UNIVERSIDAD SAN FRANCISCO DE QUITO Colegio de Administración para el Desarrollo

MBTI Personality Test related to performance in the workplace and economic benefits to the firm

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Universidad San Francisco de Quito

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HOJA DE APROBACION DE TESIS

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Resumen

El propósito de esta tesis es encontrar la relación entre las personalidades de los empleados y su desempeño en las actividades laborales. En una empresa existen personas con diferentes personalidades. La personalidad es una guía que nos da información de cuál es el sentido en la vida del trabajador y cómo se ve influenciado su trabajo. A cada persona le motivan cosas diferentes; en el ámbito laboral se quiere identificar qué es lo que causa esta motivación dependiendo de las personalidades: si es el salario o el trabajo que desempeña a diario, o solo el hecho de disfrutar de las actividades que realiza, como también puede ser su motivación por el producto final o el valor que está entregando la empresa a la sociedad. Se puede también utilizar como una estrategia al momento de contratar personas en las compañías puesto que contiene pautas para analizar y descubrir si su personalidad se aplica al tipo de trabajo a realizar, y cuáles van a ser sus principales motivadores frente a su trabajo.

Abstract

The purpose of this investigation is to find the relationship between employee personalities and the effect on work performance. All enterprises have employees with different kind of personalities, this personality is a guide and shows us what the employee considers important and what not. Every human is motivated differently and in the labor area we want to know what actions or things motivates the most to the employees; it could be salary, the activities they perform or just the purpose of its work. This study can also be used in the hiring process of a company by analyzing the type of personality and if it will fit the position applied.

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1 Introduction

Personality is a combination of behaviors, attitudes and emotions that all together characterize a certain pattern on an individual's life. Personality is unique and everyone will have certain characteristics that distinguish among others. In this investigation we will focus on the theory of a well-known and distinguished author: Isabel Myers Briggs. She is the author and co-creator of a famous test that measures the personality of an individual called, the Myers Briggs Type Indicator (MBTI). Hi what is you name

Many businesses have been doing this shit

By using this tool, we will find out the test validity and usability with the cooperation of two firms; one controversial firm (ex. Tobacco company), and one common firm (ex. Telecommunication company). By giving the MBTI to the employees of these two firms we will find out if the personality type creates a bias towards preferences in selecting a certain type of job and how this affects the performance of the individual on the daily basis.

As there are lots of possible combinations on the MBTI test, we decided to focus just on the two ways of perceiving things: Sensing and Intuition. For analyzing the two variables described above, we will use a 2nd test provided by Dr. Gerald Finch called Purpose vs. Passion test.

2 Objectives

2.1 General Objectives

- 1. To learn about the MBTI, the origin and the possible uses.
- 2. To learn about personality types.
- 3. To take the MBTI test in controversial companies.
- 4. Differentiate the personalities among employees of a firm.
- 5. Determine the most relevant variables of personality to use them as the guide for our investigation (Sensing vs. Intuition).

2.2 Specific Objectives

- 1. To understand the different personality types and how they affect work.
- 2. To analyze our surveys and conclude if the hypothesis was right or wrong.
- 3. To discover the correlation between the personality types and their job tasks.

3 Hypothesis

Our hypothesis will try to determine if there is any correlation between the personality types using the MBTI test and their preference in selecting a company.

For this research, we used two firms. One firm was a controversial firm: (ex: tabacco or oil company). In this firm, we will conduct the Passion vs. Purpose Test, provided by Dr. Gerald Finch. Then, we will repeat the process incorporating the MBTI to top managers as well as the Purpose vs. Passion test to coworkers in specific departments.

We will repeat the first step taking the (Passion vs. Purpose Test) on a firm that has no issues with social responsibility referred as 'Normal firm'. This will be just a parameter to distinguish the differences in personalities that different type of firms have. The idea is to focus on the

controversial firm's results and try to determine if effectively, the personality interferes on the people's preference when choosing a company.

Besides, we will analyze possible motivational strategies for those employees who do not belong to the firm according to the personality type. (Ex. what motivates intuitive people in controversial companies as well as how to motivate sensing people in normal companies) and finally, we will observe what economic benefits the firm will obtain by having a good HRM/OB department.

The result should come up with higher percentages of "Purpose or mission" for the non-controversial firm, this type of people would show a higher percentage of intuition on their personality type results. The other result should reflect higher percentages of Processes and activities for the controversial firms. In this scenario people should show a higher percentage of sensing characteristics on their personality type results. We came up with the percentages of Sensing vs. Intuition by incorporating to the results the MBTI test.

4 History

It all began back in 1886 with two people, Katherine Cooks and Lyman Briggs. Katherine always cared about people's reactions, the similarities and differences among them. Because she had to live during World War I, she thought that the main problem was communication, and she decided to develop her own typology to analyze why there were so many problems and reactions during war. Katherine and Lyman had a child and they named Isabel. On her junior year she got married with Clarence Myers. Isabel kept studies with her mom and the main objective was to help people understand each other and avoid destructive conflicts. While doing research she found that there was some evidence already written about this topic, the author was Carl Jung, a Swiss psychotherapist and psychiatrist. Katherine and Isabel became very interested in Jung's

theory and they tried to apply it during Second World War, when men had to leave for war and women had to replace them in their industrial position commonly characterized by strenuous work. They started to think of a way to accommodate these women the best they could in order they feel comfortable with their position, and the filter was personality. At the time that Myers built an indicator, it was criticized by mathematicians and psychologists because Myers had no formal training in psychology or statistics (psychometrics). All she received was a little reinforcement from her family and some friends; she also persuaded countless school principals in Pennsylvania to allow her to test their students. Despite critics, she continued trying to reach as many people as possible through principals and deans. All this effort resulted in a better indicator.

In 1962 the test got important recognition from Institute of Personality Assessment and University of California. Professor Harold Grant of the Michigan State and Aurbun Universities and Dr. McCaulley of the University of Florida also undertook significant research with the type indicator.

In 1975 there was more support; indeed an association of users of the MBTI was created, by that time Isabel was 85 years old but she fought believing in MBTI until her final illness. During this time the indicator became probably the most widely used personality measure for non-psychiatric population. Around two million people take the Myers Briggs Type Indicator each year.

5 Biography

Isabel Briggs Myers was born October 18, 1897 and spent her childhood in Washington D.C. She didn't have the opportunity to go school, so her mother home-schooled Isabel. This was a tradition coming from their mother. She describes that the influence of her parents are the result of what she achieved in her life. "I grew up thinking that the greatest fun in the world was to find out something that nobody knew yet, and maybe you could dig it out."

Her mother was also home-schooled because in that time her father was on the faculty in Michigan State. In that time there was no school on campus, so their parents taught kids. That is the reason why Isabel received home schooling by her mother. She had the idea of doing things without any previous knowledge. That was her vision of the unknown world. She used this creation during her investigations and as an important factor for the creation of the indicator. She went to Swarthmore College, where she met Clearence Myers and fell in love with him. They lived all their life together for more than sixty years. Her husband Clarence assisted in the creation of the MBTI indicator. They got married in 1918 in Swarthmore, where Clarence practiced law. They had two children; Peter and Ann. She died after a surgery in 1972.

