jobs, and therefore having a higher than average chance at career satisfaction. Employees today need to distinguish themselves so that they stand out in a field of average applicants. The type of branding that Arruda suggests is not creating an image to impress the human relations manager, but displaying the individual's unique qualifications in such as way that they become irresistible to the hiring agent. This display of unique talents and abilities comes because of an inner search of the employee's personal and professional goals. Arruda (2003) suggests that creating a personal brand will help to build, and nurture the individual's personal and professional portfolio and will assist the individual in:

1. Understanding themselves better

2. Raising their level of confidence

3. Increasing their visibility and compensation

4. Allowing them to thrive during economic downturns

5. Allowing the individual to expand into new business areas

6. Attaining more interesting jobs and assignments

The benefits of creating and managing a personal brand of their individual accomplishments, and abilities will assist the employee in better managing their career, and expanding their areas of career related experience so that they can distinguish themselves in a field of average job applicants.

Career Anchors

The career anchor model that was developed by Schein allows the individual some insight into their areas of competence, values, and motives. The knowledge of an individual's career anchor allows them to compare their individual values, and relate those values to their career choices. This knowledge empowers the individual to confront career choices, and the decisions regarding these career choices in a manner that is consistent with their true values, and motives (Schein, 1978).

The career anchor represents a set of values, interests, and motives that the individual would not sacrifice. It represents a set of sacred standards that remain consistent with one's behavior pattern, and how that individual views himself or herself. The knowledge gained from realizing one's career anchor provides greater opportunity to choose a career that will provide greater levels of satisfaction because that career knowledge will focus the attention of the applicant into careers that are consistent with their realized values and motives (Schein, 1978).

Schein's career anchors represent eight categories of interest, one of which is primarily compatible for each individual. While multiple career anchors may appear viable to the individual during the questionnaire used to determine the career area of interest, closer scrutiny will provide a clear path to the specific career anchor that mirrors an individual's interests, values, and motives. The career anchor chosen is based on individual traits, areas of interest, internal values, and motivations. These career anchors are:

1. Technical/Functional Competence. Individuals that display this career anchor commit themselves to a life of specialization. These individuals have a desire to pursue an area of expertise that allows them to become specialist in a chosen field. This expertise allows a certain sense of security in becoming knowledgeable in a specific field or endeavor. Technical and functionally competent individuals require challenge in their assignments, and focus on goals and objectives. These individuals view administrative and managerial efforts as unavoidable, required only when absolutely necessary (Schein, 1978).

   These individuals want to be paid for their skill levels, and are motivated by external equity, or greater pay for greater levels of accomplishment. These individuals value the recognition of peers, over individuals outside of their area of expertise, and place greater opportunities for learning and self-development at the top of their desired areas of recognition (Schein, 1978).

2. General Managerial Competence. Individuals that display an interest in general managerial competence have a desire to focus their attention in the area of management, or managerial skills. These individuals display analytical competence

whereby decisions can be made with information that is incomplete or uncertain. Financial, marketing, and technological expertise are key elements that distinguish these individuals. Their ability to gather and formulate information in such a way that a decision can be made, makes them uniquely qualified to manage organizations.

The rewards sought out by individuals displaying a general managerial competence include being reimbursed for their knowledge and ability. These individuals consider higher pay an indication of their ability and importance to the organization. Managerially anchored people insist on promotion based on merit, measured performance, and results, all other factors are legitimate only because they are essential to getting results (Schein, 1978).

3. Autonomy/Independence. Individuals that display an autonomous or independent career anchor find themselves bound by other people's rules. Their motivation comes from operating in a way that is unique to them. The dress codes, starting times, and structured meeting criteria that is common in the business environment, is prohibitive to these individuals because it represents someone else's norm.

Individuals that display an autonomous and independent career anchor prefer work that has clearly defined goals, with the method of accomplishing those goals left completely up to them. These individuals prefer promotions based on past merits, and recognition that will provide even greater autonomy in their work practices. Common business distractions such as office redundancy, meetings, specific starting times, and a common dress code are unacceptable to an individual that displays an autonomous and independent career anchor (Schein, 1978).

4. Security/Stability. Individuals whose career anchor requires security and stability demand that sense of safety and security in their work and personal environment. These individuals focus on positions that will provide tenure, or seniority in their work environment. These individuals prefer work that is stable, predictable, and are generally more concerned about the context of the work than the actual work itself. Individuals that require security and stability in their lives prefer to be paid in steady, predictable increments based on their length of service to the organization.

These individuals prefer seniority based promotion system and welcome a published grade, and rank system that will spell out their grade level and number of years on the job. Individuals that have a secure and stable based career anchor want to be recognized for their loyalty, and steady performance, with acknowledgements of future stability and continued employment (Schein, 1978).

5. Entrepreneurial Creativity. These individuals discover early in life that they have a strong desire to create new businesses of their own, often based on new products or services that they have created. These individuals are not necessarily inventors or scientists by nature, but are motivated by the challenge of starting up an enterprise from the ground up. These individuals display an urge to create, get bored easily with mundane tasks, and become restless if not constantly pursuing greater opportunities to initiate a successful venture.

Individuals that display an entrepreneurial career anchor pride themselves in ownership, and often forego payment for a greater share in the enterprise. They require promotional opportunities that allow them the freedom to move into positions

that allow them the greatest opportunity to develop new and creative ways to offer their product or services to others. These individuals consider the building of fortunes, and sizeable enterprises as their measure of success, and recognition (Schein, 1978).

6. Sense of Service, Dedication to a Cause. Individuals that exhibit a sense of service, or dedication to a cause career anchor generally enter these occupations because it allows them to work in an environment that embodies values that they believe in, and want to include in their work. Some of these careers include counselor, social service worker, labor-management relations, and research scientist working on a cure for some depilating disease.

   These service-oriented individuals clearly search for a career that permits them to influence their employing organizations social policies in the direction of their values. These individuals want fair pay for their efforts, a promotional system that allows them recognition, and greater autonomy in their efforts, and support from their peers and upper management that their values are shared by upper levels of management (Schein, 1978).

7. Pure Challenge. The pure challenge career anchor is for individuals that believe that they can conquer anything. These individuals define success as overcoming every possible obstacle and roadblock, and winning out over extremely tough competition. This type of individual generally finds career satisfaction in the armed services, professional athletics, and certain competitive sales areas. These individuals are motivated by the challenge of completing a task, or concentrated effort. For these

challenged individuals, the struggle, and completion of the challenge is generally all of the recognition, and promotion that these people require.

Managing these individuals can be extremely difficult because their constant need for challenge and self-test requires continuous opportunities for their efforts in that area. These individuals tend to get bored with normal mundane activities very easily, and will search out new and differing challenges if none are readily available (Schein, 1978).

8. Lifestyle. The last career anchor as defined by Edgar Schein is lifestyle. For these select individuals, the maintenance of the ideal style of life is more important to them, and therefore they do not have a career anchor. These individuals measure success by having a lifestyle that provides them with the challenge, creature comforts, and financial security that they require. Whatever career provides that balance of work and play, with the benefits that allows them to reach, and maintain their chosen style of life, is the career that will provide them with the greatest sense of career satisfaction.

These individuals require flexibility more than anything else because it allows them the freedom to enjoy their lifestyle. What they require most from their managers is the understanding that their needs are drawn simply from their maintaining their chosen style of life. The need to maintain their geographic location is very important to individuals that display a lifestyle career anchor, as well as requiring a certain level of respect from their managers and employing organization

in the acceptance that their goals of family life, and personal concerns are genuine, and important (Schein, 1978).

Schein's research efforts have focused on these eight different career anchors, and studies over time have found that people generally fit into one of these eight general categories. Certain aspects of each of the eight categories may be applicable to each individual, but the specifics drawn from the basic human needs can be found in one of these eight career anchors (Schein, 1978).

This case study has investigated the different career anchors that interact within a typical engineering environment, and the levels of career satisfaction that are associated with those different career anchors. Another aspect of career satisfaction that was researched was the difference in the levels of career satisfaction between both direct and contingent employees working within the same engineering organization.

<div align="center">Benefits of a Career Anchor</div>

One of the benefits of realizing a person's career anchor is the knowledge of what motivations cause an individual to react in a certain way. This knowledge of one's self and the factors that stimulate one's actions formulates the basis for individual actions (Evans, 1996). These career decisions influence choices and are evident in our likes, and dislikes. If an individual finds satisfaction in reducing human suffering or changing the uncaring mindset against the city's poor inhabitants, then a career in social work, or ministry would be more relevant to achieving their desired state of career satisfaction, than being a florist. The benefit in realizing one's career anchor comes in choosing a position that compliments that area of interest.

The sense of realizing, and being able to employ one's set of values, belief's or areas of interest into their career provides many with greater levels of career satisfaction, and therefore reduces the negative side-effects of having to go to work each day. With greater enjoyment in their work-related activities comes a greater level of satisfaction in the career choice that they have made. Career anchors do not specifically define a job, or career position, but how an individual would relate to the unique characteristics of that career position.

The knowledge and understanding of the unique characteristics of each ones career anchor will provide valuable information regarding how an individual will react during different stimulations, and motivations. This knowledge will provide each individual with career information as to which careers will and will not provide the desired levels of career satisfaction. These factors represent the positive influence, or benefits that come from realizing, and understanding ones career anchor.

Career counseling as a profession has been around since the early 1900s (Pope, 2003). This career counseling has led to the availability of numerous motivational theories regarding the aspects of a career anchor that draws individuals toward a specific field of endeavor. The basics of career motivation have changed over the years from the basic sense of security that was evident during the Great Depression, to the technology explosion of the computer age, to the availability of fringe benefits such as flexible starting times, and day care opportunities that draw young employees today (Schmidt & Duenas, 2002). These unique incentives are motivating today's young employees who require greater flexibility in their incentives because of their responsibility to care for a sick child, or caring for aging parents.

Organizations are motivated to providing greater flexibility in their benefits for female employees. Statistics indicate that by the year 2005, fifty-seven percent of all new entrants into the workforce, and almost fifty percent of the total workforce will be female (Schmidt & Duenas, 2002). This drastic change in the makeup of the workforce motivates both employees, and organizations to a greater understanding of the needs, and motivations of this unique workforce. Flexibility in the benefits offered, and an increased focus on non-financial compensation packages is the direction that organizations are currently taking to attract the career decisions of today's workforce.

<div align="center">Uses of Career Anchor Information</div>

Garavan (1996) believes that over the last decade, a person's career has taken on new and different levels of importance. The period when an employee started one career and retired from that same organization, 40 years later have all but disappeared. Today's employee needs to constantly stay up to date regarding their career choice, and maintaining knowledge of where, not only the career that they have chosen, but other career opportunities are progressing. The knowledge of other career opportunities that are available in the field of choice makes movement within that field of choice easier.

It was not too long ago that the employing organization that an employee hired into was in some way responsible for moving an employee throughout their career. Today the employee is responsible for their own career decisions, so knowledge of where the individual's strengths, values, interests, and motivations lie will help today's employee choose a career that will provide the level of career satisfaction required by the employee.

Barth (1993) believes that Schein's model of career anchors provides a useful and relevant framework for understanding the myriad of career opportunities that are available. With the knowledge of what aspects of the work environment provide higher levels of motivation, and satisfaction, the employee can judge the aspects of their career choice to determine if these other job opportunities provide that same level of career satisfaction.

Barth (1993) also believes that the aspect of career anchor and their usefulness in the business environment is missing from the government workforce sector. Certainly, the goals of an organization are to hire the brightest, most highly motivated individuals possible for the position being filled, but the government hiring practices do not necessarily promote the hiring of specific individuals, for specific tasks, but rather the hiring of individuals with generic tasks to fill the positions (Barth, 1993). This movement of individuals without regard for their skills, interests, and motivations can provide a negative impact on both the organization filling the position, and the individual taking the job. Without regard to their future opportunities, or areas of individual interests, accepting government positions without any regard to their individual talents, and values may numb certain career-minded individuals.

Barth (1993) believes that the use of career anchors as a method of placing highly motivated individuals into government position will aid their efforts in reducing costs, maintaining employee morale, and reduce the waste commonly associated with government positions. The same benefits that hiring an individual that knows, and appreciates their unique values, interests, and motivations has for private industry, can assist the government business practice as well.

