An investigation into what conflict exists between IT Engineers and Salespeople in Medium-sized Technology Company in Ireland.

Is it process or personality based?

By

Sarah Dillon

A Dissertation submitted in Partial Fulfilment of a BA in Human Resource Management (Top up)

2015

Submitted to National College of Ireland, August 2015.

Abstract

This study investigates whether conflict between IT Engineers and Salespeople is as a result of company processes or personality clashes. This study was undertaken in an IT SME and a case study was conducted. Six interviews with long-term employees were given to three Salespeople and three Engineers. Theaim of the study was to identify personality traits of Engineers and Salespeople, to investigate the issues resulting in conflict in Company X, to understand the conflict management styles used by employees and to investigate the current processes to uncover possible downfalls.

Is it process or personality based conflict? This study found that the conflict in this organisation is personality based but it could be effectively and drastically reduced by improving processes and managing the personality differences of employees. It was proven that process is needed to combat personality conflict with each of the conflict descriptions given by employees easily prevented with processes. This study was the first of this topic investigated although a small contribution it has created a topic worth more investigation.

Submission of Thesis and Dissertation

National College of Ireland Research Students Declaration Form

Name: _____

Student Number: _____

Degree for which thesis is submitted:

Material submitted for award

I declare that the work has been composed by myself.

I declare that all verbatim extracts contained in the thesis have been distinguished by quotation marks and the sources of information specifically acknowledged.

My thesis will be included in electronic format in the College Institutional Repository TRAP (thesis reports and projects)

I declare that no material contained in the thesis has been used in any other submission for an academic award.

Signature of research student: _____

Date: _____

Library Submission

Submission of Thesis to Norma Smurfit Library, National College of Ireland

Student name:

Student number:

School:
Course:
Course:
Degree to be awarded:
Title of Thesis:

One hard bound copy of your thesis will be lodged in the Norma Smurfit Library and will be available for consultation. The electronic copy will be accessible in TRAP (<u>http://trap.ncirl.ie/</u>), the National College of Ireland's Institutional Repository. In accordance with normal academic library practice all theses is lodged in the National College of Ireland Institutional Repository (TRAP) are made available on open access.

I agree to a hard bound copy of my thesis being available for consultation in the library. I also agree to an electronic copy of my thesis being made publicly available on the National College of Ireland's Institutional Repository TRAP.

Signature of Candidate: _____

For completion by the School:	
The aforementioned thesis was received by_	
Date:	

This signed form must be appended to all hard bound and electronic copies of your thesis submitted to your school

Acknowledgements

To my Family, Boyfriend and Friends, for their encouragement and support throughout this year.

To my supervisor Ron Elliot for his support and advice in completing this dissertation. I would also like to thank Dr. Laura Costelloe for her writing guidance and advise.

To my Classmates for their inputs and ideas. They have been a motivation for me throughout the year, their helpful discussions and help was invaluable in this process.

To the participants in the Company X, Thank you for providing me with invaluable information which was vital for the fulfilment if aims in this dissertation.

Table of Contents

Abstract	1
Submission of Thesis and Dissertation	2
Library Submission	3
Acknowledgements	4
Chapter One: Introductions	7
1.1 Background to Dissertation	7
1.2 Research Question & Objectives	7
1.3 Outline of Thesis	8
Chapter Two: Literature review	9
2.1 Introduction	9
2.2 Personality Traits- 5 forces, Myers Briggs explanations	9
2.3 Test assumptions Sales	11
2.4 Test Assumptions Engineers.	12
2.5 Team Dynamics between Sales and Engineers	14
2.6 Conflict within teams. – Resolution, Personality based?	15
2.7 Conclusion	17
Chapter Three: Methods	18
3.1 Introduction to Research Methods	18
3.2 Research Aims and Objectives	18
3.3 Research Instrument	18
3.3.1 Research Paradigms	18
3.3.2 Research Methodology	19
3.3.3 Data Collection.	20
3.4 Research Design	21
3.5 Sample	22
3.6 Ethical Considerations	23
3.7 Summary	23
Chapter Four: Results	24
4.1 Introduction	24
4.2 Company Information	24
4.3 Findings and Analyses	25
4.3.1 Theme 1, Sales Personalities	25
4.3.2 Theme 2, Engineering Personalities	27
4.3.3 Theme 3, Team Conflict in Company X	28

4.3.4 Personalities or process?	. 30
4.3 Conclusion	. 31
Chapter Five: Conclusion & Recommendations	. 32
6.1 Conclusion	. 32
6.2 Limitations and Recommendations	. 32
References	. 34
Appendices	. 39
Appendix 1: Interview questions	. 39
Appendix 2: Engineer Interview Example	. 40

Chapter One: Introductions

1.1 Background to Dissertation

In recent years Ireland has experienced the worst recession since its formation and as a result of this companies began cutting costs and making saving where possible (Russell and McGinnity, 2014) Productivity has increased and costs have reduced in organisations who use teamwork. The combination of all team members' knowledge and experience it can often create creative debate and increase productivity and the quality of the work (Mattick and Millar, 2006).

With more and more companies adapting to the teamwork methods conflict can become an issue with individuals working so closely. There has been a problem with conflict in all Information Technology (IT) organisations in particular where Engineers and Salespeople work in these project teams (Carter, 2005). There has been little investigation into the reasoning behind this conflict and how it effects the morale within the organisation.

1.2 Research Question & Objectives

The aim of this research is to answer the following question:

An investigation into what conflict exists between IT Engineers and Salespeople in Medium-sized Technology Company in Ireland. Is it process or personality based?

The objectives needed to answer this question are as follows:

- Identify personality traits of Engineers and Salespeople
- To investigate the issues resulting in conflict in Company X.
- To understand the conflict management styles used by employees
- To investigate the current processes to uncover possible downfalls

There is a vast amount of literature relating to personality measurements and conflict management types but there is a gap in the literature relating to particular industries. The IT industry has historically had high levels of conflict yet there is no literature into the cause of this organisation behaviour. This dissertation aims to take the first step at filling in that gap.