During World War II Isabel found a way to connect all the information she had about typology. She wanted to find the method for people to understand rather than destroy each other. With her observations she found out that people where taking jobs and hating their tasks; most of the activities they performed were against their core beliefs and values. With this opportunity she decided to give a practical use to all her research. For the next twenty years she worked according to her personality type, and working with her own experience, she used her

characteristics consciously. She spent lots of time scoring and analyzing data, investigating different cases to understand interests. She worked with the head of personnel of a bank in Philadelphia; Edward N. Hay. He let Isabel work with the banks personal, to analyze the work force of the company and to make some research about personality. She had the opportunity to test five thousand students from George Washington School of Medicine. Isabel observed students after twelve years, to see if their chosen specialties were according to their personality types. Her interest in health professions students was based on the future responsibility that would be on their hands. She hoped that using MBTI would help them to choose specialties most suited to their preferences and with their gifts. Isabel observed and analyzed her results during 25 years while she mastered her work. Different universities were working and implementing the MBTI instrument such as Michigan State University, University of Florida, and Educational Testing Service. They worked together with Isabel with the idea of creating a computerized MBTI system.

After several MBTI national conferences CPP, Inc. (People development People) in 1975 for the first time the MBTI instrument was available and ready to be used by the society. After several studies of improving the MBTI, Isabel developed a shorter form and redesigned a new scoring key. She managed to finish and public her book Gifts Differing. Before her dead she fought to validate her research at Auburn University, and to publish her research. During the last months of her life, she saw all her work with acceptance and appreciation. For Isabel, it was important to know that her research and the system she created would help millions of people in the world "I dream that long after I'm gone, my work will go on helping people." -Isabel Myers, 1979. Isabel Briggs Myers is the creator of the most recognized, most used, and highly respected personality test of all times. The Myers-Briggs type indicator mainly known as MBTI, is an

instrument used by more than 2 million people each year. It is translated to more than sixteen languages. This is an extremely useful tool and it is available for almost everyone in the world. Isabel and her mother Katherine Cook; worked together in a very thorough way. So they were able to analyze human behavior as related to personality. They were passionate in their research and combined their observations to create the MBTI exam. Isabel Briggs main purpose with all the studies and research was to create a theory of psychological type to a practical use. She recognized that human differences are invaluable, since every person in the world is different and at the same time observes the world in a special way. It is important to mention that every person has his or her own way of reacting under a certain circumstance. She worked to further improve MBTI for more than forty years, until her death. She was well known by her intelligence, curiosity, and generosity as well as for her interest in understanding society.

6 Personality Differences

We all know that everyone is different from each other, it doesn't matter how similar we look like or act; people think, and feel differently. Yet this doctrine of uniqueness cannot be proven exactly, but research with large groups has shown strong trends. Carl's Jung personality theory states, "The theory is that much seemingly chance variation in human behavior is not due to chance; it is in fact the logical result of a few basic, observable differences in mental functioning" (Myers, 1995)

Here is a chart of four of the preferences that we will be explaining and that will be discussed more in deep throughout this paper.

	Preference for	Affects a person's choice
EI	Extraversion vs. Introversion	To focus the dominant process on the outer world or on the world of ideas.
SN	Sensing vs. Intuition	To use one kind of perception instead of the other when either could be used.
TF	Thinking vs. Feeling	To use one kind of judgment instead of the other when either could be used.
JP	Judgment vs. Perception	To use judgment or the perceptive attitude for dealing with the outer world.

Table 1. Summary of the four preferences

There are two main processes to be executed by any stimulus given to a person. First, you need to perceive (the process of becoming aware of things, ideas people, etc...) that stimulus and the other process is how we are going to judge it (having certain conclusions about that stimulus). There is no particular order here, just mentioning the two main groups. These two main variables make up almost all the components of how a person handles its external environment. Saying it in simple words, perception is what you see, and judgment is what you do. Thus, changes in perception or judging will result in different behaviors.

According to Jung's theory, people can perceive things in two ways, they can either use their five senses or use their intuition; intuition is an indirect perceiving by which we unconsciously connect ideas and relate them to a certain stimulus. Every human since they born can use both types of perception, thus there is always a favorite one; as we grow up we unconsciously develop one skill more than the other and as the time passes we prefer using the developed skill because it makes us feel secure and more trustworthy, and that, consequently is going to change our general behavior to certain things like preferring activities that demand that skill rather than the other, and this will lead to see the world and life in a particular way. For example, a person who prefers sensing over intuition will be more focus on the present, on what is going on that moment, while on the other hand the intuitive person prefer paying attention to ideas that came up of nowhere but the feel they are important.

There are two ways people can perceive, and this is the SN preference, S for sensing and N for intuition. There are also two ways a person can judge, the first one involves the process of thinking, while the other uses feeling. As with the SN preferences, this works similar. The individual will feel more comfortable in situations where he or she can apply its preferred way of judging and will most of the time trust this opinion rather than the less developed and often will be wholly disregarded. For example, a person who prefers thinking will first analyze all the facts that came to that result and after that, he or she will conclude to something; in the other case the person that preferred the feeling, will focus on appreciation like if he was pleased, unsatisfied, sad, etc... The preference of the personal or impersonal approach of life results in distinguish this preference; TF, T for thinking and F for feeling.

6.1 Four Possible Combinations

Out of all these preferences we can combine them and obtain four possible combinations:

- ST: Sensing + Thinking: Uses senses to perceive and thinking to judge. Facts taken by
 this kind of personality are analyzed through impersonal analysis because they trust in
 thinking. Economics, law, surgery and accounting are some areas where ST people could
 feel comfortable.
- 2. SF: Sensing + Feeling: Uses senses to perceive and feeling to judge. Decisions are taken with personal warmth because they consider feelings about them and others. They are focused with people more than on things and tend to be friendly. Pediatrics, nursing, teaching (elementary) are areas most likely to succeed in.
- 3. **NF: Intuition** + **Feeling**:_Intuition to perceive and feeling to judge. They do not center their attention on concrete or actual thinks, he or she tries to discover new things around them and possess the same personal warmth with other people as SF. NF people have a gift of communicating with others, they are enthusiastic and insightful. College teaching, advertising, writing and research are good areas for these people.
- 4. **NT: Intuition** + **Thinking:** Intuition to perceive and thinking to judge. These people use their ideas and try to explain them by theory. These people tend to be ingenious and logical. Scientific research, mathematics, physics are some areas of comfort.

All of these possibilities result in a different personality which is going to prefer certain types of things, values, needs, reactions, impressions, attitudes, etc... We can say that people that have some or same variables will have similar yet not identical personalities; they will share some thoughts and behaviors as well as having some other different. It is important to say that people sharing a variable will understand him or her better than to a person that has completely other

variables. We can say that person ST will understand better a SF or NT but not a NF. So we have to pay attention for example to coworker's personality preferences, because the possibilities of confronting someone is higher if as I said the variables among them do not match at all; this will result in a hostile and unfriendly environment, that probably means less productivity for all the area and company. Same situation can appear with family or even friends. From now on, we have to understand where the problem is coming from, and it does not matter is the way perceiving or judging the thing that is causing the misunderstood, you always have to try to solve it. One important think learned here is that in terms of business we should try to find a job that fits our personality preferences so we avoid unnecessary conflicts with others.