Along with the knowledge of ones inner values, interests, and motivations, comes a benefit in knowing those same motivations of fellow workers, children, siblings, and one's significant other. The knowledge that comes from realizing what influences one's behavior provides the ability to influence that behavior, as well as work toward utilizing the positive factors of that behavior. A successful work team for example should be made up of a leader, someone to organize specific items that are required by the team, and them someone to get the job done. The Myers-Briggs Type Indicator is a very effective tool that is currently used by business, and individuals to define these critical characteristics in work-related teams, and utilize the strengths of this knowledge to form effective, cohesive work teams.

<div align="center">Career Anchor Model Empirical Research</div>

There has been a great deal of empirical research on the career anchor model that Schein developed during the 1970s. Nordvik (1996) did a study of 1063 Norwegian adults to investigate the theory of career anchors and its relationship to the Myers-Briggs Type Indicator, and the John Holland Vocational Typology. The study found that the career anchor variables were related to the occupations of the participants. The results obtained through this study mirrored that of a previous study done by the same researcher in finding stability in the pattern of differential preferences among the vocational, and career anchor concepts across the participants tested.

Another study of 533 Finnish business students utilizing both the career anchor theory and the Myers-Briggs Type Indicator focused on the relationship between personality, and career expectations. Jarlstrom (2000) was researching the relationship of personality characteristics to

explain career choice and development. This study concluded that Schein's career anchor theory provides a useful framework for business student's career expectations (Jarlstrom, 2000).

The United States Government conducted a survey of 2,778 former employees utilizing Schein's career anchor model to determine the level of career management activity at either the individual, or agency level in the federal government (Barth, 1993). The federal agency was concerned about recruiting the best and brightest individuals and conducted a study of exiting government employees. The study focused on employees that left government service during April, May, and June of 1989. The study concluded that Schein's career anchor model provided a useful and relevant framework for understanding the array of career motivators (Barth, 1993). The study further concluded that the career anchor model could promote constructive conversations between employees, and managers that is lacking in the federal government.

The Career Orientations Inventory, the questionnaire that Schein developed to access an individual's career interest, was validated through two studies involving 396 information system employees (Igbaria & Baroudi, 1993). These studies were conducted in 1990, and 1991 to validate Schein's questionnaire as an effective tool in the recruitment, development, and retention of information system personnel. These studies confirmed the validity, and reliability of the Career Orientations Inventory, and reaffirmed the relationship between career orientations, and various individual differences (Igbaria & Baroudi, 1993).

These empirical research studies have taken Schein's career anchor model and Career Orientation Inventory and have proven their effectiveness in determining the relationship between career orientation, and individual differences. The career anchor model as proposed by

Edgar Schein is a useful tool for identifying career areas of interest, personal values, and motivation.

<center>Myers-Briggs Type Indicator</center>

The Myers-Briggs Type Indicator (MBTI) is a self-report questionnaire used to make Carl Jung's theory of psychological types understandable to the average individual, and useful in everyday life (Myers, 1993). The results obtained from this survey describe valuable differences between normal, healthy people, differences that can be the source of much misunderstanding and miscommunication. The Myers-Briggs Type Indicator is a useful tool to help individuals learn about themselves, and the people with whom they interact.

The Myers-Briggs Type Indicator (MBTI) helps an individual identify their strengths and weaknesses, which is useful information that can be used to understand ones gifts, interests, and motivations (Myers, 1993). The MBTI also provides the individual an opportunity to understand areas of inner growth, by identifying areas of weakness, or areas where the interaction with others may be challenged. The Myers-Briggs Type Indicator provides the individual with valuable information about themselves, the people they work and play with, and others that they interact with daily. The Meyers-Briggs Type Indicator is used in:

1. Self-development
2. Career development and exploration
3. Relationship counseling
4. Academic counseling
5. Organizational development
6. Team building

7. Problem solving

8. Management and leadership training

9. Education and curriculum development

10. Diversity and multicultural training

The Myers-Briggs Type Indicator is based on the idea of human interaction introduced by Carl Jung in a theory used to explain some of the random differences in people's behavior (Myers, 1993). Carl Jung found predictable and differing behavioral patterns of normal behavior. His studies elaborated on these normal behavioral patterns, defined these behavioral patterns, and provided an explanation on how these patterns develop (Myers, 1993).

According to Jung's theory, predictable differences in individuals are caused by differences in the way that people prefer to use their minds. His theory suggested that when the mind is active, the individual is involved in one of two mental activities, taking in information, perceiving, or organizing that information and coming to conclusions, or judging. Carl Jung further concluded that there are two opposite ways to perceive, which are identified as sensing and intuition, and two opposite ways to judge, which he referred to as thinking, and feeling (Myers, 1993).

Jung believed that everyone uses these different processes daily in both the external world, or what he referred to as extraversion, or the internal world, which he referred to as introversion (Myers, 1993). By adding these two additional factors to the four attributes previously mentioned, Jung provides an individual with eight different ways to use their mind. Jung believed that everyone preferred using one kind of perceiving, and one kind of judging, and is drawn toward either the external, or the internal world. As each individual exercises their

preferences, they are naturally drawn toward distinct perspectives, and approaches to human interaction (Myers, 1993). The variations chosen lead to the individual differences between people. These predictable differences make up the different behavioral patterns between individuals.

The Myers-Briggs Type Indicator is used by organizations for a number of very important reasons. First it provides valuable information regarding the employee's areas of interest, and disinterest which can be very valuable information when choosing a career, or making a career change somewhere within the career span. The Myers-Briggs Type Indicator can also be used when creating a team for a special project, or work-related activity. The knowledge of the team member's specific traits, and how those traits fit into the overall working of an organizational team, can provide valuable information on team creation that will add to the cohesive nature of that organizational team.

<p align="center">Holland Occupational Code</p>

The John Holland Occupational Code is a career assessment tool of a slightly different sort, in that it allows individuals to better understand their pattern of interests. The selection of a career choice is one of the most important decisions that an individual will make in their lifetime, and the added knowledge of an individual's pattern of interests can provide valuable information when making that decision, and therefore increase their opportunity for career satisfaction.

The John Holland Occupational Code breaks down the individual characteristics that define a person's interests, values, and attitudes (Holland, 1990). Like the career anchor model, which provides individuals with the knowledge of work-related interests and areas of motivation, and the Myers-Briggs Type Indicator that provides additional knowledge in the form of

individual motivations, and the relationship between individuals, the John Holland Occupational Code breaks down those individual interests into more specific categories. These categories are a result of many different factors such as the influence of family, educational opportunities, previous work experiences, cultural differences, and a variety of other determinants that shape interests, values and attitudes within the individual (Holland, 1990).

The John Holland Occupational Code breaks down individual interests into six major types:

1. Realistic

2. Investigative

3. Artistic

4. Social

5. Enterprising

6. Conventional

Careers and the elements of career satisfaction can be classified as having elements of these six basic types. The knowledge of where an individual falls within these areas of interest can provide valuable information when considering a career, and searching for a career that will provide the greatest degree of career satisfaction. The knowledge of these basic types of individual interest and the corresponding career choices that match these interests can play an important part in career decision-making. The specific career interest areas that match these six basic types are as follows:

1. Realistic. These individuals prefer realistic careers such as mechanical engineer, production planner, building inspector, and marine surveyor. This type of individual

has mechanical and athletic abilities and enjoys working outdoors. People usually describe realistic individuals as conforming, frank, genuine, humble, persistent, and thrifty (Holland, 1990).

2. Investigative. These individuals prefer investigative careers such as biochemist, anthropologist, economist, and researcher. These individuals usually prefer working with mathematical and scientific information, enjoy working alone, and like to solve problems. The investigative individual can be described as being analytical, precise, methodical, and independent (Holland, 1990).

3. Artistic. The individuals that have artistic interests prefer careers such as architects, technical editors, stage director, interior decorator, and commercial designer. These individuals have artistic skills and enjoy creating original work that requires imagination. These individuals are described as being open, imaginative, original, intuitive, independent, and idealistic (Holland, 1990).

4. Social. These individuals prefer social careers, or careers that allow them access to different people and places. Careers such as teacher, psychologist, personnel manager, and speech therapist are some of the career choices that this social type would enjoy. This social type is interested in human relationships, and likes to help others with problems. This social type has been described as being helpful, responsible, warm, cooperative, and understanding (Holland, 1990).

5. Enterprising. Careers that allow enterprising efforts, such as public relations, financial planner, and stockbroker, best suit individuals that have enterprising interests. This type usually has leadership, public speaking, and influential skills that

allow for greater levels of success in business areas. The enterprising type can be described as being adventurous, energetic, optimistic, and self-confident.

6. Conventional. Careers in areas such as an accountant, cost clerk, bookkeeper, and business programmer best fit the type of individual that displays conventional areas of interest. These individuals prefer working with words, numbers, working indoors, and like organizational tasks. The conventional individual can be described as being conforming, practical, careful, obedient, and persistent (Holland, 1990)

The realization of where an individual falls within these six types of interest areas can provide additional information as to what specific career choice best suits their abilities, interests, and areas of greatest individual satisfaction.

Career Stages

Schein (1990) identifies in his research ten career stages, or positions that an individual will fall within during the span of their career. These ten stages form the span of time from the exploration of the desired career, to the last stage, retirement. Schein's belief was that these stages form the internal timetable for every individual. These stages can be long or short, depending on each individual, and the stages can repeat themselves as the individual moves from one career to another. These career stages can correlate to the age of the individual, but the age correlation differs with the career choice of the individual. The age of the second stage of education and training for example will correlate to a different age than that same stage in a mason, or carpenter. This is due to the additional schooling that is required of a physician, and the advanced age at which the schooling will be completed (Schein, 1990). The different stages within a career are as follows:

1. Growth, Fantasy, and Exploration. This stage is generally associated with childhood or adolescence where an occupation is seen in generic stereotypes as some measure of success associated with financial freedom. At this early stage, the individual prepares to enter the educational or preparatory stage for whatever career is chosen (Schein, 1990).

2. Education and Training. This career stage is dependent on the occupation that is chosen, and can therefore be either a minimal or an elaborate process. There are numerous points within this stage where the occupational goals are clarified, or changed based on the greater knowledge of the career requirements that come during the period of education (Schein, 1990).

3. Entry into the Workforce. This career stage follows a period of realization where the individual, before entering the workforce, comes to a realization of what their entry into the workforce entails. This career stage may come after years of schooling where early morning classes and late night study habits are soon to be replaced with the rigors of a nine-to-five work environment. Other factors such as the political environment of the workplace, and ambitious tendencies may play a part in confusing the individual who leaves the safety of the schooling environment, for the challenging word of the business environment (Schein, 1990).

4. Basic Training, Socialization. This career stage entails differences in intensity based on the occupation, organization, and the complexity of the work. The more responsible the occupation chosen as a career, the longer the period of basic training and individual socialization. This stages acts as a major source of individual learning

because the organization begins to make demands with which the newly hired individual is expected to comply. At this very important stage, the individual is faced with real choices about whether to remain in the organization based on how well he or she responds to the socialization process (Schein, 1990).

5. Gaining of Membership. There is a point in the career stage where the individual realizes that they have been given areas of responsibility, have accumulated a certain degree of trust based on previous assignments, and is now recognized as a contributing member of the organization. This knowledge of acceptance, or the gaining of membership provides the individual with a great deal of self-confidence, as well as a clarification of values, and motives based on their responses to different challenging situations (Schein, 1990).

6. Gaining Tenure, Permanent Membership. Generally within the first five or ten years of a career, most organizations make a tenure decision whether the individual can rely on long-term employment within the organization. This tenure, or a higher degree of job security, is generally applicable as long as the job exists. In some formal occupations such as the law or teaching professions, the gaining of tenure is seen as a formal right of passage. In most organizations, the gaining of tenure or the granting of permanent membership is not as formalized, but still exists in the form of seniority, and the reduced possibility of layoff (Schein, 1990).

7. Mid-Career Crisis, Reassessment. The introduction into this stage is not as clear as the previous stages because the realization that the individual has not done enough with their lives, or has followed the wrong career path can be based on a number of

different factors. The death of a parent, or their sibling's entry into college, can cause an individual to reassess their current position, and question their own career choices. The popular phrase, "What do I want to do with the rest of my life" seems to creep into a person's subconscious as they realize that they have reached the mid-point of their career (Schein, 1990).