This research proposes to discover the causes of conflict in the Small Medium Enterprise (SME) IT Industry. This is the first step to discovering the reasoning behind this conflict between Salespeople and IT Engineers. This will be achieved by interviewing six employees and by understanding their personalities and their attitudes towards their conflicting colleagues. These finding will then be compared to existing literature to find what similarities exist. Then conflict management styles will be discussed and the main areas for concern with regards to process for both Engineers and Salespeople. The structure of this research can be seen in the next section.

1.3 Outline of Thesis

This study is comprised of five main chapters followed by references of literature cited and Appendices. After the Introduction, a review of all existing literature will be undertaken which aims to collect sufficient knowledge of Personality Measurements, Sales and Engineering Personality Traits, Team Dynamics and Conflict within these teams. This information will be used to gain an in-depth knowledge of all relevant areas to assist in the research.

Following on from the Literature Review the Methods Chapter will outline the research aims and objectives followed by the justification of the chosen research paradigm, methodology and data collection method. The Research Design then outlines in detail the process used to collect and analyse the data. The sample used and ethical consideration are then discussed.

Next, Chapter Four explains how the results of the research was divided into three themes, namely 'The Personality Types of Salespeople', 'The Personality Types of IT Engineers', 'Team Conflict within Company X' and lastly the 'personality or process' section which will be a discussion on the causes of IT conflict. These themes will be analysed and compared with the literature.

Finally, Chapter Five will conclude the research question and discussing the Limitations of the study followed by Recommendations from further research.

Chapter Two: Literature review

2.1 Introduction-

The definition of a literature review is "A critical evaluation of the existing body of knowledge on a topic, which guides the research and demonstrates that relevant literature has been located and analysed" (Collis and Hussey, 2009, p. 302). Throughout this chapter the existing literature on personality testing, traits, interactions and conflict has been investigated to provide the researcher with the existing academic literature.

Firstly, some existing taxonomies will be analysed to gain an insight into the terminology used and explanations of forces and traits. Next the literature relating to the personality traits of Salespeople and Engineers will be analysed. The team dynamics between them are then explored and lastly the literature around conflict styles and management are investigated and linked with the FFM model.

2.2 Personality Traits- 5 forces, Myers Briggs explanations.

Personality measurement has been a controversial area of study in the past. It is difficult to quantify and there is a wide range of literature available depicting different measurement strategies and the relationship between individuals' personalities and behaviours (Boag, 2011). It is difficult to source an appropriate personality measurement which covers all trait approaches (Goldberg, 1994). Three areas relevant to this research involving personality types in employment are the FFM (Five Factor Method), the MBTI (Myers Briggs Type Indicator) and the Type A and B personality types.

The Five forces are made up of five variables that create the concept for describing personality types (Popkins, Date). This method was proposed to be the most dominant (Goldberg 1990) practical and applicable approach to trait psychology (Digman, 1990). Most of the literature in this field uses the Big Five traits and it is seen as a universal measurement (McCrae and Costa, 1996). Its use has been justified in the literature because it can be "reliably measured" and is proved to have "cross cultural validity" (Van Der Molen, Schmidt and Kruisman, 2007).

Costa and McCrea (1992) explain the five personality traits with 6 facets per trait they are as follows:

Those with the **Extraversion** trait are described as being gregarious, assertive, warm, positive, active and excitement seekers. Characteristics of **Neuroticism** are anxiety, depression, self-consciousness and hostility, impulsive, feeling of vulnerability and unaccommodating to aversive situations. Those who are **Agreeable** are described as trusting, honest communicators, cooperative, compliant, modest and sympathetic **Conscientiousness** individuals are described

as competent, methodical, dutiful, goal orientated, disciplined and deliberate. The final Trait is **Openness to Experience** which describes individuals as those open to fantasies, aesthetics, feelings, novel action, ideas and values, with closed individuals favouring rules and conformity (Molberg, 2001). Positive and Negative relationships with these factors are explained in Table 1. **'Emotional Stability'** is sometimes used in place of 'Neuroticism' and is explained to be the positive take on the trait.

Table 1	Example of Items from the FFPI; + positively phrased item – negatively phrased pole item	
Factors		Items
Extraversion		Likes to Chat +
		Keeps a distance from others -
Agreeable	ness	Respects other feelings +
		Imposes his/her will on others -
Conscient	iousness	Likes to follow a regular schedule +
		Acts without planning -
Emotional	Stability	Can take his/her mind of his/her problems +
	-	Invents problems for himself/herself
Openness		Can easily link facts together +
-		Follows the crown -
		Table 1: (Adapted from Van Der Molen et al., 2007, p.497)

This method of measuring personality has come under criticism for its simplicity and has been described as being 'a too linear non-scientific approach to cover complex personalities and that ways of measurement are limited to questionnaires which can be bias' (Block, 2010). The ideal situation is where there is a "broadly ranging, coherence-suggesting nomological network (Block, 2010, p.19). Intellect is also seen as missing from the FFM with declarations that 'Openness to experience' does not capture (Block, 2007).

Some adaptions were made to the FFM with the most popular being Hough's 9 Factors. This evolution sparked as it was felt that 5 forces were inadequate for those who want to measure job performances through personality types. It contains Emotional Stability, Agreeableness and Openness (described as intelligence). It also contains Extraversion which has been divided into 2 separate traits of Affiliation and Potency with Conscientiousness divided into Achievement and Dependability (Hough, 1992). There was also the reintroduction of Rugged Individualism which refers to masculine values and characteristics and Locus of Control which depicts how much the individual has control of their surroundings (Hough et al., 1990) (Hough, 1992).

Like FFM the MBTI ways of personality measurement is determined by self-reporting to discover their most dominant personality traits. (Fretwell, Lewis and Hannay, 2013). There is a range of scores between each of the following elements

and the scoring of each determines the strength of the trait as each trait is opposing (Varvel, Adams, Pridie and Ulloa, 2004).

Extraversion	То	Introversion
Sensation	То	Intuition
Thinking	То	Feeling
Judging	То	Perceiving
Table 2: (Fretwell et al., 2013, p. 57)		

The links between this MBTI model to the Type A and Type B personality types were investigated and it was found that Judging was the only trait that was associated to Type-A personalities (Fretwell et al., 2013).