Now that we understand in a better way perceiving and judging, we can add another variable that will let us specify a person in a better way. Those variables are Extraversion and Introversion. As we know by introversion we refer to the people who focus on the inner world of concepts and ideas and the opposite would be extroversion; focus on the outer environment. As with the other variables, an individual will prefer one of these two and feel more comfortable choosing it. Obviously the EI (extroverted/Introverted) preferences are independent from the others so the combination could be with all of the four pairs.

Finally, we have one decision left, the JP preference (Judgment/Perception). This is more a way of living, whether you judge or perceive (wait until all information make sense to you). In all problems you have to choose how to act, you cannot choose both; you must use just one attitude at a time. It does not mean you have to use that decision in all your problems, indeed you actually can switch between them depending on the situation but as I said before, because it is a

way of living, in that moment you do not really think about it, and you just react according to your formation through life.

With all these preferences, a person is going to have a certain type of personality, for example, one might be ESTF, while other INTP. In this example, someone can say that these two persons are completely different but some can argue that they might not be as much as different as it looks because each of these preferences has a dominant preference. Explaining our example, we can say that the first person could have slightly preference to extroversion while the second person can have a slightly preference to introversion. As we can see these two people aren't as far as we thought at first sight. We always have to consider the intensity of each preference. The author in these cases, recommend that, knowing your dominant preference, you need to develop it to the point where it clearly dominates the other. Some authors don't like this idea of a dominant preference and argue that most people use all 8 preferences equally; however if you think about it, you have higher probability of doing 1 thing right rather than two things right. For example, if someone has to study for final exams, it is not the same to give 1 exam each day than taking 3 exams the same day as well. Possibilities that you master those 3 exams are going to be very low; in the other hand, the person who just took 1 exam a day is going to do much better. Same thing happens with preferences, if someone prefers thinking over feeling and according to critics he uses both of his or her preferences, neither are going to be developed, thus according to the author, these people are going to have "primitive mentality". If a person wants to be really effective, he or she must concentrate in establishing sovereignty over the different preferences.

Although, this dominant preference is necessary to develop, this does not mean that you need to forget about the counterpart, because this less developed characteristic is going to be your helper

and it is denominated auxiliary process. This auxiliary process is going to be used in unimportant situations. So on a daily basis, you are going to require both for dominant and auxiliary processes, you will be using your dominant preferences most of the time, but in situations you will need to stop using it and rely over your auxiliary process, as the book says "Auxiliary carries the main burden of supplying adequate balance" (Gifts Differing 12).

To find which process is the dominant we need to clarify if someone is either introvert over extrovert and uses judging or perceiving. Saying that the author comes up with this chart:

	ST	SF	NF	NT
IJ	I <u>S</u> TJ	I <u>S</u> FJ	I <u>N</u> FJ	I <u>N</u> TJ
IP	IS <u>T</u> P	IS <u>F</u> P	IN <u>F</u> P	IN <u>T</u> P
EP	E <u>S</u> TP	E <u>S</u> FP	E <u>N</u> FP	E <u>N</u> TP
$\mathbf{E}_{-} \mathbf{J}$	ES <u>T</u> J	ES <u>F</u> J	EN <u>F</u> J	EN <u>T</u> J

Table 2: Which process is dominant?

As we can see, extroverted people preferring judging over perceiving are going to determine his or her dominant preference in the 3rd letter of the personality type, this is either thinking or feeling. If the extroverted prefer perceiving over judging their dominant letter will be sensing or intuition.

7 Working with Opposites

Every person is different starting with their physical appearance and most importantly in their personalities. It is essential to mention that people look and value things in the way that seem natural to them. Humans would observe things in their own way, from a different point of view compared to someone else, at the same time in any situation between humans they would not be

in the same direction with their thoughts, opinions, and the ways of observing the position. The moment when making decisions people can differ themselves depending on their actions, and the process. You can observe if this person is a thinker or a feeler.

In the case of a thinking personality, it would be more important to add more weight on the objective principle and more emphasis on the impersonal facts. For thinkers, there is a lack of logic in a feeling type; their action is to underrate the others judgment because it appeared not to be logical. They distrust their own feeling's since they consider their own feeling erratic, in this way thinkers try to keep their feeling's out of any decision. At the same time, they assume that other people's feelings are unreliable.

In the other hand, there is the feeling type, which has a more skilled kind of judge. It is important to mention that a sensing person does not handle ideas intuitively. In this situation they tend to underrate the others' perceptions. Feelers rely on the superior gasp of realities; they are inclined to disturb all intuitive inspirations, since their own undeveloped intuition does not bring them such value. They believe they can take the best decision taking into consideration what people care about and analyzing the points of view of the group involved in a specific situation. For feelers are concerned with values and with what the best for the group is involved. They try to maintain things with harmony, care about others concerns, and about what is important for the rest. Most of feelers analyze different situations with their heart, and by being compassionate.

These two types of personalities are opposites. There is a common saying about people with opposite personality types, expressing that opposites attract each other. It is true; opposites in most of the cases should supplement each other. In certain circumstance, it would be very

convenient to have an opposite approach to a problem, since one person observes things in a thinker way, and the other, the feeler would observe things considering more the humanity and trying to keep harmony. It would be useful to expose what has been overlooked. It is important to find a balance in all the combinations between opposites, because it could make working together a difficult task. It is important to understand each point of view. These people might have to identify the preferences they have in common, so they would be able to understand each other and to find the correct way of communication. In any organization, the communication between co-workers is essential. In cases where workers don't recognize the differences in type, and at the same time they are not aware of their personality preferences, communication could be impaired.

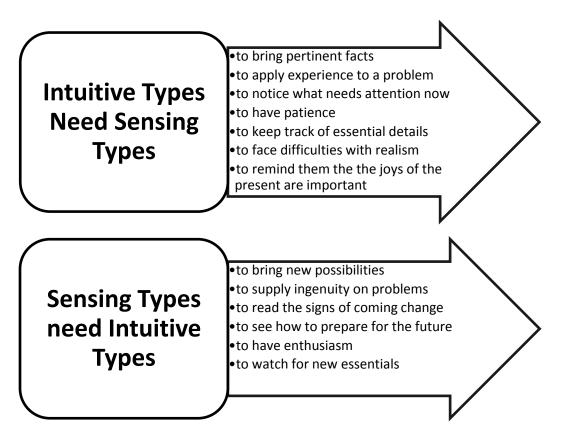


Table 3: Opposites

8 Applying MBTI to Work

The Myers Briggs Type indicator is commonly used by companies and organizations all around the world. This instrument demonstrates different personalities, for instance, it provides a structure where it is described differences between type personalities. This is a useful tool to understand and identify individual differences, preferences, attitudes and more personality characteristics. MBTI in a company provides a model of individual development. So it helps to understand the employees and it would help to predict how workers would react with a certain situation. Using this important tool in daily basis would help the organization to know how to arrange work teams that would be able to work together and at the same time would bring a positive outcome to the problem, and solutions to diverse situations.