8. Maintaining Momentum, Regaining it, or Leveling Off. The insights gained from the previous stage usually present themselves in a period of indecision where the questions asked regarding career choices are answered. This stage serves as a decision phase where the individual makes the decision as to whether their career choice was correct, or if a change in career is warranted. Decisions regarding the length of time spent with family, the demands of work and personal concerns are viable concerns that will influence this decision. The leveling off refers to the individual's realization that their talents, motives, and values to do require any greater level of aspiration (Schein, 1990).

9. Disengagement. This is the career stage when the individual slows down and starts to relish the thoughts about retirement. The person becomes less interested in the work environment, becomes easily agitated by political situations that earlier in their career would not have mattered, and generally becomes disinterested in work, and the demands that work makes on the employee (Schein, 1990).

10. Retirement. Eventually the career stage comes to its final position, retirement. Whether the individual has planned for it or not, this final stage represents the point where the individual either no longer makes a significant contribution to the

organization, or places individual thoughts, and dreams ahead of organizational goals. Some individuals in occupations such as the military or professional sports reach this stage earlier in life due to the requirements of the organization. For these individuals the ten-step career stage process may begin all over again in another career effort. For some this last career stage of retirement is traumatic, for others joyful, depending on their preparation for this event, and their ability to handle the new demands that this last career stage requires (Schein, 1990).

These ten career stages carry with them different degrees of career satisfaction. At the extreme stages of growth, fantasy, and exploration, as well as retirement, career satisfaction may have not yet begun to surface, or may have disappeared, depending on the individual. The internal eight remaining stages carry with them differing degrees of career satisfaction based on the challenges to the individual, and their ability to draw satisfaction from these career challenges.

<div align="center">Changing Factors of Career Satisfaction</div>

Swanson (1993) suggests that career counselors should incorporate a multicultural approach to the career counseling sessions. There is a greater need today than ever before to train individuals in developing the skills needed to function in a multicultural environment. The amount of diversity in the workforce today, demands that individuals working within that workforce be trained in diversity and the multicultural aspects of working with individuals in different languages, ethic backgrounds, and religious preferences. The ability to perform successfully in a multicultural environment will go a long way toward creating a satisfying career.

Lorsch and Tierney (2002) believe that a greater alignment is necessary between a firm's strategy, organizational choices, culture, and leadership to ensure an organizations success. These authors believe that organizations of the future need to create a business persona based on their organizational beliefs, and hire individuals that support that organizational persona. Employees that believe in, and support an organization's strategy, and organizational goals will support those goals in their everyday business transaction, and thereby create a more positive environment for career development, as well as supporting the company's objectives.

There is a large degree of difference in the career satisfaction levels within the ranges of the career span. The ambitions of the young college graduate and their goals for career satisfaction are far different from the tenured employee who may have reached their greatest comfort level within the position currently being held. The student looks forward to the challenges that the business environment holds, the mature employee, weary from years of potential layoffs, rightsizing, and economic cutbacks, looks forward to calmer, less stressful times. The challenge for the organization employing these two types of individuals is to utilize their strengths so that the satisfaction of coming to work each day does not wither over time.

Career satisfaction in the future will be much different than it is today. The technological advancements of the future will change the level of the communication capabilities of the organization, and speed up the need for greater flexibility within the individual employee. The ability to conduct business virtually anywhere in the world, has produced challenges within the social structure of the business environment, as well as challenged individuals entering the workforce to adapt to these changes at an even greater pace. The changing face of career satisfaction is as different, and as exciting as the individuals that hope to attain it.

Contingent Employee Differences

Another aspect of career satisfaction that was explored was the difference in the levels of career satisfaction for direct and contingent employees. Micro Motors has a large number of contingent employees who, while working in a Micro Motors facility, are employed by a contract house and their services paid directly to the contract house. These contingent individuals work on the same projects as direct employees, but have no retirement plan, or health care plan supported by Micro Motors. The benefit package for these contingent employees comes from the supporting contract organization.

This situation where the contingent employee is far removed from their employer, suggests that differences in the level of career satisfaction in contingent versus direct employees may be possible. There are generally two reasons why an individual would be employed by a contract organization, first of all this type of arrangement provides a large amount of freedom where the employee could quit if the work assignment, or fellow workers prove to be unsatisfactory (Parker, 2002). In this scenario, the level of career satisfaction may be higher because this scenario involves the freedom that is an attractive by-product of the contingent arrangement (Parker, 2002).

Another reason why some employees choose the contingent arrangement is that they hope to be hired directly if their service proves useful to the organization. The employee may lack the educational level, or a hiring freeze may prohibit their being hired directly. A position gained into the organization through a contract house may prove beneficial. If the employees can prove themselves, or if the prohibiting factor that eliminated their initial hiring was waved, these employees may be hired. For this type, the level of career satisfaction may be lower because their

efforts to be hired directly into the organization may be hampered by any number of differing reasons.

Contingent positions are being reduced within the automobile industry because of the overall effort to reduce costs to remain competitive (Crain, 2003). These positions generally represent a buffer between the direct employees, and the yearly layoff cycle of the automotive companies. The removal of these contingent employees means that direct employees will bear the brunt of any future downsizing, or rightsizing efforts within the automobile companies, which will certainly lead to lower levels of career satisfaction within the direct employees of Micro Motors.

Chapter 2 Summary

In summary, the literature revealed that several tools are available to the individual to determine their specific area of career interest that will provide them with some level of career satisfaction. The career anchor model developed by Edgar Schein, the Myers-Briggs Type Indicator developed by Isabel Briggs Myers and Katherine Cook Briggs, and the John Holland Occupational Code are tools that individuals searching for career interests can investigate to find the areas that will provide them the greatest opportunity for career satisfaction.

The career anchor model is relevant to this research effort because it forms the basis for the investigation of career satisfaction levels relative to the individual's career anchor. This theory created by Schein has been the subject of numerous additional research efforts over the years and remains one of the foremost tools for the identification of an individual's area of interest, value, and motivation (Nordvik, 1996).

The researcher has utilized Schein's career anchor model to identify the career anchor of the employees of the engineering organization under study, and compared those career anchors to the levels of career satisfaction experienced by those employees. This effort has identified differences in the career anchors of employees engaged in a technical/functional effort, and the corresponding levels of career satisfaction. Differences in the career satisfaction levels of both direct and contingent members of the workforce have also been identified. The use of Schein's career anchor model serves as a benchmark for identifying the value, interest, and motivation levels of the employees under study, and their corresponding level of career satisfaction.

The Myers-Briggs Type Indicator provides valuable information regarding a person's personal assets relative to their behavioral modes, and personality concepts (Nordvik, 1996). This information allows the individual to realize their areas of motivation, what makes an individual react in a certain manner, and how that reaction affects others. A thorough knowledge of individual reactions is an important benchmark to any study of career motivations.

The John Holland Occupational Code provides six vocational categories that are used to focus the career aspirations of individuals toward their areas of interest, and motivation. This valuable information takes the information gathered from the career anchor model, and the Myers-Briggs Type Indicator and provides direction toward the career areas that best satisfy those areas of interest and motivation (Nordvik, 1996).

The common idea in Holland's theory of vocational personalities, Schein's theory of career anchors, and Myers-Briggs type theory is that people have different methods of coping with issues regarding their work and life experiences. This method of coping with these experiences allows individuals to function in their daily activities (Nordvik, 1996).

The career and interest tools that were identified in this chapter have proven track records of helping individuals find their true calling, their career choice that satisfies their interests, provides each individual with an unsatisfied motivation, and represents the beliefs, and values that define exactly who they are. It is the knowledge of the inner workings of the specific individual that will fuel that appreciation for the position held, and hold the greatest hope for higher levels of career satisfaction.

CHAPTER 3. RESEARCH METHODOLOGY

Introduction

The purpose of this case study was to investigate the relationship between the perceived levels of career satisfaction of the individuals within a specific engineering department of Micro Motors who are working outside of their career anchor. The data for this case study was gathered using a survey instrument, which established the respondent's career anchor, and their level of career satisfaction. A pilot study was conducted of the survey instrument to remove confusion, and maximize its efficiency. The career anchor of the respondents of this case study was established using the Career Orientation Inventory that identified the career anchor of the study subjects, and provided a benchmark of comparison between that career anchor and the respondent's level of career satisfaction.

This case study also researched the differences between the career satisfaction levels of engineers whose career does not reflect their individual interests, and passions, and those whose career falls within their areas of interest. Another facet of the case study was the comparison of the career satisfaction levels of direct and contingent engineers within Micro Motors.

One important factor in research is the relationships between variables. Both dependent, and independent variables play an important role in the area of research being undertaken. The dependent variable is a criterion that is predicted or explained, the variable of interest that is affected by one or more independent variables. The independent variable is a variable that is expected to influence the dependent variable. Its value may be changed or altered independently of any other variable (Zikmund, 2000). The dependent variable in this case study is employee career satisfaction. The independent variables that impact career satisfaction is: individual career

anchors, career span, interests and passions, and both direct and contingent employment. These independent factors were studied and their impact to the dependent variable of career satisfaction explored and presented within this document.

This chapter will be divided into seven sections: (a) Research Questions, (b) Research Design and Methodology, (c) Significance of Case Study Research, (d) Instrumentation, (e) Data Coding, (f) Statistical Analysis, (g) and Limitations.

<div align="center">Research Questions</div>

This case study project specifically analyzed the following research questions:

1. What are the differences in the career satisfaction level of engineers whose career anchor is not technical/functional competence?

2. What are the differences in the career satisfaction level of engineers whose career does not reflect individual interests or passions?

3. What are the differences in career anchors in individuals working within an engineering environment?

4. What are the differences in career satisfaction levels of direct versus contingent engineers?

These research questions provide information regarding the levels of career satisfaction in the direct and contingent engineers of an engineering department within Micro Motors relative to their career anchor, and areas of interest. The benefits of this case study include: (a) Gathering data from both direct and contingent employees, (b) Identifying the differences in career satisfaction levels between direct and contingent employees, (c) and determining if individual interests impact career satisfaction levels.

Research Design and Methodology

This case study utilized descriptive statistics for the purpose of identifying a relationship between career anchors, and career satisfaction, as well as identifying the strength of this relationship. Correlational design studies are typically used for exploring relationships among variables that are not manipulated, or cannot be manipulated (Fitzgerald, 2004). Correlational designs were appropriate for this study because it is not possible to manipulate variables such as age, career satisfaction, and individual interests and passions (Fitzgerald, 2004). It was believed that the participants in this case study possess the characteristics of interest in these areas and they were measured on these interests during the study, and no attempt was made by the researcher to change these interests.

Significance of Case Study Research

Case study research places more significance on a full contextual analysis of fewer events or conditions and their interrelations (Cooper & Schindler 2003). Case study research demands that the researcher evaluate information from multiple sources of information, and obtain the cooperation of the population being sampled. The case study approach to research allows the researcher to study a specific case in its context, as well as utilize data collection techniques such as observation, interview, and documentary analysis (Robson, 2002).

Case study research is further defined as a research method, which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence (Robson, 2002). Important factors of a case study include a strategy for data acquisition, a phenomenon in context for study, and the ability to study the particular case in its own right (Robson, 2002)

Instrumentation

Primary data for this case study was collected using a Career Orientation Inventory, permission for its use having been granted by the author. The Career Orientation Inventory defined and benchmarked the respondent's career anchor, one of the variables being studied. The questionnaire identified the interest and passion levels of the respondent, as well as their position within the career span. Additional information gathered with the questionnaire included whether the respondents were direct or contingent members of the workforce. The Career Orientation Inventory and corresponding questionnaire provided the researcher with the information required to define the variables being studied.

The Career Orientation Inventory was established by Edgar Schein and is used to identify areas of individual competence, values, and motivation (Schein, 1990). The Career Orientation Inventory consists of 40 questions, which were used to identify the respondent's relationship to one of the eight career anchors. Each question in the Career Orientation Inventory utilized a six-point Likert Scale with answers ranging from never true for me, to always true for me. A five-point Likert Scale was also used for gathering additional data regarding the respondents demographic, and career satisfaction levels. A response option that allowed the respondent to identify questions that were not applicable, where no significant answer was appropriate, or areas where the respondent had no opinion was included in the survey to purify the survey answers provided. Schaeffer and Presser (2003) suggest a quasi-filter such as "I don't know" be added to questionnaires to remove possible inaccuracies from the questionnaire. This also helped to direct the questions to the specific areas of interest, and respondent knowledge.