Type-A personality's reaction to situations can be regarded as impatient, achievement orientated, assertive and fast paced. While Type B personalities are known to be more easy going, relaxed and leisurely (Glazer and Beehr, 2002). Type B personalities are usually associated with having External Locus of Control (Spector and O Connell, 1997). Those with an External Locus of Control feel as though they are not in control of their work and their achievements are controlled by factors that are not in their reach (Hanif and Sultan, 2011). Alternatively those who are Type B tend to have an Internal Focus of Control meaning that they feel that they have control over their actions and achievements (Hanif and Sultan, 2011). These individuals tend to be more confident that they are in control of the outcomes of their work and as a result can be more motivated (Rotter, 1990).

As a result of the methods explained above there have been findings around the personalities of those in sales and engineering occupations. These will be explained in the following subsections:

2.3 Test assumptions Sales

Holland has found that Salespeople 'think of themselves as strong masculine leaders' this description explain a lot about their personalities (Holland, 1959, p.37). **Extraversion** is a predominate trait of Salespeople (Opt and Loffredo, 2003). Interestingly it has been found that extraverts tend to bring out negative emotions in people they are interacting with as a result of their social dominance over people (Dodge, 1938). This dominance can be seen as imposing on colleagues control and status resulting in tension and power struggles in organisations (Eisenkraft and Eifenbein, 2010).

Although literature regarding sales performance and personalities of Salespeople is vast, certain trends emerged and it became evident that the relationship between personality traits can change depending on the type of sales role (Warr, Bartman and Martin, 2005). It was found that Extraversion in its entirety was not connected to Sales performance but 'Potency' aspect of the Extraversion was linked as previously suggested by Opt and Loffredo (2003). In some cases it was found that perhaps, as result of these findings, extraversion isn't necessarily an aspect of a

good salesperson at all. Grant states investigated personality types of Salespeople in a Call Centre environment and discovered that in the relationship between sales performance and Extraversion is was not extraverts that were the most successful but it was **Ambiverts** (those who are in between Extravert and Introvert) who had highest sales performance rates (Grant, 2013).

Some links between personality traits have been found to have higher performance rates when combined. Performance links have been discovered between Extraversion and **Conscientiousness**, Conscientiousness has more of an effect on performance in Extraverts than in Introverts, this is most likely to happen in sales roles where there is more interaction with colleagues (Witt, Burke, Barrick and Mount, 2002). A Salesperson exhibits low levels of conscientiousness where they tend not to be specific in their language and avoid talks that need long intellectual effort (Holland, 1959). Although conflictingly some found that there are some aspects of conscientiousness related to high sales performance, for example achievement orientation is a characteristic of high sales performance when dependability is not, meaning that high Conscientiousness is necessary in good Salespeople (Warr et al., 2005).

Holland describes Salespeople as being part of the persuasive environment made up of vocations like Salespeople, Politicians and Business Executives. Whether or not Salespeople are **agreeable** could show some significance in their sales performance. Myers Briggs feel that trait as part of the J-P index can be used to describe Salespeople where they can be seen as more emotional and social and human values are considered when decisions are being made (Myers and McCauley, 1989) (Opt and Loffredo, 2003). Alternatively it was found that lower levels of agreeableness are present in individualistic commission based roles where the manipulation of customers can result in higher profits (War et al., 2005).

Interestingly Herried, Peterson and Chang have linked the Type A personality to Sales and found that those in commission based sales are often Type A people with an increased risk of developing coronary heart disease from stress levels. They define a Type-A person as being someone who aim "to achieve more and more in less and less time." (Herried, Peterson and Chang, 1985). Positively type-A people were found to have higher job performance as they can work longer hours and travel more for work (Herried, Peterson and Chang, 1985).

2.4 Test Assumptions Engineers.

The Stereotype of an Engineer is that they are introverted nerds but in truth we need them to create a modern economy and these types of people need to teach us the ways of the future (Van Der Molen et al., 2007). In order to do this their **agreeableness** always comes under scrutiny. It is well documented that Engineers lack interpersonal skills (Van Der Molen et al., 2007) and avoid interpersonal problems (Holland, 1959). In Type-A literature it was found that as Type-A Engineers are impatient and restless (Hannif and Sultan, 2011). Backing up this literature, agreeableness was also found to be the only factor that was negative and

advised that Engineers need to improve and develop their personal skills to communicate their knowledge (Van Der Molen et al., 2007).

Engineer's great discoveries can be based on **Openness** factor. Their imagination and non-conformity could be the thing that makes them so knowledgeable (Costa and McCrea, 1992). The literature explains the theory that the older the Engineer the more open they are to experience and found that they had high levels of Openness (Van Der Molen, 2007). Openness is also associated with those who prefer standardised routines and processes (Costa and McCrea, 1996).

Engineers are known to have high levels of Conscientiousness and toughmindedness (Van Der Molen, 2007) (Kline and Lapham, 1992). Their Judging Myers Briggs characteristics describe them as being orderly planning and organised (Myers and McCauley, 1989) (Opt and Loffredo, 2003). It was discovered that judging was the only MBTI that was associated with Engineers and Type-A individuals (Fretwell et al., 2013). Interestingly, like with the Openness factor, differences have been found in levels of this trait depending on their rank and experience. It has been noted that the higher degree of Engineer, the lower their conscientiousness levels. Those with lower Engineering degrees were found to be more conscientious (Van Der Molen et al., 2007). Engineers were found to possess traits like mindfulness, goal orientation and decisiveness, all part of the conscientious trait. (Brown and Joslin, 1995). No contradicting literature could be found on these findings.

Engineers have been associated with being part of an intellectual environment along with other professions like biologists, chemists and mathematicians, hence suggesting that they possess the same personalities. In that research he describes them as being asocial as opposed to social (Holland, 1959). This relates to the FFM trait of **Extraversion**, This asocial account of Engineers is seen as a stereotype of a male nerd (Van Der Molen et al, 2007). There is some literature that supports this opinion of the introverted Engineer (Myers and McCauley, 1989) (Opt and Loffredo, 2003). A study conducted on Dutch Engineers interestingly found that Engineers were more extraverted than the population as a whole (Van Der Molen et al., 2007). Alternative findings on university student's .found that there was no difference between extraversion levels in the Engineering students than any other course (Kline and Lapham, 1992). Perhaps the difference in these findings may support the idea that an Engineering (Van Der Molen et al., 2007).