Using personality type in an organization can create a support system; this could be implemented in different functions, activities and also situations. This tool is very versatile and applicable to any kind of process and also in any kind of company. It is important to understand your own type preferences and at the same time knowing the team work type preferences. This is important because it would give hints to understand others. Understanding preferences helps to approach the work in a manner that would best fit the person's style, and it is a tool to understand other opinions and points of view. In any situation, there are different perspectives of opinions, most of the times it is complicated to understand others points of view, and accepting them as valid options and for problem solving. Knowledge about type personality can be a powerful tool to deal with culture differences at the work place.

Having control over our own personality and being able to understand others would develop new skills as well as understand how to create and maintain a positive work environment. It is important to manage a constructive work environment where people feel free to express their opinions, where all ideas are heard and respected in the same way, as a result to succeed with a positive interaction with all colleagues. Depending on the work position and the activities that one individual have to perform in their daily basis, it is important to apply the personality type, and it would help to understand what coworkers expect from this person, and what their superiors expect, too. Managing type personality would help to interact and communicate with the customers or people related in the daily work activities. Personality type is a useful tool for applying, not only to the activities of a company, but to our personal lives, and also to professional development.

Applications	Managing others
	Develop leadership skills
	Organizing tasks
	Creation and management of teams
	Training
	Conflict resolution
	Motivation

Table 4: Applications of MBTI

Nowadays, there are some companies throughout the world that are using the MBTI method, to improve internal and external systems. This instrument is useful to create and to improve communication among workers, to develop general managerial applications, and desire for employees to remain working in the company. In the table below there are listed some common MBTI applications that could be used in any company.

8.1 Leadership

It is important to find an implementation method to show the workers how things would change, and clearly explain the purpose of all the new system. In companies that have used this method, the results showed that people start showing their abilities and sharing with others. Employees discovered new characteristics that could be used in their work activities, as well as in their personal life. The moment that people understand their personalities and how to communicate and interact with others, employees can discover some characteristics that they already had, but haven't used them. It is complicated to create good working teams, since most of the times it is difficult to work with people, because of differences in personality, ways of thinking and communication problems. When companies understand these problems and find a viable solution, by using the MBTI they give tools of communications and how to understand others, managing differences in capabilities, and primarily understanding their own personality. In working teams, there would always exist potential leaders, where they would reinforce their capabilities to guide the group. The use of personality type would show a better way to guide people, create and improve communication systems, and to achieve the expected and the established goals. Real leaders achieve objectives because people believe in what they do. Great leaders know how to organize groups, teach and show how things have to be done, and most important they share responsibilities and believe in their group.

To achieve positive outcomes is also important to create a bond with the group, where all the members feel involved with the task, understand the main purpose and are willing to give the best from them to realize the common objective.

8.2 Physiological Preferences at Work

Personality is an important characteristic that would influence the success at work. People should be coincident about their personality at the moment to choose the type of work and the company that would best suit to each individual. It depends on their preferences as well as their personality type. Managers and colleagues assume what is going to be the ability of a person to perform a specific duty, based in what they know and understand from their personality. It is possible to control some aspects of personality to be successful at work. When choosing your job each person would take a decision depending on his or her preferences and characteristics supported by the personality.

Interaction is an important characteristic to take into consideration when choosing a job position, since it is important to identify the different attitudes people use to direct their energy to the outer world. These physiological preferences are the extroverted or introverted personalities. Extroverted people prefer to work with large groups, spend time in the outer world, getting involved in events and having lots of different activities, enjoy big groups and socializing with people. Normally, extroverted personalities in their work places and in life understand a problem better when they can discuss with large groups and when they can talk it out loud having interactions with the rest of the group. For an extroverted person, it is easier to work in teams, talking about problems, expressing their opinions and at the same time they are opened to hear what others have to say. Extroverted people might prefer careers where they would have high levels of interaction, like executive management, training and development, customer service, selling activities, etc.

In the other hand, there are the introverted personalities, which get their energy from dealing with ideas, images, pictures, memories, and reaction coming from the individual, and his or her inner world. Introverted often prefer doing things alone or in small groups. In their work activities they take time to organize their ideas and processes. They are more reflective, reserved; they enjoy working and solving problems alone or in small groups. Introverted people would prefer to choose a company and a job position where they working alone, such as scientists, analysts, factory workers, writers, and more.

The second preference, sensing or intuition determines the method by which information comes to a person. People with sensing as their psychological preference pay more attention to the information coming from their five senses. In this case, they live in the present and pay attention to the physical reality, to what they are feeling with their five senses. In their work development and also in their personal life, they live in the present and what is happening now in their reality. People with this characteristic prefer to do jobs related to practical things, are more interested in the general idea than in the details. They follow established procedures, plan actions in advanced, they rely on personal experiences. They limit their attention to facts and to solid data. Sensors focus their attentiveness in what is immediate, practical and real. They live life as it is; they are not willing to change the world.

In the opposite side there are the intuitive personalities. They pay more attention to the possibilities and patterns in life coming from the information they receive. A person with intuitive personality pays more attention to impressions and the meaning behind it. They take more time analyzing and thinking in the possibilities. All their analysis is focused on the possible

consequences that would be seen in the future. They prefer to work with symbols and abstract theories, and read things between lines. They like ideas and inspiration, their activities are focused to plan to change the world; their effort is directed to make changes in to future.

Thinking and feeling are other important factors that reflect personality at work. These preferences would show how individuals make decisions. Thinkers usually try to find the basic truth of the situation, when making a decision related to their job or personal; these individuals tend to analyze the pros and the cons of any situation, leading to a consistent and logical solution. Thinkers tend to be impersonal in their job, they do not allow their own problems or wishes to interfere with their decisions, and at the same time, they aren't influenced by others opinions and perceptions. This characteristic would make people find logical explanations and solutions to problems. The decision process would be based analysis, truth and fairness. People with this personality would enjoy working in technical and scientific fields, problem solving, critical thinking and innovation.

Additionally, there are the feelers; this personality preference is more inclined to care about others, their opinions and their principles. They understand more other points of view of persons involved in the situation. They are concerned about people, and try to find a method to benefit the entire group. This personality preference tends to maintain harmony, good relationships, care about others, and tactful. In job matters feelers have great communication skills and like to maintain communication methods with the work team. They fight and look for others concerns and preoccupation.

The last of the fourth psychological preferences is judging and perceiving. This pair describes how a person would like to live his or her outer life, and how to show and demonstrate their behaviors to the rest. Judging personalities prefer a more structured and established life style. This personality focus on making decisions, this is because they want things to be decided. They tend to be structured and manage order. In their personal and professional development, they normally prefer to have things under control and to demonstrate to the rest how things have to be done in their lives, managing things and decisions in a settled and organized way. They need things and moments to be under control. In their work, they are extremely organized individuals, making to-do lists; they are task-oriented and need to complete tasks on time.

In contrast with judging, there are people who are more inclined by their personalities to being perceivers. These individuals prefer to have a different life style, more focused, flexible, adaptable and relaxed. This preference shows to the outer world spontaneity and flexibility in the individual. Persons with this personality prefer to understand the world and to find the method to adapt to it. They are more opened to more experiences and new information. In their professional development perceivers tend to be opened and inclined to improvisation. They like to explore possibilities and accept new ways and solutions.