The advantages of conducting a survey as identified by Robson (2002) include:

1. Providing a simple and straightforward approach to the study of attitudes, values, beliefs, and motives.

2. Surveys can be adapted to collect generalizable information from almost any human population.

3. Surveys can be extremely efficient at providing large amounts of data, at a relatively low cost, within in a short period.

4. They allow anonymity, which can encourage frankness when sensitive areas are involved.

These advantages adapted well to the collection of data regarding individual levels of career satisfaction as influenced by ones career anchor, areas outside of individual interest or passion, and direct, or contingent employee designation.

There are also a number of disadvantages in conducting a survey, as identified by Robson (2002), which the researcher should be aware of so that the data obtained can be free from bias, or outside variables. These disadvantages include:

1. Data are affected by the characteristics of the respondents, characteristics such as memory, knowledge, experience, motivation, and personality.

2. Respondents may not report their beliefs and attitudes correctly because it may not allow them to appear in a favorable light.

3. Ambiguities in and the misunderstanding of the survey questions may not be detected.

4. Respondents may not treat the exercise seriously, and this may not be detectable.

This researcher took the necessary steps to prevent bias, and reduce possible errors in administering the survey by offering the research document to all members of the sample group of the specific engineering group within Micro Motors; this addressed any possible bias on the part of the sample group. The issue of confidentially was addressed by providing a secure envelope to the respondents for the return of the survey to a central location. This addressed any negative thoughts that the respondent may have had regarding appearing in a favorable light. The researcher has communicated to the respondents that participation in this research effort was strictly voluntary.

The survey did not seek any personal information about the respondents, the envelopes were numbered however so that non-respondents could be contacted. Once a second contact was made to those individuals who had not responded, the envelopes were destroyed. The questions asked of the respondents were carefully constructed to prevent any bias, or misunderstanding in the wording of the survey questions. This action addressed the negative survey aspect of ambiguities and possible misunderstanding of the questions asked. The question subject matter, and the response provided by the respondents were carefully reviewed to remove any additional halo-effect bias, or preconceived impressions of the subject from one rating to another. A second party reviewed the results received to assure that no errors in the tabulation of results have been committed. These steps were taken to reduce possible bias from being introduced into the survey, and by ensuring anonymity, thereby encouraging a higher response rate. Every effort was made by the researcher to communicate to the respondents the seriousness of the research effort, so that the significance and importance of the survey was not misunderstood, or taken for granted. A statistical software package such as SPSS or Microsoft Excel was used to collect the data for

statistical manipulation. The data was double-checked for completeness and accuracy in an effort to reduce any possible administrative errors.

Population and Sample

The target population of this case study included a sample of the salaried and contingent employees within a specific engineering department of Micro Motors located in North America. A convenience sample of the employees working at Micro Motors was surveyed and the results weighed to identify appropriate population estimates. An engineering organization within Micro Motors was selected as appropriate strata for survey distribution. This case study included a sample size of 129 engineers and supporting personnel with an actual response rate of 73%. The sample size involved individuals working within the Micro Motors North American operation. The mixture of respondents included males, females, and contained a career span mix of new hires, to individuals contemplating retirement. The sample mix contained both direct and contingent employees working within the specific engineering organization within Micro Motors. According to Pelosi et al. (2001), a 30% response rate is considered an acceptable response rate.

Members of the sample population consisted of individuals with varying degrees of engineering, and business backgrounds. The mix was composed of both degreed engineers, and individuals working in an engineering discipline with non-technical educational backgrounds. Support personnel in areas of finance, human resources, and administrative expertise were also a part of the engineering units within the structure of Micro Motors, and were a part of this sample population. This sample was appropriate because of the mix of direct and contingent workers as well as the fact that all have perceptions of career satisfaction.

The data collected were categorized and labeled using both nominal and ordinal scale measurement. This type of scale worked well with the chi-square test as a nonparametric test of significance (Cooper & Schindler, 2003). This technique tested for significant differences between the observed distribution of data, and the expected distribution. The chi-square test is particularity useful in tests that include multiple variables (Cooper & Schindler, 2003).

The actual group under study consisted of 129 direct or contingent workers divided into 112 males, and 17 females. This study group was further divided into 104 direct, and 25 contingent employees. The ratio of contingent employees to direct employees within the engineering department studied was 80% direct employees, to 20% contingent employees. That same ratio was represented in the sample population, as well as the pilot survey group used for this case study.

<div align="center">Validity and Reliability</div>

There are a number of different types of validation that are required for scientific measurement in an effort to purify the information, and reflect the true meaning of the data obtained (Cooper & Schindler, 2003). These different types of validation are as follows:

1. External validity of research findings refers to the data's ability to be generalized across persons, settings, and times.

2. Internal validity is defined as the ability of the research instrument to measure what it is purported to measure.

3. Content validity of the measuring instrument is the extent to which the measuring instrument provides adequate coverage of the investigative questions guiding the study.

4. Criterion-related validity reflects the success of measures used for prediction or estimation.

5. Construct validity considers both the theory and the measuring instrument being used for the presence of abstract characteristics for which no empirical validation seems possible.

The validation of any research measurement instrument is necessary to determine if the instrument used really measures what the researcher hopes to discover (Cooper & Schindler, 2003). The validation of any measuring instrument is an indication that the differences found with the measuring instrument reflect the true differences between the participants being tested. The validation of a measurement instrument helps to determine if the instrument paints a true picture of the condition being studied.

The reliability of a measuring instrument is the degree to which it supplies consistent, reliable results (Cooper & Schindler, 2003). Reliability is a necessary contributor to the validity of a measurement instrument and is concerned with the degree to which the measurement is free of random or unstable error (Cooper & Schindler, 2003). Reliable measurement instruments are robust, repeatable, work well despite differing times or conditions, and are stable and consistent.

There are a number of areas that may threaten either the validity or reliability of a measurement instrument. These areas include external sources of variation, non-standard conditions under which the measurement occurs, and too narrow a sample of measurement questions (Cooper & Schindler, 2003). These threats may negate some of the information received, or render certain aspects of the data unusable for use in reaching conclusions. These threats to the validity of the measurement instrument may prohibit the study from being

duplicated and further research to be accomplished (Cooper & Schindler, 2003). The researcher can improve the validity and reliability of the measuring instrument in the following manner:

1. Minimize external sources of variation.

2. Standardize conditions under which the measurement occurs. Improve investigator consistency by using only well trained, supervised, and motivated individuals to conduct the research.

3. Broaden the sample of measurement questions used by adding similar questions to the data collection instrument or adding more observers or occasions to the observational study.

4. Improve internal consistency of an instrument by excluding data from analysis drawn from measurement questions eliciting extreme responses.

These suggested precautions will limit the threat of unreliable data being obtained, and incorrect assumptions made regarding the data collected (Cooper & Schindler, 2003).

<div align="center">Validity Testing</div>

In an effort to assess the internal validity of the measurement instrument being utilized, a panel of experts for technical and linguistic discrepancies reviewed the survey for a face validity assessment. Suggested changes to the research instrument were incorporated and a pilot study utilizing a random selection of employees from the same engineering organization as the sample population was conducted. A random selection of ten individuals from the department's organizational structure were provided an opportunity to participate in the survey pilot study to provide a sampling of the research instrument's ability to be understood, and provide the information required to address the research questions that form the basis for this case study.

Data Collection Methods

A hard copy of the survey was sent to the respondents via the company mailing system along with the permission letter from the leadership of Micro Motors and a letter of explanation from the researcher. A return envelope was included with the survey packet, which allowed the respondent to mail the survey back to a central location within the organization where the researcher gathered the completed surveys for data coding and analysis. The respondents were offered a copy of the results of the research effort upon completion.

Data Coding

In order to organize and process the data collected, a coding system was utilized that defined the data characteristics and allowed for the clearly defined gathering of similar data characteristics. The same data coding system was utilized for all data received, and a chart showing the data code made available for the technical expert review, as well as the ongoing review of data entry items. The six-point Likert scale previously identified, as the scale of choice, provided adequate definition of the answers received to ascertain the response from those participating in the survey. The extent of respondent agreement, or disagreement of the questions asked was determined by the percentage of the employee's response.

Statistical Analysis

Descriptive statistical analysis was conducted in this case study utilizing software packages such as SPSS and Microsoft Excel. This descriptive statistical analysis transformed the raw data into a format that was understandable and from which logical trends and conclusions could be made. Summarizing, categorizing, and calculating the mean, median, and mode, standard deviation and percentage of distribution of both the statistical and demographic

information gathered was incorporated in the completion of this task. The chi-square test was used to test for significant differences between the observed distribution, and the expected distribution. Cross tabulation was used to compare the variables identified within the survey instrument.

<div align="center">Limitations</div>

One limitation of this case study was that it was administered to the salary and contingent employees of a specific engineering department of Micro Motors, and did not include the hourly workforce of that same organization. This action was taken because individuals with a technical and functional career anchor are believed to be more prevalent within the salary, or contingent labor segment. This case study identified technical, and functional career anchors, and the satisfaction levels of individuals within that career position. Additional research is needed to assess the level of career satisfaction in the other career anchors not included in this study.

There may have been some reluctance on the part of the contingent workforce to participate in the survey, due perhaps to their apprehension with being involved in any extracurricular activities within the organization. For the past several years, the number of contingent employees within Micro Motors has been steadily reduced, so any activity involving these employees may have been suspect.

Schein (1990) identifies concerns regarding individual bias in the answers provided in the questionnaire, and suggests a follow-up interview to determine an individual's career anchor. For this research effort, every step was taken to minimize bias in the answers provided. This was accomplished by instructing the respondents to answer the questionnaire with the response that reflected their strongest feelings.

Chapter 3 Summary

The purpose of this case study was to identify the relationship between an individual's level of career satisfaction and their career anchor. An additional goal from this research was to identify differing levels of career satisfaction relative to an employee's status as a direct employee, or a contingent employee working within the organization.

Chapter 1 provided an overview of the problem, identified the research method that would be utilized to study the problem, and identified research questions that would focus the research effort towards the specific areas of study. Background information regarding the career anchor model and its use in the research effort, and the boundaries of study were also identified. A listing of the pertinent term definitions was presented to aid the reader in understanding the jargon that is associated with this field of study.

Chapter 2 identified several different tools that are used in industry today to maximize productivity, and increase the efficiency of the organization/employer. These tools are used to benchmark the strengths of the employee and utilize those strengths for the benefit of the organization, and the satisfaction of the employee. The knowledge of the employee's strengths and motivations can be used to formulate work teams that compliment the members of the team, and provide a formidable competitive advantage.

Chapter 3 describes the survey research, and descriptive statistical research design appropriate for this study. The research methodology, instrumentation, and validity efforts to provide an accurate, un-biased research document were explained. The research limitations for this research effort were identified so that a clear understanding of the research objectives could be obtained.

The results of this case study have provided additional information regarding the importance of individuals selecting a career based on their interests, values, and motivations, as identified by their career anchor. Additional efforts can now be initiated to direct new hires, into positions that maximize the values that define their interests, and motivations.

CHAPTER 4. DATA COLLECTION AND ANALYSIS

Introduction

The researcher utilized and analyzed data from the Career Orientations Inventory (Appendix A), and the demographic information survey (Appendix B) administered to an engineering organization within Micro Motors. These two survey instruments were distributed via the internal mailing system, with a return inter-company mailing envelope provided for delivery of the survey documents to a central location. The population for this case study included both salaried direct and contingent employees working in an engineering discipline for an automotive manufacturer, Micro Motors. The mixture of respondents included a career span mix of new employees, mid-career employees, and individuals contemplating retirement.

A pilot survey of the questionnaire was conducted utilizing a random selection of ten individuals from the same organization as the sample population. A response rate of 90% was obtained from the pilot survey. Information gathered during the pilot survey regarding question clarity, user friendliness, and respondent response timing was incorporated into the final questionnaire.