As many Engineers have a Type-A personality they can be described as being stressed easily, impatient and hostile (Hannif and Sultan, 2011). Research into organisation dissatisfaction in Type-A's found that they have high levels of organisational dissatisfaction as a result of their emotional stability (Choo, 1986). Alternatively some findings suggest that Engineers have above average levels of emotional stability than the general population and as a result low levels of Neuroticism (Van Der Molen et al., 2007).

2.5 Team Dynamics between Sales and Engineers

"A team is a small number of people with complementary skills who are committed to a common purpose" (Katzenbach and Smith, 1993, p.45). Personalities have a large part to play in team dynamics with a vast amount of literature explaining the relationships between their positions within the teams. Teamwork has been a well investigated topic with many early journals depicting the team dynamics (Campion, Papper and Medsker, 1996). In more recent years literature has started to explore how personality affects these dynamics (Mount, Barrick and Stewart, 1998). In order for a team to be efficient a variety of team members is necessary and each member should put a fair amount of effort in to their specific role or task (Barrick, Stewart, Neubert and Mount, 1998). The FFM traits are seen as providing a "comprehensive framework from which to examine personality and its relationship to both the team and performance" (Barrick et al., 1998, p.380).

It has been found that impacts of certain personality traits can be affected or impacted by the strength of another (Warr et al., 2005). The performance levels of those in interaction based roles were to be based on the conscientiousness levels in Extraverts (Witt et al., 2002). After investigation it was found that when there were more extraverts working in a team environment performance levels were higher than those teams that had less extraverts (Barrick et al., 1998).

Another area of trait interactions is where conscientiousness may have a positive relationship with agreeableness in the teamwork environment (Warr et al., 2005). A meta-analyses was conducted to collect the ratings of cooperation between team members. This research discovered that one un-cooperative/disagreeable member can affect the team's overall performance (Hough, 1992). A disagreeable member can have a large overall effect on the team with a reduction in performance, an increase in conflict, an increased workload and lack of communication (Barrick et al., 1998). Conscientiousness, agreeableness and emotional stability were also found to be the most important factors in teams with cooperation, consideration and trust the most important qualities. If any of these personality traits are missing in a team member it would lead to dysfunction within the team (Mount et al., 1998). Interestingly it was found that along with disagreeable team members, introverts also found to reduce team performance (Barrick et al., 1998).

In order to be a successful leader it is believed that two of five factors are deemed necessary. Extraversion and conscientiousness are the backbone to high performance and effective leadership (Barrick and Mount, 1993). In the MBTI it was found that the sensing and judging personality types were present in the majority of leaders (Fox-Hines and Bowerstock, 1995).

An investigation was carried out on Type-A and Type-B individuals in Management. It found that Type-A personalities held the majority of management positions as a result of their goal orientation and drive to succeed. Most of these management positions consisted of mid management. Type-B individuals held most of the upper management roles as a result of their strategic mind-set, their broad perspective and their patience in decision-making (Watson, Minzenmayer and Bowler, 2006).

2.6 Conflict within teams

As the personality types of Salespeople and Engineers and their position in teams have been investigated in previous sections, the relationship between each of these factors will be discussed. Conflict is defined as an 'interactive process manifested in incompatibility, disagreement or dissonance within or between social entities' (Rahim, 1992, p.16).

Conflict is considered to be inevitable and if it is not prevented within the organisation it will effect it negatively (Aloysius, 2013). The cause of conflict can be as a result of defamation, oppression or the violation of privileges or as a result of the scarcity of resources resulting in employees fighting to meet their own goals (Aloysius, 2013) although this is not the case in the avoiding technique where nobody benefits because the issue is not resolved (Rahim, 2011).

It is recommended that these are resolved when possible through a mediation policy based on circumstantial evidence. These employees should not be told to carry on working, forcing them to do this without resolving the cause of the issue will have an effect on work ethics (Aloysius, 2013). The mediating effects that conflict, leader effectiveness and management style has been investigated and analysed in this section (Barbuto et al., 2010)

It was found that there are five different methods of handling conflict in the Rahim Organisational Conflict Inventory-II, Integrating, Obliging, Compromising, Dominating and avoiding (Rahim, 2011). Many authors chose to investigate the relationship between the FFM and an individual's choice in conflict management technique (Molberg, 2001) (Antonioni, 1998).



Image 1: (Rahim, 2002, p.217)

The **Integrating** style of conflict management has been described as a win-win resolution to conflict. It is where all those involved in the conflict resolve the problem and achieved their aims (Rahim, 2011) by reducing conflict through collaboration (Rahim, 1983). Positive relationships were indicated between integrating and extraversion, conscientiousness, openness and agreeableness. Neuroticism is the only factor that was not positively related to integrating as hostility and unaccommodating traits are likely to still find some issue with this solution (Antonioni, 1998). This style can be seen as being an effective conflict management strategy (Gross and Guerrero, 2000). The Integrating style was found to be the most necessary for leader's effectiveness. (Barbuto, Phipps and Xu, 2010).

Secondly, **Obliging** is a change management style which shows little concern for one's self but more concern for others. This involves playing down their differences to reduce the conflict and aims to satisfy other parties (Rahim, 2010). This style does not reduce the conflicts of the task but can be used to resolve the interpersonal issues resulting (Gross and Guerrero, 2000). Conscientious individuals have seen linked to having obliging conflict management styles (Rahim, 2011).

The next style is **Compromising** where both parties find a resolution that they each find acceptable, this is seen as being a win-win method (Rahim, 2011). It has been found that open individuals prefer to be both flexible and adaptable as a result compromise is a way to explore alternative and has been found to be the most likely strategy to be used by Open employees (Molberg, 2001). As agreeable individuals have a big concern for others they would have a sympathetic outlook for resolving conflict and will aim to be helpful and cooperative this would result in them adapting a compromising approach (Costa and McCrea, 1985) (Molberg, 2001).

Dominating is where there is a high regard for themselves and a low regard for others. A characteristic of dominating is forceful behaviour in order to achieve. There is no consideration of the expectations of other people (Rahim, 2011). Confrontation and control are aspects of the dominating management style. The literature explains that extraverts are known to be confrontational and dominating when dealing with conflict. As a result of their interpersonal characteristics they work best when dealing with people directly (Antonioni, 1998) (Molberg, 2011).