9 Effect of the SN Preference

Part of our study is going to focus on sensing vs. intuition because these two variables can predict, according to the author, certain likes or dislikes that we are going to prove to have some impact on the development of their job; and therefore, the company will have a lower performance translated to lower profits. At the moment of hiring personnel, depending on the job, they have to analyze what type of preference they have. As we have mentioned above, sensing people will prefer actualities whereas intuitive people will rely on possibilities. On one

hand we have sensing people, who relies on their senses and prefers doing activities that they love to do, it doesn't matter if the company has a bad reputation or has no social responsibility. In other words, they do not care about the significance of the work they perform. They take time to analyze until they feel secure of displaying any conclusion.

On the other hand we have intuitive people, this type of people tend to rely on its creativity and imagination. They like paths where there is no route pre-established, they have to make their own path, so possibilities and chances of things to happen are endless. People working in enterprises that promotes empowerment, creation of projects, inventions, etc... are great options for these people. They do care about the significance of the work they are doing, as well as the challenges it gives and the ability to solve them. They could even do tasks not of their preferences only if they know that they are working for a mission according to their values. Here is a table provided by the book Gifts Differing that shows the different preferences of

Sensing types and intuitive types:

Sensing Types	Intuitive Types
Face life observantly, craving enjoyment.	Face life expectantly, craving inspiration.
Admit to consciousness every sense	Admit fully to consciousness only the senses
impression and are intensely aware of the	impressions related to the current inspiration;
external environment; they are observant at the	they are imaginative at the expense of
expense of imagination.	observation.
Are by nature pleasure lovers and consumers,	Are by nature initiators, inventors and
loving as it is and having a great capacity for	promoters; having no taste for life as it is, and
enjoyment; they are in general contented.	a small capacity for living as it is, and a small

capacity for living in and enjoying the present, they are generally restless.

Desiring chiefly to possess and enjoy, and being very observant, they are imitative, wanting to have what other people have, and do what other people do, and are very dependent upon their physical surroundings.

Desiring chiefly opportunities and possibilities, and being very imaginative and original, indifferent to what other people have and do, and are very independent of their physical surroundings.

Dislike intensely any and every occupation that requires the suppression of sensing, and are most reluctant to sacrifice present enjoyment to future gain or good. Dislike intensely any and every occupation that necessitates sustained concentration on sensing, and are willing to sacrifice the present to a large extent since they neither live in it nor particularly enjoy it.

Prefer the art of living in the present to the satisfaction of enterprise and achievement.

Prefer the joy of enterprise and achievement and pay little or no attention to the art of living in the present..

Contribute to the public welfare by their support of every form of enjoyment and recreation, and every variety of comfort, luxury and beauty.

Contribute to the public welfare by their inventiveness, initiative, enterprise, and powers of inspired leadership in every direction of human interest.

Are always in danger of being frivolous, unless balance is attained through development of a judging process.

Are always in danger of being fickle, changeable, and lacking in persistence, unless balance is attained through the development of a judging process.

10 Motivation

Motivating employees is a complicated task in an organization. Since each employee is different, they have different interests, and are influenced by distinctive factors. It is important to have a continuous motivation in any organization, since employees are the most important component of a company. Having a motivated labor force is essential to have positive results. "Motivation is the process that initiates, guides and maintains goal-oriented behaviors. Motivation is what causes us to act." (Cherry, 2013). There are three principal components for motivation:

- Activation or Direction: Involves the decision to initiate a behavior, the choice to expend effort.
- **Intensity:** The concentration and the energy that is needed to achieve the goal, the choice of level of effort to expend.
- Persistence: Is the continued effort to achieve the goal, and also it includes getting over some obstacles. It is considered the choice to persist.

There are two different types of motivation, extrinsic and intrinsic. Extrinsic motivations are the ones that come from the outside of the individual. Extrinsic motivation is created by external factors, most of the times it involves economic rewards, social recognition, and praise. This type of motivation is crude, easy and often effective. When employees have good reactions with this kind of motivation, they would get used to respond to this incentive, however when the recompense method stops, employees would change their behavior and stop doing things as previously.

While intrinsic motivation is the one that arise from within the individual, purely for the personal gratification of problem solving. This kind of motivation moves people because the result of it

would cause them fun, and also because individuals thinks it is good or right thing to do. There are three needs that would lead to intrinsic motivation:

• Competence: Being successful in what to do

• Relatedness: bonding with others

• Autonomy: having the control of life

Getting people to share your purpose, to believe in the idea, and to have common values would create an intrinsic motivation in a group. Employees at work would be motivated by showing that they have autonomy and that they have the complete capabilities to perform and be successful in the assigned task.

10.1 What motivates employees?

In a general basis, we have two approaches that tell us what motivates employees:

- **Content Theories:** Emphasize the reasons for motivated behavior; consider factors that "drive" behavior.
- Process Theories: Focus on how behavior change occurs; how a person comes to act in a different way.

10.1.1 Content Theory

Job characteristic theory: It means that jobs are more intrinsically enjoyable when work tasks are challenging and fulfilling. For this, there are five core characteristics that can be manipulated in order to make some jobs more rewarding than others:

- Variety: Job has different activities and uses different skills.
- **Identity**: Job results in whole, identifiable piece of work.
- **Significance**: Job affects the lives of other people.
- **Autonomy**: Job holder has freedom and discretion.

• **Feedback**: The job itself provides feedback on performance.

These five core characteristics create three "critical psychological states:"

- **Meaningfulness of Work**: Belief that the job has a meaningful outcome.
- **Responsibility for Work**: Belief that worker controls the job outcome.
- **Knowledge of Results:** Worker is aware of the job outcome.

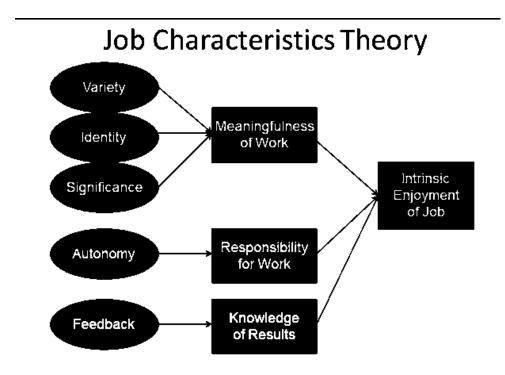


Table 6: Job Characteristic Theory

10.1.2 Process Theory:

Reinforcement Theory: It states that behavior is a function of its consequences.

To increase a frequency of behavior you could use:

- Positive reinforcement. :
 - o Desirable consequence follows a behavior.
- Negative reinforcement:

o Undesirable consequence is removed following a behavior.

To decrease frequency of behavior

Punishment

o Undesirable consequence follows a behavior. (ex. yelling at an employee)

Summary Table			
+ Reinforcement	\rightarrow	GIVE GOOD	
- Reinforcement	\rightarrow	TAKE BAD	
		GIVE BAD/TAKE	
Punishment	ent \rightarrow GOOD		

Table 7: Reinforcement Theory

Reinforcement Theory Schedules

- Continuous Reinforcement: A response is reinforced each time it occurs.
- Fixed-Interval Reinforcement Schedule: Reinforcement after a fixed amount of time.
- Variable-Interval Reinforcement Schedule: The period of time between reinforcement varies.
- **Fixed-Ratio Reinforcement Schedule**: A certain number of responses must occur before reward.
- Variable-Ratio Reinforcement Schedule: The number of responses necessary for reinforcement varies

These reinforcements need to follow certain characteristics in order to maximize their influence on behavior.