Data Collection Instrument

The sample population for this case study consisted of 129 salaried direct and contingent employees working for, or within the engineering environment at Micro Motors. The sample population surveyed consisted of 112 males, 17 females, with an employment mixture of 104 direct employees, and 25 contingent employees. This sample population mixture matched the breakdown of the entire engineering department from which the sample population was chosen.

A six-point Likert scale was used for the initial forty questions of the survey (Appendix A), allowing respondents to select one response from varying degrees of scaled answers. The Likert scale provided participants with possible responses to the questions asked that indicated the degree to which the questions were, or were not true for the respondent. The responses varied along a six-point scale ranging from (*never true for me*), (*occasionally true for me*), (*often true for me*), to (*always true for me*). The participant's response along this range of six possible indicators of respondent agreement was tabulated to provide the researcher with an indication of the participant's career anchor, which served as a benchmark from which levels of career satisfaction could then be measured.

The second part of the survey (Appendix B), queried the participants on the aspects of their unique employment situation, their gender, and specific questions aimed at identifying their current level of career satisfaction. A Likert scale format with a varying amount of response options was used to obtain this information. This demographic information was tabulated and used in the overall comparison between the respondent's identified career anchor, and corresponding levels of career satisfaction.

Cross tabulation and statistical methods were utilized to display the information gathered. Decimal percentages were used to break down the demographic information gathered into finite increments. This allowed statistical manipulation of the data into a format whereby the information could be analyzed, and conclusions drawn.

<div align="center">Demographic Analysis</div>

Ninety-four individuals responded to the survey. This number represents 73% of the population sampled. Of the participants responding, 81 (86%) were males, 13 (14%) were

females. Further breakdown of the number of respondents indicated that, 75 (80%) of those

responding were direct employees, and 19 (20%) were contingent employees. Table 1 presents

the survey participation information identified by gender.

Table 1: Survey Respondents by Gender.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	81	86.2	86.2	86.2
	Female	13	13.8	13.8	100.0
	Total	94	100.0	100.0	

Note: Presented is the gender designation of the survey participants.

Additional information was made available within the demographic information section

of the survey (Appendix B). Information such as educational levels, the number of years at the

respondent's current position, and the age span of the participants, provide valuable information

regarding the make-up of the engineering organization. Table 2 presents the educational levels of

the survey respondents.

Table 2: Educational Levels of the Survey Respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School Graduate	5	5.3	5.4	5.4
	Some College	40	42.6	43.0	48.4
	Bachelors Degree	30	31.9	32.3	80.6
	Graduate Degree	18	19.1	19.4	100.0
	Total	93	98.9	100.0	
Missing	No Response	1	1.1		
Total		94	100.0		

Note: Presented are the education levels of the survey respondents.

Table 2 shows that a total of 48 (51%) of the individuals that responded within the engineering organization have a bachelor's or higher degree. This table also illustrates that the majority of individuals, 88 (94%) working within the engineering organization have had some level of college education.

The number of years that an individual spends at their current position is pertinent in this research effort because it provides valuable information relative to the differing levels of career satisfaction. The career plateauing phenomenon that Lemire (1999) discovered can lead to lower levels of career satisfaction if the individuals find themselves without advancement opportunities.

Table 3: Years at Current Position.

			Employment		
			Working as a Micro Motors Employee	Working as a Contingent Employee	Total
Years at current position	0 - 1 Year	Count	8		8
		% within Employment	10.7%		8.5%
	2 - 4 Years	Count	15	8	23
		% within Employment	20.0%	42.1%	24.5%
	5 - 10 Years	Count	28	7	35
		% within Employment	37.3%	36.8%	37.2%
	> 10 Years	Count	24	4	28
		% within Employment	32.0%	21.1%	29.8%
Total		Count	75	19	94
		% within Employment	100.0%	100.0%	100.0%

Note: Number of years at current position by employment status.

Table 3 illustrates the survey information relative to the number of years that the respondents have spent at their current position. Table 3 shows that a total of 63 (67%) of the individuals surveyed have worked within their specific job position for five years or longer.

This information also illustrates the fact that contingent employees are absent in the 0 – 1 year category.

Another important factor in determining the level of career satisfaction in an engineering organization is the age of the individuals working within the department. Schein (1990) stated that the last career stage, preparing for retirement, can be traumatic, or a joyful experience, depending on how prepared the individual is for entering this last career stage. Table 4 identifies the age levels of the participants that responded to the survey.

Table 4: Age of the Respondents.

			Employment		
			Working as a Micro Motors Employee	Working as a Contingent Employee	Total
Respondents age	18 - 25 Years	Count	1		1
		% within Employment	1.4%		1.1%
	26 - 40 Years	Count	7	2	9
		% within Employment	9.5%	11.1%	9.8%
	41 - 60 Years	Count	60	13	73
		% within Employment	81.1%	72.2%	79.3%
	> 61 Years	Count	6	3	9
		% within Employment	8.1%	16.7%	9.8%
Total		Count	74	18	92
		% within Employment	100.0%	100.0%	100.0%

Note: Age of the respondents by employment status.

Table 4 indicates that 82 (89%) of the individuals surveyed, both Micro Motors employees, and contingent employees are older than 41 years of age. The number of relatively young employees between the ages of 18 – 25 that responded to survey was only one. The median age group, 26-40 years of age represented 10% of those individuals responding to the survey.

Survey Analysis

The researcher utilized the first forty questions (Appendix A), to identify the career anchor of the survey respondents. This information became the benchmark from which comparisons were drawn, and research questions answered. The survey was administered within an organization that is considered by Micro Motors to be an engineering discipline, due to the technical nature of the work performed within the department. Table 5 identifies the career anchors of the survey participants by frequency and percentage.

Table 5: Career Anchor Identification.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Technical/Functional	14	14.9	14.9	14.9
	General Managerial	3	3.2	3.2	18.1
	Autonomy/Independence	2	2.1	2.1	20.2
	Security/Stability	15	16.0	16.0	36.2
	Entrepreneurial Creativity	3	3.2	3.2	39.4
	Sense of Service/Dedication to a cause	6	6.4	6.4	45.7
	Pure Challenge	15	16.0	16.0	61.7
	Lifestyle	36	38.3	38.3	100.0
	Total	94	100.0	100.0	

Note: Presented is the identification and percentage of career anchors.

Because of the immense size of the Micro Motors organization, both in facilities, and number of employees, and the movement of employees within the corporation, a combination of talents, skills, and abilities was identified. This information is identified in Table 5 where each of the eight career anchors identified by Schein is represented, and the identification of the career anchors of the survey participants. Table 5 also indicates that the majority of the participants surveyed within the Micro Motors organization 36 (38%), display a lifestyle career anchor. Schein believes that this trend toward lesser degrees of importance toward specific careers, and

greater levels of importance toward career flexibility, is a growing trend, due to the individuals

need to balance both their personal, and professional lives (Schein, 1990).

Security/Stability shares the second highest percentage (16%) along with Pure Challenge.

Security/Stability are career anchors that are found in individuals that require predictable hours,

work efforts, and a seniority-based promotion system (Schein, 1990).

Table 6: Number of Years at Micro Motors.

			Employment		
			Working as a Micro Motors Employee	Working as a Contingent Employee	Total
Number of years at Micro Motors	0 - 5 Years	Count	3	6	9
		% within Employment	4.0%	31.6%	9.6%
	6 - 15 Years	Count	13	6	19
		% within Employment	17.3%	31.6%	20.2%
	16 - 25 Years	Count	18	3	21
		% within Employment	24.0%	15.8%	22.3%
	26 - 35 Years	Count	24	1	25
		% within Employment	32.0%	5.3%	26.6%
	> 36 Years	Count	17	3	20
		% within Employment	22.7%	15.8%	21.3%
Total		Count	75	19	94
		% within Employment	100.0%	100.0%	100.0%

Note: Number of years worked at Micro Motors by employment status.

Individuals that have a Pure Challenge career anchor demand work that is challenging to

them, that allows the testing of an individual's abilities and skills (Schein, 1990).

Table 6 shows the number of years worked at Micro Motors by employment status. This

table illustrates that 45 (48%), of the participants surveyed have worked at Micro Motors for a

period greater than 26 years. These individuals may be close to retirement age, a time when their

motivation may focus largely on maintaining the lifestyle that they have established (Schein,

1990).

Research Questions

Research Question 1: What are the differences in the career satisfaction level of engineers whose career anchor is not technical/functional competence? To answer this research question the researcher used the data from the Career Orientations Inventory to identify the respondent's career anchor and the results from question number one related to individual levels of career satisfaction. Table 7 identifies the information relative to research question number one by identifying the career anchors of the respondents and their levels of career satisfaction.

Table 7: Differences in Career Satisfaction Levels by Career Anchor.

| | | | Identify your current level of career satisfaction. | | | | |
			Very Much	Somewhat	Only a little	Not at all	Total
Career Anchor	Technical / Functional	Count	4	8	2		14
		Percentage	28.6%	57.1%	14.3%		100.0%
	General Managerial	Count	3				3
		Percentage	100.0%				100.0%
	Autonomy / Independence	Count			1	1	2
		Percentage			50.0%	50.0%	100.0%
	Security / Stability	Count	8	5	2		15
		Percentage	53.3%	33.3%	13.3%		100.0%
	Entrepreneurial Creativity	Count	1	2			3
		Percentage	33.3%	66.7%			100.0%
	Sense of Service / Dedication to a cause	Count	2	3	1		6
		Percentage	33.3%	50.0%	16.7%		100.0%
	Pure Challenge	Count	9	5	1		15
		Percentage	60.0%	33.3%	6.7%		100.0%
	Lifestyle	Count	16	17	3		36
		Percentage	44.4%	47.2%	8.3%		100.0%
Total		Count	43	40	10	1	94
		Percentage	45.7%	42.6%	10.6%	1.1%	100.0%

Note: Presented are the different levels of career satisfaction by career anchor.

Of those respondents that did not identify with a technical/functional career anchor, 39 (41%) stated that they were very satisfied with their career. In the two positive categories of career satisfaction, (*very much*), and (*somewhat*), a total of 83 (88%) of the individuals responded. This left eleven individuals that indicated a lower or negative level of career satisfaction. SPSS software and the cross tabulation method were used to compare two variables, the levels of career satisfaction, and the respondent's career anchor. Table 7 identifies both the frequency of those different levels of career satisfaction, and the percentage of that specific career satisfaction level of the participants of the survey.

Table 8 presents the Chi-Square test of statistical significance for the information found in Table 7. The p-value of .000 indicates that there is a relationship between the individual career anchor and the corresponding levels of career satisfaction.

Table 8: Chi-Square Test for Table 7.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	59.455[a]	21	.000
Likelihood Ratio	22.956	21	.346
Linear-by-Linear Association	1.350	1	.245
N of Valid Cases	94		

[a]. 24 cells (75.0%) have expected count less than 5. The minimum expected count is .02.

Research Question 2: What are the differences in the career satisfaction level of engineers whose career does not reflect individual interests or passions? This research question sought to determine if the respondents believed that having both an interest and a passion for a career was an important ingredient in career satisfaction. Schein (1990) believed that both interest and passion were important factors in determining career anchors.

Table 9 addresses the respondents' level of career passion and indicates that 69 (73%) of those surveyed were both satisfied, and passionate about their career. Table 9 also indicates that of the 20 individuals that were either not or marginally passionate with their career, only nine indicated lower levels of career satisfaction.

Table 9: Differences in Career Satisfaction Levels relative to Career Passion.

| | | | Identify your current level of career satisfaction. | | | | |
			Very Much	Somewhat	Only a little	Not at all	Total
Are you passionate about your current career?	Very Much	Count	27	11			38
		Percentages	71.1%	28.9%			100.0%
	Somewhat	Count	14	17	1	1	33
		Percentages	42.4%	51.5%	3.0%	3.0%	100.0%
	Not Applicable	Count	2				2
		Percentages	100.0%				100.0%
	Only a little	Count		11	7		18
		Percentages		61.1%	38.9%		100.0%
	Not at all	Count			2		2
		Percentages			100.0%		100.0%
Total		Count	43	39	10	1	93
		Percentages	46.2%	41.9%	10.8%	1.1%	100.0%

Note: Presented is the comparison of career satisfaction and career passion levels.