Those who have low levels of agreeableness can be seen as being competitive and sceptical. They want to be in control and as a result they are confrontational and dominating (Antonioni, 1998) (Molberg, 2011). Those with low levels of Neuroticism are also seen as dominating (Antonioni, 1998) along with conscientious individuals as they are organised and strive for task completion they are seen to act on disputes quickly, efficiently and effectively in order to benefit the team as a whole, resulting in confrontation tactics being used (Molberg, 2011).

Lastly the **Avoiding** conflict management style is where there is no resolution because the conflict at hand is ignored and dodged. This is seen as the 'lose-lose' option with nobody benefiting from it (Rahim, 2011). Non-confrontational strategies are adopted by those with Neurotic traits as they are nervous, depressed or anxious they could see a dispute as threatening and as a result they avoid it (Antonioni, 1998) (Molberg, 2011). Introverts were also found to be to be avoiding as they are not comfortable in social situations and conflict can be seen as an interpersonal act (Molberg, 2011). Unconscientiousness individuals were also found to avoid situations of conflict (Antonioni, 1998) (Molberg, 2011).

2.7 Conclusion

In order to investigate the research question the objective to identify personality traits of Employees and Salespeople, the first step has been completed and the literature surrounding this has been reviewed. Salespeople were found to be Extraverted with low levels of agreeableness and conflicting literature regarding conscientiousness (Warr et al., 2005) (Holland, 1959). Engineers were found to have low levels of agreeableness and extraversion but high levels of conscientiousness overall (Opt and Loffredo, 2003).

In order to investigate the objective "To understand the conflict management styles used by employees" the conflict management styles were researched. They are Integrating, Obliging, Compromising, Dominating and Avoiding (Rahim, 2011). The sales traits are most like the Dominating style and the Engineers traits linking up with Compromising and Avoiding (Molberg, 2011)

In the next chapter the research methodology used for completing those research will be explained and justified.

Chapter Three: Methods

3.1 Introduction to Research Methods

As discussed in the literature review, there are areas of the literature that have not been investigated. This chapter outlines the process used to gather data in an Irish owned, Medium-sized Technology Company. The aims and objectives of this research will be noted followed by a discussion on method choice of collecting primary data.

Firstly the Positivism and Interpretivism paradigms will be considered and the reasoning and rationale behind the decision, Interpretivism approach and the choosing by the author to use a case study and interviews to collect the data. Lastly the credibility of the research is discussed and the limitations that occurred in the process.

3.2 Research Aims and Objectives

Aim: To investigate what conflict exists between IT Engineers and Salespeople in Medium-sized Technology Company in Ireland and to discover if it is process or personality based?

Objective: The research method chosen must have the means to complete all objectives. In order to complete the aim of this study the following must be found and analysed.

- Identify personality traits of Engineers and Salespeople
- To investigate the issues resulting in conflict in Company X.
- To understand the conflict management styles used by employees
- To investigate the current processes to uncover possible downfalls

3.3 Research Instrument

3.3.1 Research Paradigms

The investigation into the research question began with an investigation into Paradigms. The decision was made to use an Interpretivism Paradigm described as "an inductive process with a view to providing interpretive understanding of social phenomena within a particular context" (Collis and Hussey, 2009, p. 57). This paradigm will be suitable for research in understanding conflict and personalities in a particular Organisation.

Positivism as a paradigm can be explained as a process which "involves a deductive process with a view to providing explanatory theories to understand social phenomena" (Collis and Hussey, 2009, p. 56). Positivism was also considered for this research but it was decided that this was too objective to be suitable for this research involving employees personal experiences a highly structured design may lead to important data being constrained resulting in the ignoring of some social findings.

Positivism tends to:	Interpretivism tends to:
Use Large Samples	Use small Samples
Have an artificial location	Have a natural location
Be concerned with hypothesis testing	Be concerned with generating theories
Produce precise, objective, quantitative data.	Produce 'rich', subjective, qualitative data.
Produce results with high reliability but low validity	Produce findings with Low reliability but high validity
Allow results to be generalised from sample to the population	Allow findings to be generalised from one setting to another similar setting

Table 2: (adapted from Collis and Hussey, 2009, p.62)

3.3.2 Research Methodology

As seen in Table 2 above the positivism paradigm is associated with producing "precise, objective, quantitative data" (Collis and Hussey, 2009, p.62). Quantitative data in research relates to numerical data compared to Qualitative Data which does not use numbers and statistics but concentrates more on words and images to analyse the data. (Collis and Hussey, 2009). Qualitative data is more suitable for the purpose of this research as the thoughts and emotions of participants can be clarified, quantitative finding would amount to statistical data.

There are certain methodologies used to generate Qualitative Data namely hermeneutics, ethnography, participative enquiry, action research, case studies and grounded theory. The methodologies that were most suitable for the research question were considered. Both Ethnography and Case Studies were investigated. Ethnography is defined as "a methodology in which the researcher uses socially acquired and shared knowledge to understand the observed patterns of human activity" (Collis and Hussey, 2009, p. 79). It was then found that due to time constraints and the nature of the research the researcher could not participate in the activity as it was limited to Engineers and Salespeople only.

It was established that a case study would be the most suitable approach for this dissertation. A case study is defined as "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2009, p.18). It became apparent that a case study was the best option when

the literature was consulted. This literature review contained information regarding statistical insights mostly providing little insight into interviewees' responses in the areas of personalities and conflict in the workplace.

An Explanatory case study where "existing theory is used to understand and explain what is happening" (Collis and Hussey, 2009, p. 82). This case study type coincided with the research aims, a single case approach was adapted to analyses the phenomenon. This approach was carried out using Interviews as a method.

3.3.3 Data Collection.

The next stage of the dissertation involved choosing a data collection method. There were two possible methods that would retain the integrity of the data collected. Firstly the Focus Group was considered, it can be defined as "a method for collecting data whereby selected participants discuss their reactions and feelings about a product, service situation or concept, under the guidance of a group leader" (Collis and Hussey, 2009, p. 155). After investigation it was decided that a Focus Group was not suitable for this research as it would be insightful to gain an insight into the participants' opinions and observations of their colleagues' personalities and this information would be confidential. As a result of this research aim it was not suitable to pursue this method.