- Link rewards to behavior.
- Match the magnitude of the reward to the magnitude of the behavior.
- Reward after performance.
- Reward people with what they value.

11 Results

11.1 Purpose vs. Passion Test Only

Once taken all the surveys in the two different firms, we tabulate the surveys and got the following data about the Purpose vs. Passion Test.

Q1

Which would be more disagreeable to you:

- a) Spending every day at work doing things that you hate to do.
- b) Spending every day at an organization that has a purpose or mission that you do not respect

	Normal Firm	Controversia I Firm
a)	47%	47%
b)	53%	53%

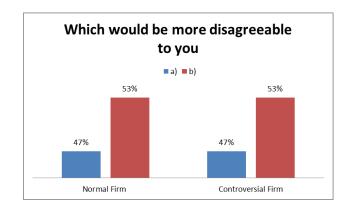


Figure 1: Purpose vs. Passion Test Q1

Which would make you feel the best

- b) Creativity is something you love and you are able to spend all day at work doing very creative things.
- c) Since you were a child you dreamed to working for an organization that is making a large and important difference in the world that you admire and you are working in this organization

	Normal Firm	Controversial Firm
c)	29%	45%
d)	71%	55%

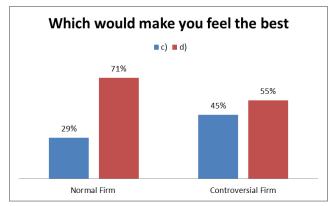


Figure 2: Purpose vs. Passion Test Q2

Q3

Which is more true

I wouldn't think of working in an organization doing work that I don't

- e) like
- f) I wouldn't think of working in an organization that does not have a morally defensible purpose according to my values

	Normal Firm	Controversial Firm
e)	39%	52%
f)	61%	48%

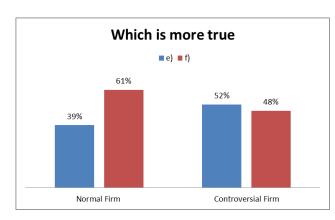


Figure 3: Purpose vs. Passion Test Q3

Which is more true

- g) I could dedicate my entire life to organizations that do a lot of good for people
- h) I could work in almost any organization if I spend my day doing what I love to do

	Normal Firm	Controversial Firm	
i)	41%	24%	
j)	59%	76%	

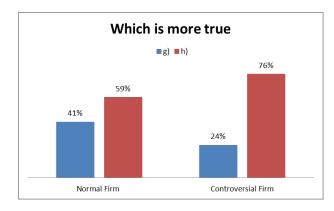


Figure 4: Purpose vs. Passion Test Q4

Q5

Which is more true

- i) For me it is more important to work in an organization where I can support my family, such as continuing my parents' business, or just earning enough money to support my own family very well
- j) For me, it is more important to do work that I love to do

	Normal Firm	Controversial Firm
i)	39%	52%
j)	61%	48%

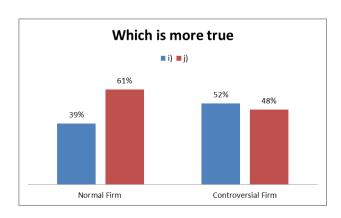


Figure 5: Purpose vs. Passion Test Q5

TOTAL:

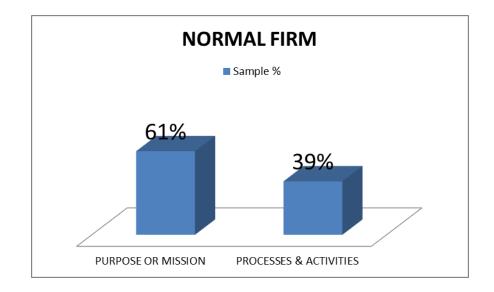


Figure 6: Purpose vs. Passion Test Total 1

		Sample %	Samples
NORMAL FIRM	PURPOSE OR MISSION	61%	305
	PROCESSES & ACTIVITIES	39%	195
		100%	500

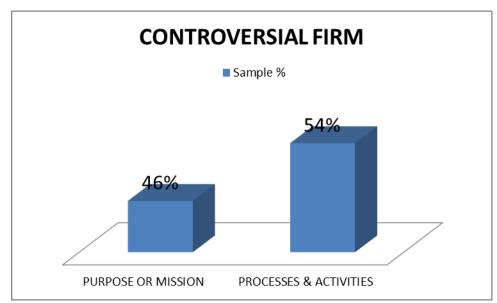


Figure 7: Purpose vs. Passion Test Total 2

		Sample %	Samples
CONTROVERSIAL	PURPOSE OR MISSION	46%	232
FIRM	PROCESSES & ACTIVITIES	54%	268
		100%	500

For a better understanding of the graphics, we have to mention the following:

Purporse or Mission	Processes and Activities
b	a
d	c
f	e
g	h
i	j
m 11 o r	

Table 8: Favorable answers

Purpose or Mission people related to the normal firm according to our hypothesis will prefer options b, d, f, g, i, while the processes and activities people related to the controversial firm according to our hypothesis will prefer options a, c, e, h, j.

Having clarified this, the controversial firm employees slightly preferred the same option as employees on the normal firm did. On Q2, the normal firm showed some strong results that employees choose the preference that was supposed to be; in this case there was a 71%. On the controversial firm, this came up as on Q1, the employees again selected the wrong answer for this question but the percentage of preference was low being this 55% vs. 45%. On Q3, employees on the normal firm, showed a moderate preference for the right choice being this 61%, and for the first time on the controversial firm we can see that the expected results came as we thought, but this preference is low being 52% vs. 48%. On Q4, we got some unusual results, the employees on both the controversial and normal firm chose the h option what indicates preference for sensing type. On the normal firm, the preference was 59% vs. 41% so the result did not match our expectations. On the other hand, the employees at controversial firm showed a high preference on the right question being this the highest percentage form all 5 questions, 71%.

Finally, on Q5 the results showed totally the opposite. But on the normal firm employees choose the wrong answer with a higher preference, than the employees on the controversial firm did.

Adding up all these numbers results came up to be positive. As we can see, the normal firm got the best results, from all the employees, 61% of them are purpose or mission thus intuitive personality dominates the personality type. This result confirms the theory that is behind personality types. On the other hand, on the controversial firm although there is no a high preference towards purpose or processes decisions, there is a slightly preference for processes and activities, that means that the majority of employees of this sample at this controversial firm confirms again the theory of our study.

11.2 Purpose vs. Passion Test + MBTI

As we established before, we focus again on the controversial firm, but now we are adding the MBTI test to our samples. The objective of adding this extra variable was to confirm that employees of a controversial firm would have a higher psychological characteristic of sensing on their personality type.

This time we took a 21 employees sample. We ask them to take the MBTI test combined with the Purpose vs. Passion test.

With this combination we tried to demonstrate that employees with sensing personalities would be more focused on their processes and activities rather than Purpose or Mission.