Table 10 presents the Chi-Square test of statistical significance for the information found in Table 9.

Table 10: Chi-Square Test for Table 9.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	57.186[a]	12	.000
Likelihood Ratio	57.460	12	.000
Linear-by-Linear Association	35.567	1	.000
N of Valid Cases	93		

[a.] 14 cells (70.0%) have expected count less than 5. The minimum expected count is .02.

The p-value of .000 indicates that there is a relationship between the level of passion experienced within a career and the respondents' level of career satisfaction.

Table 11 addresses the question of career satisfaction levels and individual career interests within the individuals responding to the survey. This table indicates that 63 of the individuals surveyed were working within an area of real career interest, and showed positive levels of career satisfaction.

Table 11: Career Satisfaction Levels and Career Interests.

| | | | Identify your current level of career satisfaction. | | | | |
			Very Much	Somewhat	Only a little	Not at all	Total
Are you working outside of your area of real career interest?	Very Much	Count	1	2	4		7
		Percentage	14.3%	28.6%	57.1%		100.0%
	Somewhat	Count	4	12	2	1	19
		Percentage	21.1%	63.2%	10.5%	5.3%	100.0%
	Not Applicable	Count		1	2		3
		Percentage		33.3%	66.7%		100.0%
	Only a little	Count	9	8			17
		Percentage	52.9%	47.1%			100.0%
	Not at all	Count	29	17	2		48
		Percentage	60.4%	35.4%	4.2%		100.0%
Total		Count	43	40	10	1	94
		Percentage	45.7%	42.6%	10.6%	1.1%	100.0%

Note: Presented is the comparison of Career Satisfaction Levels and Career Interests.

A total of 19 individuals indicated that they were working outside of their area of real career interest, but had a positive level of career satisfaction. Only seven respondents indicated that they were working outside the area of real career interest, and indicated negative levels of career satisfaction. One individual displayed no level of career satisfaction. This same individual identified working somewhat outside of their area of real career interests.

Table 12 presents the Chi-Square test of statistical significance for the information found in Table 11. The p-value of .000 indicates that there is a relationship between working within an area of real career interest, and corresponding levels of career interest.

Table 12: Chi-Square Test for Table 11.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.532[a]	12	.000
Likelihood Ratio	33.189	12	.001
Linear-by-Linear Association	19.620	1	.000
N of Valid Cases	94		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .03.

Research Question 3: What are the differences in career anchors in individuals working within an engineering environment? Table 5 displays the frequency, and percentages of those members of the Micro Motors Engineering organization and their corresponding career anchors. This table indicates fewer numbers of respondents interested in autonomy, or independence in their career anchor. General Managerial, Entrepreneurial Creativity, and Sense of Service/Dedication to a cause also indicated lower numbers within the individuals surveyed. Table 5 indicates a large disparity between the top four career anchors, Lifestyle, Pure Challenge, Security/Stability, and Technical/Functional, and the remaining four.

Research Question 4: What are the differences in career satisfaction levels of direct versus contingent engineers? This research question sought to determine if there were lower levels of career satisfaction within the individuals that worked within, but not for Micro Motors. Table 13 indicates that 88% of the Micro Motors employees, and 89% of contingent employees

responding to the survey were either somewhat, or very much satisfied with their level of career

satisfaction.

Table 13: Career Satisfaction Levels by Employment Category.

| | | | Employment | | Total |
			Working as a Micro Motors Employee	Working as a Contingent Employee	
Identify your current level of career satisfaction.	Very Much	Count	36	7	43
		Percentage	48.0%	36.8%	45.7%
	Somewhat	Count	30	10	40
		Percentage	40.0%	52.6%	42.6%
	Only a little	Count	8	2	10
		Percentage	10.7%	10.5%	10.6%
	Not at all	Count	1	0	1
		Percentage	1.3%	.0%	1.1%
Total		Count	75	19	94
		Percentage	100.0%	100.0%	100.0%

Note: Presented are the different career satisfaction levels by employment category.

Table 14 presents the Chi-Square test of statistical significance for the information found

in Table 13. The p-value of .745 indicates that the factors of career satisfaction and working as

either a direct or contingent member of the workforce are independent.

Table 14: Chi-Square Test for Table 13.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.235[a]	3	.745
Likelihood Ratio	1.426	3	.700
Linear-by-Linear Association	.076	1	.783
N of Valid Cases	94		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .20.

Survey Question

There was an additional question in the demographic questionnaire (Appendix B), that

asked the respondents specifically if they believed that working in an area of interest or passion

was important in a career choice. The researcher hoped to verify Schein's (1990) belief that one

of the most important factors in determining a career anchor was finding a career that was

interesting, and would arouse a level of passion within the individual.

Table 15: Importance of Interest and Passion in a Career choice.

			Employment		
			Working as a Micro Motors Employee	Working as a Contingent Employee	Total
Is working in an area of interest or passion important in a career choice?	Very Much	Count	61	12	73
		Percentage	64.9%	12.8%	77.7%
	Somewhat	Count	9	6	15
		Percentage	9.6%	6.4%	16.0%
	Not Applicable	Count	3	0	3
		Percentage	3.2%	.0%	3.2%
	Only a little	Count	1	1	2
		Percentage	1.1%	1.1%	2.1%
	Not at all	Count	1	0	1
		Percentage	1.1%	.0%	1.1%
Total		Count	75	19	94
		Percentage	79.8%	20.2%	100.0%

Note: Presented is the respondents answer to survey question number four.

The results for this survey response were statistically manipulated through SPSS

software, utilizing both cross tabulation and a statistically significant chi-square test. The data

used came from question number four of the questionnaire (Appendix B) and the variable used in

Table 15 was employment status. The use of this variable would highlight the response to

question four from both factions of the employment group, both direct and contingent

employees.

Table 15 illustrates the response from those surveyed indicating that choosing an area of interest and passion is indeed a factor in career satisfaction. A total of 70 of the direct, and 18 of the contingent employees, or 94% of the total, indicated a favorable response when asked if they believed that working in an area of interest or passion was important in a career choice. Table 15 presents the response data. The chi-square test, Table 16 indicates a p-value of .171. The high significance value indicates that there is little or no relationship between the variables.

Table 16: Chi-Square Test for Table 15.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.400[a]	4	.171
Likelihood Ratio	6.422	4	.170
Linear-by-Linear Association	.903	1	.342
N of Valid Cases	94		

a. 7 cells (70.0%) have expected count less than 5. The minimum expected count is .20.

Chapter 4 Summary

The researcher analyzed four research questions and additional survey questions to determine both the career anchor, and levels of career satisfaction levels of those surveyed. Comparisons were drawn between both direct and contingent members of the Micro Motors workforce to determine if differing levels of career satisfaction existed between these two distinct factions of the automotive workforce. The career anchor mix of the sample population was determined through the survey questions asked, and the breakdown of the eight different career anchors evident within an engineering department of Micro Motors presented.

Research indicated that of those responding to the survey, 86 % were males, 14 % were females, 80 % were direct employees, with 20 % contingent employees. Data showed that the

lifestyle career anchor was the most prominent within the individuals surveyed, followed by security/stability, and pure challenge. Micro Motors has 48 % of its workforce, both direct and contingent employees that have worked for the organization for a period greater than 26 years. Contingent employees are absent in the 0 – 1 year at current position category. This situation may be caused by the ongoing efforts by the automotive organizations to reduce headcount. The majority of the workforce surveyed, 89 % are greater than 41 years of age. The majority of those surveyed have a bachelor's or higher degree with many identifying graduate level studies.

A total of 88 % of those responding to the survey indicated that they were either very much, or somewhat satisfied with their career, with 73 % indicating that they were both satisfied and passionate about their career. Breaking down the employment segment further indicated that 88% of the direct and 89% of the contingent workforce are satisfied with their career. Of the total surveyed, 67 % indicated that they were working within their area of career interest. A total of 94% of those surveyed indicated that passion for a career was an important factor in career satisfaction.

The results indicated that all eight-career anchors identified by Edgar Schein were present within the sample population, with the highest percentage belonging to those having a lifestyle career anchor. Schein (1990) suggested this phenomenon as a trend associated with the need of the employee to exhibit greater flexibility in the work environment. The need to spend greater amounts of free time with family, and the pursuit of activities outside of the work environment was a trend that Schein suggested, and is evident in the survey results.

CHAPTER 5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this case study was to investigate the relationship between the levels of career satisfaction in the engineers of Micro Motors, their career anchor, and the levels of career satisfaction in employees whose career is outside of their areas of interest and passion. The researcher also studied the differences in career satisfaction levels in contingent employees who work within Micro Motors for an outside organization.

Career satisfaction can be a somewhat nebulous commodity, one not easily defined or identified. Cascio (1998) describes career satisfaction as a fulfilling experience in a sequence of positions occupied by a person during the course of a lifetime. Career satisfaction is one of the aspects of the workday experience that defines the overall satisfaction level of the employee. Individuals that look forward to being on the job can view their career in a positive way, versus the individual that dreads the daily trek to the office (Ford, 2003). The level of satisfaction that the employee receives for the work completed plays a significant part in their level of satisfaction for their overall career effort (Burke & MacDermid, 1999).

Career satisfaction does not necessarily come from financial awards, job recognition, or career advancement. Factors such as fulfillment, a sense of dedication, job appreciation, or working in areas of interest or passion, are additional factors that may contribute to career satisfaction. Story (2002) found that the not for profit sector is recruiting high level executives that find career satisfaction in managing activities for which they are truly passionate. These opportunities to work in areas of interest, or passion, can represent a very attractive alternative to managing successful organizations because of the lower levels of stress and anxiety.

Two distinctly different employment conditions are present within the automotive industry today, direct, and contingent employment. Direct employees are hired directly by the organization and receive their wages and benefits from that organization. Contingent employees are hired by companies to work within another organization to cope with unexpected or temporary challenges (Jackson & Schuler, 2000). Contingent employees receive their wages and benefits from an outside organization. Contingent employees work in an environment that generally limits their advancement opportunities. This lack of advancement opportunity may limit their individual level of career satisfaction. The differences in the career satisfaction levels between direct and contingent employees were an important area of study within this case study document.

The literature review presents several different methods of determining areas of career interest, or career paths to individuals searching out their career vocation. Many of these career-determining methods are based on fitting the individual, into an existing career slot, or employment position. Schein's method of determining an individual's career anchor, based on the unique interests, values, and motivations of that individual, provides the individual with the general knowledge of what type of work experience most closely matches these individual attributes (Schein, 1990). Individuals that match their values, interests, and motivations to careers that compliment those attributes may experience higher levels of career satisfaction.

Responses to the survey (Appendixes A & B) were received from both direct and contingent employees working within the engineering environment of Micro Motors. The Career Orientation Inventory (Appendix A) was used to obtain an indication of the individual's career orientation, relative to the eight career anchors defined by Schein (1990).

Demographic information was obtained from additional questions (Appendix B). This questionnaire defined the respondent's employment status, gender, and several additional factors that were then compared to the career anchor, defined in (Appendix A). The results of this comparison were then analyzed on a question-by-question basis using quantitative data analysis. From this comparative analysis research questions were answered, and conclusions drawn. The method of description, and presentation of the results obtained was selected, both for their attention to detail, and for ease of understanding.

Conclusions

Overall, the information found in the literature coincides with the survey results regarding the career anchors of the individuals working within Micro Motors. The information regarding the differences within the direct, and contingent workforce of the organization, and their levels of career satisfaction contradicts the literature reviewed. The analysis of the survey results and the research questions answered provide the following conclusions.

Data showed that the engineering organization surveyed displayed all eight career anchors that Schein (1990) identified in his early research. The Lifestyle Career Anchor was the prominent career anchor displayed. This phenomenon was predicted by Schein (1990) because of the changing need to integrate a meaningful career into the individual's total lifestyle. Schein (1990) believed that this incorporation of professional and family values is not merely the balancing of these two important facets of an individual's life, but an integration of the needs of the individual, the family, and the career.

The career anchors of Pure Challenge, Security/Stability, and Technical/Functional competence were also prominent within the individuals surveyed. The researcher concluded that

the technical nature of the work performed, the security afforded the workforce by a large, mature organization, and the challenging nature of the competitive business environment today is evident in these results.