Interviews can be described as "a method for collecting primary data in which a sample of interviewees are asked questions to find out what they think, do or feel" (Collis and Hussey, 2009, p. 144). This method was most suited to the Research aims and created an opportunity for the researcher to hear the participant point of view in areas related to the research topic. As this was an interpretive study it was important to gain insight into the participant insights and opinions about their colleagues and conflicts within the team structures. Focus groups "are sometimes nothing more than the opinions of a small group of people and offer little by way of deep insights or illumination of the issues under study" (Collis and Hussey, 2009, p.156). This was a risk and as a result Interviews were selected.

A semi-structured interview format was selected by the researcher and it was decided that there would be a set of open ended questions that would be guided by the interviewer.

This would benefit the research as specific questions could be asked yet further discussion in certain areas was possible and probing themes further was possible when adequate information was not gained. Open-ended questions are viewed as being less threatening to interviewees than closed (Yin, 2009). As a result of this interview format it was possible to gain further insight into participant's experiences and perspectives. Time was also a factor in the decision to choose the interviewing methodology as it ensured that all research could be completed in a particular timeframe and that there would be adequate information for the study. This would be a suitable way to achieve the objectives of the study.

There are some limitations to the semi-structured interview methodology. The interviews were time consuming and at times difficult to examine as a large range of topics were covered in the duration of the interviews and trying to decipher what was intended by what the interviewee responded (King, 2009). At times the semi structured interview the interviewee was in control of the data and had the opportunity to hold back information unlike a in a questionnaire style data tool (Yin, 2009).

3.4 Research Design

The Interview process is key to this research and it was considered important to locate an appropriate approach to it. Though there were many options in the literature, the one that was considered most suitable for this topic was Kvale and Brinkham (2009) who outlined stages to the research process.

Thematising: Firstly the researcher must create themes to gain clarity and purpose.

Designing: A guide is then created for the Interview. The design of the interview will ensure that interviews flow and creates a consistent interview guide. This helps to clarify the time and resources needed for the process. In this stage interview questions were created and the order in which they were asked was decided.

Interviewing: During the next stage of this process the interview takes place. Participants must be comfortable and aware of the topics for discussion. Interviews were recorded with Participants permission and questions were asked. The researcher listened and observed the interview.

Transcribing: This stage involved listening to the recorded interviews and typing up the discussion. The transcriptions were reviewed to ensure all information was accurate.

Analysing: The transcriptions were then studied and themes to be determined by analysing the data. These themes were informed by the literature review and the questions asked. The interviews were printed.

Once themes had emerged, the researcher highlighted each theme in a different colour highlighter. This made the themes visible and easy to reference. Information for each theme was also grouped together for clarity of the data. The theme's data was then compared with the literature review and similarities and differences were noted.

Verifying: At this stage the data quality is assessed by the researcher. The interviews generalisability, validity and reliability were assessed. The Generalisability in this research is "whether your findings may be equally applicable to other research settings, such as other organisations" (Saunders, Thornhill and Lewis, 2008, p.158). This case study research will not have high levels of generalisability as it is based on a single medium sized organisation. In

order for the findings of this Dissertation to be credible particular attention has been Reliability and Validity.

The data's reliability is described as "the extent to which your data collection techniques or analyses procedures will yield consistent findings" (Saunders et al., 2009, p.158). The aim of this is to ensure that research is fair and accurate (Yin, 2009). As a result of using an Interview to gather the data there were certain factors the researcher had to be conscious of, the participant error and bias was avoided through making the participant comfortable and assuring them that the interview was anonymous and that they can speak freely about the organisation and their colleagues. The Observer's error and bias was considered by designing the interview and keeping the interviews consistent. The bias was avoided by using themes to analyse the data. The validity of the research is the "extent to which the research findings accurately reflect the phenomena under study" (Collis and Hussey, 2009, p. 65). By nature interpretivisms aim is to investigate the phenomena and focuses on the detailing the meanings of participants and as a result validity is high in this instance.

Reporting: This is the final stage of the research design. A report of interview findings was completed. This report contains the outcomes of the data and how these findings will assist in future research in this area. These research findings would also benefit the organisation detailed in the sample section below.

3.5 Sample

This sample was chosen from a medium-sized indigenous technology company. Three IT Engineers and three IT Salespeople were interviewed as it was important to gain an insight into the opinions and experiences of those involved in this phenomenon. One participant from each profession is of management level. A profile of participants is included in Appendices 2.

A Non-probability judgemental sample was used in this research. In order to gather data on IT Engineers and Salespeople's interactions and personality types, it was necessary to select participants who would have working relationships with both Engineers and Salespeople.

It was important that participants were chosen who would work regularly with the corresponding department. This sample does not represent the population and as a result of this sample method further research would have to be carried out to say that every organisation would find the same results.

These participants were interviewed in their office environment in Dublin, Ireland. This was an effective sample as a vivid and varied insight was given to the Author on the organisational behaviour and professional interactions in a medium sized Technology Company.

All Engineers and Salespeople are deemed to be high performers within the organisation.

3.6 Ethical Considerations

Considerations of Research Ethics is critical throughout the dissertation process. Prior to any data collection, the author was granted permission to interview by company HR Manager and Managing Director. They were informed that the Company name would remain anonymous.

The participants were then approached via email to partake in an interview. They were briefed on the topic of research and consent was obtained. All those participating were informed that they could withdraw from the process at any stage. Anonymity was a promised and interview responses were coded to keep identity hidden. They were ensured that information collected would be used for research purposes only. The interviewer asked for confirmation at the beginning of each interview that permission to record was granted.

3.7 Summary

Following the review of the research which outlined the methods and approaches used in this Dissertation. The research process used was outlined and justified. The limitations and ethical protocol was outlined and follows. Qualitative Methods were used to research a particular organisation as this was the most suitable approach to fulfil the aims and objectives of this research topic. A case study of a medium sized IT Company and interviews and observations were selected to get the desired data for the dissertation question. This was deemed to be the most suitable research design to achieve the objectives of the study and as a result achieve the aim of the dissertation.