The results came up this way:

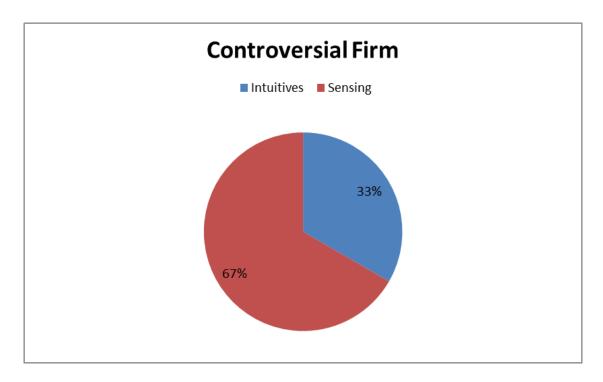


Figure 8: Controversial firm, Intuitive vs. Sensing

This graph demonstrates the total sample of employees in the chosen firm. As we exposed previously 21 employees took the MBTI exam. The results show that 33% of the firm has an intuitive psychological preference, and in the other hand we obtained that 67% of employees of the controversial firm had a sensing preference. This result contributed with our hypothesis, since we wanted to show that people with sensing preferences would be predominant in a firm with controversial characteristics. It is important to mention that in any organization there would be a combination of personalities, but depending on the purpose and mission of the organization there would be a most influential group.

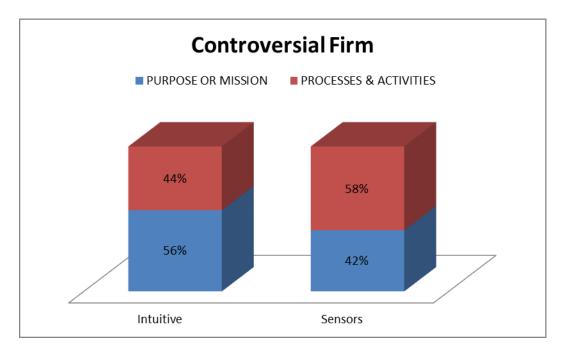


Figure 9: Controversial Firm, Purpose or mission vs. processes and activities

In this graph is shown the combination of the two exams, the MBTI as well as the Purpose vs. Passion tests. We took both of the exams to each individual; the purpose of this was to observe each individual based on its personality and combined it to their purpose and passion. The objective of combining these methods was to obtain information and to see if workers with an intuitive personality are inclined more to the purpose and the mission of the company. And in contrast with the employees with a sensor personality, they would prefer the process and the activities in the firm. The graph demonstrates that between employees with intuitive characteristics the 44% are more focused on processes and activities, while the 66% are concerned about the purpose and the mission of the firm.

The column at the right shows that between employees with a sensing personality, the 58% considers processes and activities better than the purpose and mission of the organization; opposed to the 42% who preferred and are inclined to the purpose and the mission of the firm.

12 Financial Benefits of a Well-Structured HR Department

There are case studies of successful companies (Fortunes 100 Bests 2010) and quantitative studies that prove it. One study found a "matched firm" for each of the 100 Best. Matched firms were similar in size and industry, but had never made the list. The 100 Best firms outperformed their matches over a five year period.

Execs in 968 firms responded to questions about their HRM/OB practices, Data on turnover, sales, and stock price were collected for all 968 firms, a one-standard deviation improvement in their question responses was associated with a 7% decrease in turnover, \$27,000 more in sales per employee, and an \$18,000 improvement in market value per employee.

Another study of Initial Public Offerings comes up with these conclusions:

The survival of 136 firms who initiated an IPO was tracked. Company mission statements and organizational documents were rated as a means of assessing the value placed on HRM/OB practices.

According to FORTUNES magazine, the MBTI instrument is used by more than 70% of their database companies. There is a nice clear example to show again the importance of a human resource department:

Due to the introduction of MBTI seminars, Ernst & Young's Regional HR Director, Nicki Jeffries, has seen quarter-on-quarter improvement in her division's performance, particularly in the key areas of leadership and desire to remain in the company — taking her division to the top of all E&Y national business units in its people performance.

"Since the introduction of OPP's MBTI seminars, survey results have shown quarter-on-quarter improvements in performance, particularly in the key areas of leadership and desire to remain

with the company. The improvements have been such that this division of Ernst & Young is top of all the national business units in its people performance. Focusing on these areas with OPP has made a real difference to staff morale and demonstrated that the partners care." (IDL, 2013)

Nicki Jefferies, Regional HR Director, Ernst & Young

13 Conclusions and Recommendations:

The MBTI is a well-known and useful tool that helps to recognize people's personalities, although some authors question its validity, it is still an important and respected method that can be used obtaining useful and reliable results.

Based on the two tests, the MBTI and the Purpose vs. Passion, we can conclude that people unconsciously have a preference of a job based on his or her personality. We could see on our results a positive relation with theory. On the controversial firm, we find a higher percentage of sensing people whereas in the normal firm we find out a higher percentage of intuitive employees. In addition to this we could confirm that on one hand the sensing types indeed preferred processes and activities and that intuitive people preferred purpose and mission firms. These results can also be interpreted as a good job on the human resources department in the process of recruiting and selection. We all know that happy people will outperform angry or unsatisfied employees in doing daily tasks at work; "although no job is perfect, it is easier to accept the imperfections cheerfully if the job gives workers the opportunity to use their preferred process" (Gifts Deferring, 1995).

An important point to mention is that either sensing or intuitive people are more or less intelligent. They both have their strengths and weaknesses, it all depends on the type of job they

are doing. HR department has the difficult task to create a heterogeneous group. In a simple way, if you have the best HRM practices in your industry, you will have the best people in your industry, and thus your company will be more profitable due to the good performance of employees.

It is important to keep in mind that any company depending on its type is going to be fully conformed of individuals that share its vision or purpose. As our results showed for example, figure 9 indicates the percentages of intuitive and sensing people on both controversial and normal firm. For those people who are sensing and are in a controversial firm is OK, as well as intuitive people working on a normal firm. The issue is to motivate the other half that does not necessary share the principles. In our case, figure 8 shows that a 33% percent of the sample on the controversial firm responded to be intuitive, this people will need to be motivated to stay on the firm; otherwise turnover ratio should increase and this means more costs.

It is essential to have different motivational systems in a company. Having programs and methods to get people involved with the purpose is a request for the good performance of all employees. For this, extrinsic and intrinsic motivation methods need to be used. There has to be a perfect combination of these two motivational methods to keep people in the company. For motivating intuitive people, for instance, we can use content theory, specifically Job characteristic theory to create a psychological stage of meaningfulness and responsibility of work as well as knowledge of results. An example of this could be that the controversial firm could implement new product projects and name head and responsible of the project to an intuitive person. Other approaches to fulfill intuitive requirements could be implementing empowerment in the work area, in this way intuitive people will feel more free to express themselves. Controversial firms that have intuitive employees should create a bond between them through

social responsibility programs. To create an intrinsic motivation, employees have to believe in the purpose of the action, and to be and feel part of the social program. With this method, they would be motivated and would have a good performance. It is important to connect them to the company so they would feel identity and significance feelings.