The number of years that the respondents' have spent within the workforce at Micro Motors was another factor that produced some surprising results. The majority of the direct employees surveyed indicated a length of employment beyond sixteen years, with 21% having worked for Micro Motors for a period greater than thirty-six years. Contingent members of the workforce indicated a much shorter duration of activity in support of the organization, with the majority of those surveyed working in support of Micro Motors for a period less than sixteen years. Micro Motors has been producing automotive products for an extended period of time while struggling over the past decade to reduce overhead in an effort to remain solvent in a very competitive business environment. The researcher concludes that this extended period of operation, coupled with the cost reduction efforts of the business environment today provide a plausible explanation for the results identified.

Research Question 1 compared the respondents' level of career satisfaction to their specific career anchors. The focus of this question was to identify lower levels of career satisfaction in individuals whose career anchor was outside of the area of Technical/Functional competence. The researcher believed that individuals working within an engineering environment would display a Technical/Functional career anchor, and individuals working within that environment without the Technical/Functional career anchor would have lower levels of career satisfaction.

The data showed that the highest percentage of career satisfaction relative to specific career anchors occurred within the Lifestyle, Pure Challenge, Security/Stability, and General Managerial career anchors. With the exception of the Autonomy/Independence career anchor, the majority of those responding indicated positive levels of career satisfaction. The researcher concluded that the reason the individuals with the Autonomy/Independence career anchor indicated lowers levels of career satisfaction were due to the restrictive nature of the automotive business environment. Individuals that display an Autonomy/Independence career anchor find being bound by other people's rules, procedures, and general working conditions restrictive, a condition that is present within the automotive industry.

Research Question 2 asked for a comparison of the different levels of career satisfaction to individuals whose career does not reflect interest or passion. The data showed that there was a definite link between the levels of career satisfaction and the levels of passion expressed regarding the respondents' current career. Individuals that expressed a high level of career satisfaction also indicated a passion toward their current career. Correspondingly, individuals surveyed that indicated lower levels of career satisfaction also indicated lower levels of passion towards their career.

The second part of Research Question 2 asked for that same comparison of career satisfaction to levels of real career interest. The results indicate that individuals working within an area of real career interest also express higher levels of career satisfaction. The researcher concludes from the data collected that in those individuals that responded to the survey, working in a career that embodies both interest and passion leads to higher levels of career satisfaction.

Research Question 3 addressed the different career anchors of those individuals working within an engineering environment. The individuals surveyed displayed all eight career anchors identified by Schein (1990). General Managerial and Entrepreneurial Creativity were the least represented career anchors within the individuals surveyed. Schein (1990) identifies a lesser percentage of individuals exhibiting a General Managerial career anchor because these individuals view specialization as a trap. The researcher concludes that because of the specialized nature of the engineering group sampled, that individuals that share this career anchor would constitute a much lower percentage.

The second career anchor that displayed much lower percentages within the group sampled was Entrepreneurial Creativity. Schein (1990) identifies a need within these individuals to create new businesses, to build new organizations through financial manipulation. Individuals that share this career anchor dream about starting their own business, about getting out on their own Schein (1990). The Entrepreneurial Creativity career anchor shares many of the same attributes as the Autonomy/Independence career anchor. Both of these career anchors display qualities that would have little chance of success within the engineering organization of Micro Motors.

Research Question 4 addressed the differences in levels of career satisfaction in the direct versus contingent employees within Micro Motors. The literature reviewed indicated that lower levels of career satisfaction might be evident in the contingent workforce because of the low probability of advancement opportunities. Another factor that was identified in the literature reviewed was that one of the reasons why individuals become contingent workers is because of the hope of being hired directly by the organization. Because of the continuing need to reduce

labor and lower overhead costs, the opportunity for a contingent worker to be hired directly into Micro Motors is almost nonexistent.

The research shows that extremely high levels of career satisfaction are evident within both the direct and contingent workforce of Micro Motors. A total of 88% of the direct employees, and 89% of the contingent workers within the population sampled indicated high levels of career satisfaction. From these results, the researcher has to conclude that the situation expressed in the literature review regarding possible lower levels of career satisfaction for contingent workers is not evident within the engineering organization surveyed.

A few notable events demand mention concerning the distribution, return, and ownership of the survey that was a part of this research effort. The survey was sent out to 129 individuals working within a close-knit engineering group. The individuals surveyed generally work within two engineering facilities. The individuals surveyed work with the researcher, and for the Engineering Director, whose permission allowed this research effort to occur.

The survey cover letter pointed out the need for the survey, the fact that participation was voluntary, and assured confidentially of those who wished to participate. There were a number of surveyed individuals who blatantly refused to participate for fear of reprisals from the employing organization. The researcher anticipated some resistance toward completing, and submitting the survey, but the number, and magnitude of these refusals was not anticipated. It is therefore important to note that in organizations that are experiencing extreme competitive pressures, and who find themselves cutting costs to remain competitive, that reluctance by the workforce to answer sensitive questions regarding career satisfaction might be evident.

Another notable event that deserves mention is that after the survey was submitted, and returned, several survey respondents displayed some ownership of the research effort. Questions regarding the number of returned responses, daily requested updates of the researcher's progress, as well as requests for a condensed version of the results were apparent during the post-survey period. These events were not anticipated, but certainly appreciated.

<div align="center">Recommendations</div>

The following recommendations should be considered in studying the effects of career anchors and their impact on career satisfaction.

Recommendation 1: Communicate the Research Results. This case study provides valuable information regarding a typical engineering organization within Micro Motors. The survey results indicate that a positive attitude exists within both the direct and contingent engineering workforce regarding career satisfaction. This information should be communicated to the leadership of the organization so that myths regarding lower levels of career satisfaction among both direct and contingent members of the workforce can be expelled.

Much can be learned from the results of this case study, and the high levels of career satisfaction that this study has uncovered. This case study effort was conducted during a time where continued pressure from foreign automakers was eating away at the market share of all members of the North American Automobile Industry, causing the organization to take drastic steps to maintain profitability. For the employees to maintain such a positive response to their careers during a time of rightsizing, benefit reduction, and economic instability says a great deal about the caliber of the employee. The positive attitude that this research effort has uncovered should be shared with upper management so that this positive benefit can be acknowledged.

Recommendation 2: Value the Mature Workforce. This case study identified the mature nature of the Micro Motors workforce. The majority of the workforce surveyed, 89% are greater than forty-one years of age. Micro Motors has a tremendous asset in its mature workforce. The benefits that these experienced individuals bring to the workplace should not be underestimated. There are certain myths regarding the older members of the workforce that need to be reviewed based on current studies.

Stanley (2001) uncovers several misconceptions regarding today's mature workforce. Mature employees do indeed understand new technology, and one of the largest groups using the internet today is mature individuals (Stanley, 2001). Older employees stay with the job longer, have about the same rate of absenteeism as younger employees, and are just as productive as younger employees (Stanley, 2001). The average age of the individuals that made the list of the top 1,000 most important ideas that had an impact on the world was seventy-four (Stanley, 2001).

There are changing ideas regarding employees nearing retirement age that should be reviewed. These are ideas for creating a phased retirement program that help an organization capitalize on the talents of its mature workforce:

1. Evaluate whether this is a worthwhile opportunity for your company. What is the available pool of retirees, and do their skills match open positions (Rappaport, 2000)?

2. Focus on the reasons for the program and set goals for it. This will help establish a return on investment so that a business case can be created for initiating the program (Rappaport, 2000).

3. Identify the organizational, benefit plan barriers to making the program work, and develop strategies to eliminate them. If this step is skipped, managers may spend more time and money later trying to overcome these barriers (Rappaport, 2000).

4. Build a program that will address the goals. Make sure to look at the effect on all benefit and compensation plans, and the implications for human resources policy (Rappaport, 2000).

5. Try a pilot program and work out any problems. Because the program will probably run counter to a lot of traditional thinking and behavior, changes will need to be managed carefully (Rappaport, 2000).

6. Fine tune the program as needed, and retest using the pilot group (Rappaport, 2000).

7. Implement the program throughout the organization (Rappaport, 2000).

A phased retirement program will allow the mature employee, who has a positive career satisfaction level based on the results of this case study, stay on the job longer and benefit the employing organization.

Recommendation 3: Reevaluate Contingent Workforce. The survey results indicate that the contingent individuals that responded to the survey are satisfied with their careers. The contingent workforce surveyed had the same educational background, were interested and passionate about the careers, and were as satisfied as the direct employees with the status of their careers.

The contingent workforce is a tremendous asset that works along with the direct employees to complete the challenges of the organization. A study was conducted within the telecommunications industry in 1998 to both direct and contingent individuals within an

organization to measure comparative levels of employee motivation. This study found that contingent workers had higher motivational scores, and scored higher in task identity and feedback from the job (Allan, 1998). These findings indicate that the contingent workforce is a rich source of motivated workers.

Allan (1998) suggests that because the size of the contingent workforce is expected to rise sharply, that a flexible organizational model be instituted. The increasing cost of employee medical and retirement costs will eventually make the contingent employee a much more attractive option. The flexible organizational model consists of a core of permanent employees, technicians, managers, who possess the competencies that distinguish the organization from others (Allan, 1998). Supplementing this specialized core group with contingent workers will allow the organization to work better, for less without the legacy costs that hamper profitability within the automotive industry today.

Recommendation 4: Further Research. Further research is necessary to identify the organizational strengths that can be gleaned from the information gathered through this case study. The reasons behind the high levels of career satisfaction could be drawn out through a series of interviews with selected direct and contingent employees. These higher than expected levels of career satisfaction occur within an organization where layoffs happen yearly, where the employees are constantly asked to do more with less, and where the business competitive forces are demanding more creative ways of doing business. The reasons behind these high levels of career satisfaction, within an industry that is undergoing such dramatic change, need to be understood so that the benefits can further improve productivity and positively influence society.

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APPENDIX A

Career Orientations Inventory

Use the following scale to rate how true each of the items is for you:

Never true for Me	Occasionally True for Me	Often True for Me	Always True for Me
1	2 3	4 5	6

_____ 1. I dream of being so good at what I do that my expert advice will be sought continually.

_____ 2. I am most fulfilled in my work when I am able to integrate and manage the efforts of others.

_____ 3. I dream of having a career that will allow me the freedom to do a job my own way and on my own schedule.

_____ 4. Security and stability are more important to me than freedom and autonomy.

_____ 5. I am always on the lookout for ideas that would permit me to start my own enterprise.

_____ 6. I will feel successful in my career only if I have a feeling of having made a real contribution to the welfare of society.

_____ 7. I dream of a career in which I can solve problems or win out in situations that are extremely challenging.

_____ 8. I would rather leave my organization than to be put in a job that would compromise my ability to pursue personal and family concerns.

_____ 9. I will feel successful in my career only if I can develop my technical or functional skills to a very high level of competence.

_____ 10. I dream of being in charge of a complex organization and making decisions that affect many people.

_____ 11. I am most fulfilled in my work when I am completely free to define my own tasks, schedules, and procedures.

_____ 12. I would rather leave my organization altogether than accept an assignment that would jeopardize my security in that organization.

_____ 13. Building my own business is more important to me than achieving a high-level managerial position in someone else's organization.

_____ 14. I am most fulfilled in my career when I have been able to use my talents in the service of others.

_____ 15. I will feel successful in my career only if I face and overcome very difficult challenges.

_____ 16. I dream of a career that will permit me to integrate my personal, family, and work needs.

_____ 17. Becoming a senior functional manager in my area of expertise is more attractive to me than becoming a general manager.

_____ 18. I will feel successful in my career only if I become a general manager in some organization.

_____ 19. I will feel successful in my career only if I achieve complete autonomy and freedom.

_____ 20. I seek jobs in organizations that will give me a sense of security and stability.

_____ 21. I am most fulfilled in my career when I have been able to build something that is entirely the result of my own ideas and efforts.

_____ 22. Using my skills to make the world a better place to live and work is more important to me than achieving a high-level managerial position.

_____ 23. I have been most fulfilled in my career when I have solved seemingly unsolvable problems or won out over seemingly impossible odds.

_____ 24. I feel successful in life only if I have been able to balance my personal, family, and career requirements.

_____ 25. I would rather leave my organization than accept a rotational assignment that takes me out of my area of expertise.