Chapter Four: Results

4.1 Introduction

The purpose of this research is to investigate the role of Personalities in the historic conflict between IT and Sales. As illustrated in Chapter Three: **Research Methods**, a case study was completed in a medium sized Technology Company in Ireland. For context reasons the Company Information will be described. The structure of the Company will be briefly outlined and the positioning of the interview participants within the organisation along with the policies the Company currently has in place to deal with Conflict should it a rise.

After the Company information has been presented, the Interview findings will be discussed. Themes which emerged from coding the data, then by comparing and contrasting the interview transcriptions, will then be analysed. Throughout the Theme analyses there will be links made with the existing literature contained in Chapter Two: **Literature Review**. The themes examined are not unlike those in the Literature review and they are as follows:

- Theme 1 Personality Traits of Salespeople
- Theme 2 Personality Traits of IT Engineers
- Theme 3 Team Conflict within Company X
- Theme 4 Personality or Process

Lastly a reflection on the Qualitative Methods used to collect the data. In this subsection Interview questions and sample selection will be discussed in detail.

4.2 Company Information

The Organisation studied throughout these finding will be referred to as Company X for Ethics Reasons. Company X employs over 150 business and technology professionals based in Dublin, Ireland. It is a key player in the ever growing ICT market working in Cloud Computing, Network Infrastructure and Security, Storage and has seen huge growth in their Outsourced Managed Services department in recent years. They are a leading ICT provider in Ireland, UK, Germany, Switzerland and Italy.

The company's structure involves two separate departments for Sales and IT Engineers with both departments being managed separately. Interactions between Sales People and Engineers is a daily occurrence. The company have recently introduced a Project Management team to try to mediate any conflict between the two parties.

There were six employees of Company X interviewed, three from each department. In the Sales department Sales One (S1) is a sales manager and is responsible for the team's targets and would be involved if any conflict is escalated within the organisation. Sales two (S2) is a senior Account Manager and Sales three (S3) is a junior Account Manager. All Sales people have been employed by Company X for over 6 years. In The Engineering department Engineer 1 (E1) has a management and manages a team of Engineers who work on the support desk and professional service days, like S1 he is responsible for his team's performance. Engineer two (E2) is a senior solutions architect and works on high profile projects. Engineer 3 (E3) is a professional services Engineer who also assists in support calls.

Engineers and Salespeople in Company X have been advised to involve their line mangers or project managers where there is conflict that needs to be escalated to be resolved. There have been few occurrences of conflict escalating past this point and involving the Human Resource Team. The HR team is only introduced when the conflict has not been resolved when dealt with by line management. A mediation procedure is used as an alternative method of resolving issues between colleagues with the HR manger acting as Mediator, this helps them talk through issues and find a resolution. This is seen as an informal process before disciplinary action is considered.

4.3 Findings and Analyses

4.3.1 Theme 1, Sales Personalities

Each interview participant was asked about their general perceptions of sales people. The most common response was Extraversion with interviewees using terms like "loud", "outgoing" and "extraverts by nature" to describe the sales people in Company X. This coincides with the literature where Extraversion is the predominant trait in Salespeople (Opt and Loffredo, 2003). Engineers concentrated on their relationships with customers when describing them, describing them as "customer focussed and 'knowing what the customer wants to hear".

As reviewed in the literature, Social Dominance can evoke negative emotions with those who interact with them. This theory was backed up in the interviews with engineering staff. E2 described Salespeople as believing that Engineers are inferior to them and depicted them as being "opinionated extraverts who are unwilling to take on board advice from those who perhaps might have something to offer". E3 explained that if Engineers aren't told what they are expecting to hear they can be conflicting. A discussion on Ambiverts sales performance in call centres was also discussed. This theory did not hold up in Company X with all sales people being described as Extraverts by all those interviewed.

The literature included findings explaining that only the aspect of extraversion necessary for high sales performance was potency (Warr et al., 2005). In company X these findings did not prove accurate with Engineers and Salespeople describing Salespeople as having high levels of affiliation.

It may still be the case that these are not necessary but they are present in the Salespeople in company X therefore it cannot be said that affiliation is not necessary. Potency was also described in sales as persuasive and having a drive the get working work completed on time.

Throughout the literature there was some debate on Salespeople's levels of conscientiousness. Some journals suggested that Salespeople had low levels of conscientiousness because they avoid oral commitment and avoid long intellectual tasks (Holland, 1959). Long tasks did prove to be an issue for S1 he described "I do get a bit bored with long-term issues or projects, I am no good at doing tenders". There were no answers that related to a Salesperson's speaking style although it was observed by the interviewer that the Sales employees were much slower to commit to answers and sometimes talked around the point they were making.

The conflict in the literature lies with some authors finding that high levels of conscientiousness are traits of high performing Salespeople (Warr et al., 2005). There is some evidence from the interviews that Salespeople are goal orientated which is an aspect of conscientiousness in talk about their rewards structure, although this was only discussed by the Engineers who described situations where technical logic was ignored in order for the Salesperson to reach their target and receive commission. All Salespeople were observed by the interviewer as being confident speakers with S2 saying that he would never have an issue "speaking up in public". But overall from transcript analyses the Salespeople in company X would be described as having high levels of conscientiousness.

Low levels of agreeableness were evident from the Salespeople in Company X. The literature found that those in commission-based roles have a tendency to mislead customers in order to receive rewards (Warr et al., 2005). The sales employees in Company X are commission based roles and throughout the interviews it was regularly referenced that Salespeople are only considerate of costs and getting the sale processed to receive their commission. The Engineers also referenced the underselling of days to the customer to get the sale but not considering the effect it will have on the customers end solution.

Salespeople's stress levels were referenced when the sales team were asked about their relationship with work. All three sales interviewees referencing their workload and that they can get stressed when they have given themselves too many projects to manage and they tend to "creep up". This is the behaviour of a Type-A person. Although contradicting the literature which states that Type A Salespeople work longer hours this does not happen in Company X with all three sales interviews stating that they "don't like taking anything home". This could mean that the sales employees in company X are not Type-A individuals.