On the other hand, normal companies having employees with sensing personalities, would have to create processes and activities that they would enjoy performing. For example, activities can be focused on goal achievements. Reinforcement theory could help achieving great results in this type of people because this theory augments the frequency of behavior through manipulating employee's senses.

No matter the purpose of the firm, extrinsic and intrinsic motivation is important to employees. They need to know and to be recognized when they have made an effort on doing their work, feeling capable and being honored from their performance.

14 Bibliography

- 1980, t. t., & had, t. M. (n.d.). My MBTI Personality Type MBTI Basics Original Research. *The Myers & Briggs Foundation*. Retrieved February 10, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/original-research.asp
- Career Development Model Personality . (n.d.). *U.Va. University Career Services (UCS)*. Retrieved April 30, 2013, from http://www.career.virginia.edu/students/cdm/personality.php
- Changing minds and persuasion -- How we change what others think, believe, feel and do. (n.d.). Changing minds and persuasion -- How we change what others think, believe, feel and do. Retrieved January 12, 2013, from http://changingminds.org/
- Cherry, K. (n.d.). Motivation . *Psychology Complete Guide to Psychology for Students, Educators & Enthusiasts*. Retrieved May 4, 2013, from http://psychology.about.com/od/mindex/g/motivation-definition.htm
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Dee, M. (n.d.). Effective Team Building by Using MBTI Personality Strengths. *Ms Dee on HubPages*. Retrieved April 19, 2013, from http://ms-dee.hubpages.com/hub/Effective-Team-Building-by-Using-MBTI-Personality-Strengths
- Harris, N. (n.d.). How your personality affects your work Careers Advice jobs.ac.uk. *Jobs / Job Search | UK Jobs & International Vacancies Online jobs.ac.uk.* Retrieved April 29, 2013, from http://www.jobs.ac.uk/careers-advice/careers-advice/502/how-your-personality-affects-your-work
- Hitt, J. (n.d.). Focusing People on what matters. *Introducing the Myers Briggs Type Indicator (MBTI)*. Retrieved March 4, 2013, from http://evaapp.typepad.com/iabcuk/files/introducting_the_MBTI.pdf
- How can companies use the MBTI test? Task. (n.d.). *Task*. Retrieved January 20, 2013, from http://www.task.fm/MBTI-test
- Isabel Briggs Myers & Katharine Cook Briggs Biography. (n.d.). *Personality Tests and Type Profiles*. Retrieved May 8, 2013, from http://www.mypersonality-info/personality-types/isabel-briggs-myers-katharine-cook-briggs/
- Jefferies, N. (n.d.). 70% of Fortune 500 Companies use the MBTI Instrument | I4DL. *IDL*. Retrieved April 28, 2013, from http://www.i4dl.com/70-of-fortune-500-companies-use-the-MBTI-instrument/

- Media, D. (n.d.). Personality Assessment for Job Placement | Chron.com. *Work Chron.com*. Retrieved April 28, 2013, from http://work.chron.com/personality-assessment-job-placement-6470.html
- My MBTI Personality Type MBTI Basics. (n.d.). *The Myers & Briggs Foundation*. Retrieved January 10, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/
- My MBTI Personality Type MBTI Basics All Types Are Equal. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 3, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/all-types-are-equal.asp
- My MBTI Personality Type MBTI Basics Extraversion or Introversion. (n.d.). *The Myers & Briggs Foundation*. Retrieved March 14, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/extraversion-or-introversion.asp
- My MBTI Personality Type MBTI Basics Isabel Briggs Myers and Her Mother, Katherine Cook Briggs. (n.d.). *The Myers & Briggs Foundation*. Retrieved February 8, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/isabel-briggs-myers.asp
- My MBTI Personality Type MBTI Basics Judging or Perceiving. (n.d.). *The Myers & Briggs Foundation*. Retrieved February 20, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/judging-or-perceiving.asp
- My MBTI Personality Type MBTI Basics Sensing or Intuition. (n.d.). *The Myers & Briggs Foundation*. Retrieved February 8, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/sensing-or-intuition.asp
- My MBTI Personality Type MBTI Basics The 16 MBTI Types. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 24, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/the-16-MBTI-types.asp
- My MBTI Personality Type MBTI Basics Thinking or Feeling. (n.d.). *The Myers & Briggs Foundation*. Retrieved March 12, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/thinking-or-feeling.asp
- My MBTI Personality Type MBTI Basics Type Tables. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 12, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/MBTI-basics/type-tables.asp
- My MBTI Personality Type Understanding MBTI Type Dynamics The Auxiliary Function. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 19, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/understanding-MBTI-type-

- dynamics/the-auxiliary-function.asp
- My MBTI Personality Type Understanding MBTI Type Dynamics The Dominant Function. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 20, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/understanding-MBTI-type-dynamics/the-dominant-function.asp
- My MBTI Personality Type Understanding MBTI Type Dynamics The Fourth or Interior Function. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 22, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/understanding-MBTI-type-dynamics/the-fourth-or-inferior-function.asp
- My MBTI Personality Type Understanding MBTI Type Dynamics The Tertiary Function. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 21, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/understanding-MBTI-type-dynamics/the-tertiary-function.asp
- My MBTI Personality Type Understanding MBTI Type Dynamics Type Dynamics. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 16, 2013, from http://www.myersbriggs.org/my-MBTI-personality-type/understanding-MBTI-type-dynamics/type-dynamics.asp
- Myers, I. B., & Myers, P. B. (1995). *Gifts differing: understanding personality type*. Palo Alto, Calif.: Davies-Black Pub..
- Myers-Briggs Type Indicator (MBTI) Encyclopedia Business Terms | Inc.com. (n.d.). *Small Business Ideas and Resources for Entrepreneurs*. Retrieved March 15, 2013, from http://www.inc.com/encyclopedia/myers-briggs-type-indicator-MBTI.html
- Nash, D. (n.d.). Applying Type (MBTI) Lenses In Business. *EM-Power (UK) Ltd.*. Retrieved March 10, 2013, from http://www.em-poweruk.com/applyingtype.html
- Reinhold, R. (n.d.). Myers Briggs Personality Types. *Myers Briggs MBTI Personality Types | Personality Pathways*. Retrieved March 26, 2013, from http://www.personalitypathways.com/faces.html
- Sensing or iNtuition Preference. (n.d.). *Personality Tests and Type Profiles*. Retrieved February 20, 2013, from http://www.mypersonality.info/personality-types/sensing-intuition/
- Straker, D. (n.d.). Sensing vs. Intuiting. *Changing minds and persuasion -- How we change what others think, believe, feel and do*. Retrieved March 8, 2013, from http://changingminds.org/explanations/preferences/sensing_intuiting.htm
- Type Use For Everyday Life MBTI Type at Work. (n.d.). *The Myers & Briggs Foundation*. Retrieved April 28, 2013, from

 $\frac{http://www.myersbriggs.org/type\%2Duse\%2Dfor\%2Deveryday\%2Dlife/MBTI\%2Dtype\ \%2Dat\%2Dwork/}{}$

Type Use For Everyday Life - Personality and Careers. (n.d.). *The Myers & Briggs Foundation*. Retrieved May 2, 2013, from

http://www.myersbriggs.org/type%2Duse%2Dfor%2Deveryday%2Dlife/personality%2Dand%2Dcareers