_____ 26. Becoming a general manager is more attractive to me than becoming a senior functional manager in my current area of expertise.

_____ 27. The chance to do a job my own way, free of rules and constraints, is more important to me than security.

_____ 28. I am most fulfilled in my work when I feel that I have complete financial and employment security.

_____ 29. I will feel successful in my career only if I have succeeded in creating or building something that is entirely my own product or idea.

_____ 30. I dream of having a career that makes a real contribution to humanity and society.

_____ 31. I seek out work opportunities that strongly challenge my problem solving and/or competitive skills.

_____ 32. Balancing the demands of personal and professional life is more important to me than achieving a high-level managerial position.

_____ 33. I am most fulfilled in my work when I have been able to use my special skills and talents.

_____ 34. I would rather leave my organization than accept a job that would take me away from the general managerial track.

_____ 35. I would rather leave my organization than accept a job that would reduce my autonomy and freedom.

_____ 36. I dream of having a career that will allow me to feel a sense of security and stability.

_____ 37. I dream of starting up and building my own business.

_____ 38. I would rather leave my organization than accept an assignment that would undermine my ability to be of service to others.

_____ 39. Working on problems that are almost unsolvable is more important to me than achieving a high-level managerial position.

_____ 40. I have always sought out work opportunities that would minimize interference with personal or family concerns.

Please Read
At this point, look over your answers and locate all of the items that you rated highest. Pick out the THREE items that seem most true for you and give each of those items an additional FOUR (4) points.

APPENDIX B

Demographic Information Survey

Directions: Please put an X in the appropriate response and return this questionnaire to the location identified in the cover letter. Please do not return the questionnaire to anyone directly because anonymity is a requirement. Thank you for your cooperation.

Demographic Information
Please mark the appropriate response.

Years employed at/for Micro Motors	Education (completed)	
0-5 years	High School graduate	
6-15 years	Some college	
16-25 years	Bachelor's degree	
26-35 years	Graduate degree	
> 36 years	Other:	

Please mark the appropriate response.

Years at current position	Respondents Age	
0-1 year	18-25 years of age	
2-4 years	26-40 years of age	
5-10 years	41-60 years of age	
> 10 years	> 61 years of age	

Employment (Please mark the appropriate response)

	Currently working for Micro Motors
	Currently working as a contract worker within Micro Motors

	Male		Do you have an Engineering Degree? Y/N
	Female		Are you serving in an Engineering capacity? Y/N

Questionnaire

Career Satisfaction - Career satisfaction relates to the individual's overall satisfaction of their career. Not one specific job or position, but the satisfaction of their overall career choice.	Very Much	Somewhat	Not Applicable	Only a little	Not at all
1 Identify your current level of career satisfaction. (This question refers to your current area of responsibility)	☐	☐	☐	☐	☐
2 Are you passionate about your current career?	☐	☐	☐	☐	☐
3 Are you working outside of your area of real career interest?	☐	☐	☐	☐	☐
4 Is working in an area of interest or passion important in a career choice?	☐	☐	☐	☐	☐

Please add any additional comments:

_____
_____
_____
_____

Thank you for your assistance with this survey

APPENDIX C

Letter of Introduction

Dear Participant:

My name is Johnny Vanneste and I am a Doctoral Candidate at Capella University. As part of my research, I am examining different aspects of career satisfaction. I would like to invite you to participate in this research study by completing the attached questionnaire.

The questionnaire will require approximately twenty minutes or less to complete. There is no compensation for responding nor is there any known risk. Completion of this survey is voluntary, and is greatly appreciated to help complete my study. In order to ensure that all information will remain confidential, please do not include your name or any other designation that would reduce the confidentiality of this document. Your responses will be kept anonymous, no specific individuals will be identified in the study's findings, and your measured information will never be linked to you personally. Once you have completed the questionnaire, please place the questionnaire into the mailing envelope provided, and send your response within two weeks to the mail code location indicated on the envelope.

Your decision whether or not to participate will not affect your current or future relations with the company. If you choose to participate in this project, please answer the questions as honestly as possible. Participation is strictly voluntary and you may refuse to participate at any time. Your return of the questionnaire will indicate your willingness to participate in this study. The data collected will be used exclusively for this study. The questionnaires will be retained in a filing cabinet in a secure location. If you would like a copy of the compiled data, please communicate your request to the address identified below.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding the levels of career satisfaction and the motivators for that career satisfaction. If you require additional information or have any questions regarding the questionnaire, please do not hesitate to contact me.

Sincerely,
Johnny Vanneste
Doctoral Student
Capella University

APPENDIX D

Table D1a: Career Orientations Inventory Results

		Never true for me.	Occasionally true for me.		Often true for me		Always True for me	No Response
	Numeric Value	1	2	3	4	5	6	
1	I dream of being so good at what I do that my expert advice will be sought continually.	6%	18%	14%	18%	31%	13%	0%
2	I am most fulfilled in my work when I am able to integrate and manage the efforts of others.	4%	12%	7%	39%	23%	14%	0%
3	I dream of having a career that will allow me the freedom to do a job my own way and on my own schedule.	3%	12%	19%	18%	24%	23%	0%
4	Security and stability are more important to me than freedom and autonomy.	4%	16%	22%	27%	19%	12%	0%
5	I am always on the lookout for ideas that would permit me to start my own enterprise.	20%	33%	17%	18%	5%	6%	0%
6	I will feel successful in my career only if I have a feeling of having made a real contribution to the welfare of society.	11%	28%	21%	18%	15%	7%	0%
7	I dream of a career in which I can solve problems or win out in situations that are extremely challenging.	2%	7%	12%	27%	37%	15%	0%
8	I would rather leave my organization than to be put into a job that would be compromise my ability to pursue personal and family concerns.	3%	14%	17%	21%	27%	18%	0%
9	I will feel successful in my career only if I can develop my technical or functional skills to a very high level of competence.	3%	9%	7%	26%	30%	26%	0%
10	I dream of being in charge of a complex organization and making decisions that affect many people.	16%	17%	21%	21%	20%	4%	0%

APPENDIX D

Table D1b: Career Orientations Inventory Results

	Never true for me.	Occasionally true for me.		Often true for me	Always True for me	No Response
Numeric Value	1	2	3	4	5	6	
11 I am most fulfilled in my work when I am completely free to define my own tasks, schedules, and procedures.	3%	7%	14%	30%	34%	12%	0%
12 I would rather leave my organization altogether than accept an assignment that would jeopardize my security in that organization.	11%	26%	32%	10%	18%	4%	0%
13 Building my own business is more important to me than achieving a high-level managerial position in someone else's organization.	32%	40%	16%	5%	4%	2%	0%
14 I am most fulfilled in my career when I have been able to use my talents in the service of others.	2%	5%	11%	30%	38%	14%	0%
15 I will feel successful in my career only if I face and overcome very difficult challenges.	3%	7%	23%	36%	27%	3%	0%
16 I dream of a career that will permit me to integrate my personal, family, and work needs.	6%	2%	10%	19%	24%	38%	0%
17 Becoming a senior functional manager in my area of expertise is more attractive to me than becoming a general manager.	14%	10%	17%	19%	21%	18%	1%
18 I will feel successful in my career only if I become a general manager in some organization.	33%	26%	21%	18%	2%	0%	0%
19 I will feel successful in my career only if I achieve complete autonomy and freedom.	29%	20%	26%	13%	12%	1%	0%
20 I seek jobs in organizations that will give me a sense of security and stability	7%	14%	27%	21%	21%	10%	0%

APPENDIX D

Table D1c: Career Orientations Inventory Results

		Never true for me.	Occasionally true for me.	Often true for me		Always True for me	No Response
	Numeric Value	1	2	3	4	5	6	
21	I am most fulfilled in my career when I have been able to build something that is entirely the result of my own ideas and efforts.	6%	20%	19%	32%	14%	9%	0%
22	Using my skills to make the world a better place to live and work is more important to me than achieving a high-level managerial position.	7%	16%	19%	28%	21%	9%	0%
23	I have been most fulfilled in my career when I have solved seemingly unsolvable problems or won out over seemingly impossible odds.	3%	6%	7%	30%	36%	17%	0%
24	I feel successful in life only if I have been able to balance my personal, family, and career requirements.	0%	4%	11%	10%	37%	38%	0%
25	I would rather leave my organization that accept a rotational assignment that take me out of my area of expertise.	26%	35%	17%	11%	9%	3%	0%
26	Becoming a general manager is more attractive to me than becoming a senior functional manager in my current area of expertise.	29%	24%	20%	13%	12%	1%	1%
27	The chance to do a job my own way, free of rules and constraints, is more important to me than security.	22%	20%	30%	17%	11%	0%	0%
28	I am most fulfilled in my work when I feel that I have complete financial and employment security.	2%	5%	19%	38%	20%	15%	0%
29	I will feel successful in my career only if I have succeeded in creating or building something that is entirely my own product or idea.	20%	28%	27%	16%	7%	2%	0%
30	I dream of having a career that makes a real contribution to humanity and society.	11%	27%	24%	19%	12%	7%	0%

APPENDIX D

Table D1d: Career Orientations Inventory Results

		Never true for me.	Occasionally true for me.		Often true for me	Always True for me	No Response
	Numeric Value	1	2	3	4	5	6	
31	I seek out work opportunities that strongly challenge my problem solving and/or competitive skills.	0%	7%	13%	33%	35%	12%	0%
32	Balancing the demands of personal and professional life is more important to me than achieving a high-level managerial position.	0%	5%	7%	20%	43%	24%	0%
33	I am most fulfilled in my work when I have been able to use my special skills and talents.	2%	3%	9%	18%	37%	31%	0%
34	I would rather leave my organization than accept a job that would take me away from the general managerial track.	34%	31%	21%	10%	3%	1%	0%
35	I would rather leave my organization than accept a job that would reduce my autonomy and freedom.	22%	19%	31%	21%	4%	2%	0%
36	I dream of having a career that will allow me to feel a sense of security and stability.	3%	9%	23%	21%	28%	16%	0%
37	I dream of starting up and building my own business.	30%	23%	16%	14%	11%	6%	0%
38	I would rather leave my organization than accept an assignment that would undermine my ability to be of service to others.	17%	32%	17%	20%	11%	3%	0%
39	Working on problems that are almost unsolvable is more important to me than achieving a high-level managerial position.	15%	12%	29%	17%	23%	4%	0%
40	I have always sought out work opportunities that would minimize interference with personal or family concerns.	6%	22%	22%	16%	21%	12%	0%

APPENDIX E

Demographic Information Survey Results

Directions: Please put an X in the appropriate response and return this questionnaire to the location identified in the cover letter. Please do not return the questionnaire to anyone directly because anonymity is a requirement. Thank you for your cooperation.

Demographic Information
Please mark the appropriate response.

	Years employed at/for Micro Motors	Education (completed)	
10%	0-5 years	High School graduate	5%
20%	6-15 years	Some college	43%
22%	16-25 years	Bachelor's degree	32%
27%	26-35 years	Graduate degree	20%
21%	> 36 years	Other:	

Please mark the appropriate response.

	Years at current position	Respondents Age	
8%	0-1 year	18-25 years of age	1%
25%	2-4 years	26-40 years of age	10%
37%	5-10 years	41-60 years of age	79%
30%	> 10 years	> 61 years of age	10%

Employment (Please mark the appropriate response)

80%	Currently working for Micro Motors
20%	Currently working as a contract worker within Micro Motors

86%	Male	Do you have an Engineering Degree? Y/N	30% Yes-70% No
14%	Female	Are you serving in an Engineering capacity? Y/N	87% Yes-13% No

Questionnaire

Career Satisfaction - Career satisfaction relates to the individual's overall satisfaction of their career. Not one specific job or position, but the satisfaction of their overall career choice.	Very Much	Somewhat	Not Applicable	Only a little	Not at all
1 Identify your current level of career satisfaction. (This question refers to your current area of responsibility)	46%	42%	0%	11%	1%
2 Are you passionate about your current career?	41%	35%	2%	20%	2%
3 Are you working outside of your area of real career interest?	8%	20%	3%	18%	51%
4 Is working in an area of interest or passion important in a career choice?	78%	16%	3%	2%	1%

Please add any additional comments:

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Thank you for your assistance with this survey