4.3.2 Theme 2, Engineering Personalities

The stereotype of the introverted nerd is well known but when discussed in interviews the response was varied. Only one S2 mentioned that he saw Sales people as introverted and E1 and E3 both describing themselves so. E1 showed strong signs of introversion in saying "the situations I find difficult are situations in large crowds and any public speaking in crowds". Both E1 and E3 chose email as their method of communication because they liked to have everything in writing. While E2 described himself as an extrovert who prefers to deal with customers via telephone as it gives a more personal approach and as a result of his impatience.

Interestingly E2 explained a theory depending on "the level of the game they are playing" Engineers have opposing traits. He divided the Engineer types into Enterprise architects and service delivery Engineers. The Service Delivery Engineers are made of a "quieter type person" and "a chess player maybe, not quite as outgoing and outspoken". Solution architects are "outgoing, confident and extraverted". The differences between the two types is that solution architects spend more time customer facing and interacting to "translate the business need to a technical requirement". This is interesting because in the literature review the evolution of openness and conscientiousness is discussed (Van der Molen et al., 2007). The sales literature also contained findings that personalities matched the sales job role (Warr et al., 2005) but no literature could be found to explain this situation described by E2. Notably this situation of the "personality matches the role" was evident in those Engineers that were interviewed, with both E1 and E3 working in service delivery roles and E2 working as a solutions architect.

Low agreeableness was found to be the only negative trait associated with Engineers. (Van Der Molen et al., 2007). According to the literature they lack social skills, this was confirmed during interviews where the Salespeople described themselves stubborn and proud. Salespeople noted that Engineers are unwilling to ask for help and on numerous times throughout the interview process complaints were made about Engineer's communication skills. S3 explained that they "might not be informed there had been an issue on site or that something needs to be changed only that the customer makes us aware". The impatience and restlessness of Engineers (Hannif and Sultan, 2011) was described only in E2's interview where he talks of his preference for calling colleagues and customers as a result of his impatience. Their restlessness could be proven because they all work from home and are always busy.

The interviewed Engineers showed large amounts of the openness traits where their nonconformity makes them knowledgeable (Costa and McCrea, 1992) and their comfort in standardised routines and process (Costa and McCrea, 1996). Their knowledge is evident in the interviews with all 3 Salespeople commenting on their education and knowledge, E2 stating that "they are knowledgeable and they are always willing to learn" and S2 saying they "concentrate solely on solutions". There was some indication that openness to experience increased with experience

with Engineers referencing that they are always learning and that they learn from their mistakes.

Throughout the interview process is was evident that conscientiousness in the IT Engineers was high. Referenced throughout was their enthusiasm for organising and problem solving, with Salespeople referencing their endeavour for process in all aspects of their job roles. When asked whether they thought that conflict between Salespeople and IT Engineers was personality based, each believed that personality was the reason but all took the opportunity to point out the importance of process and where they see the current process as being flawed. The Salespeople labelled the Engineers as being realistic and practical. S2 explained the difference in conscientiousness between Sales and Engineers "they would look at the process but we will look at the problem".

The literature review discussed that those Engineers with higher degrees and experience have lower levels of conscientiousness than those with less. Both Salespeople and Engineers stressed that Engineers' personalities are all different but none confirmed the conscientiousness changed in relation to experience.

Those with high conscientious levels are said to be Goal orientated and decisive. This is the case in Company X as all Engineers admitted to regularly working from home to reach deadlines. E2 also described how he takes personal pride in his projects and E3 explained how he "lives and breathes IT".

An Engineer's emotional stability was found to be low. When interviewed E2 and E3 said that they get stressed in situations where they do not have all the information and when they are not confident they can complete a task. Both E1 and E3 explained when workload increases and they find it hard to do their work to the same standard they become stressed. Organisation dissatisfaction was also evident in the employees. They each showed frustration with the organisation's process structure. The conflict resulting from this process structure will be discussed in more detail in the next subsection.

4.3.3 Theme 3, Team Conflict in Company X

Throughout the interviews participants were questioned on conflict within the organisation. A particular question was designed to find what conflict style their departments had. Their replies were varied. Confrontation was discussed by all participants in the sales department with both S2 and S3 saying that in the majority of cases conflict is confrontational internally but ends in a compromise. Although conflicting S1 who is a manager describes the conflict style as Avoiding. He describes them as "needy" and that many of them can come to him with the same problem a couple of times. The majority of Salespeople will dodge the conflict with customers or colleagues if they can delegate it to somebody else. He said many Salespeople are "afraid to say no to customers". This is something he looks out for all the time and eventually the Salesperson will compromise. He noted that internally they are more likely to be confrontational as they are more confident in

their surroundings. This relates to the literature where extraverts are known for dominating conflict management methods such as confrontation. Although avoiding has not been is more typical of an introvert than an extrovert so this description of sales people was unusual.

The Engineer's responses were all different so as a result no conclusions can be made of them although some interesting point emerged. E1 explained that the vast majority of Engineers will use an obliging conflict style by just doing anything that the customer wants despite how they feel about the workload but they are more likely to be confrontational with an Engineer resulting in a compromise. He stated that it is very rare that these confrontations need to be escalated. E3 found that conflict management starts as confrontational but in the end is resolved by compromise. Interestingly E2 describes himself as being dominating and confrontation exclaiming "I would go to war with anyone" but he noted that there are many Engineers who are the opposite, who do not speak out and as a result their opinions in the discussions and disputes are often overlooked. This behaviour buy the more introverted Engineers is typical from the literature explain that introverts tend to avoid and oblige.

As this is a review of the conflict in Company X interview participants were asked to describe typical cases of conflict that occur between Salespeople and Engineers internally and discuss if the reasoning was personality based or process based. Certain themes in emerged from the described conflict situations. They are time and scheduling disputes, communication disputes, increased workloads for rewards and process versus customer focus.

Time and scheduling issues were cited as reasons for conflict within the organisation with S3 referencing that is it complicated matching up 'time, scheduling and customer expectation' and it can create frustration where other people customers are prioritised by Engineers. Where there is an issue with the schedule it often results in conflict. From an engineering prospective they see the scheduling and resources issue as the fault of the Salesperson. E3 described how Salespeople make promised to customers without doing any research on hardware arrival dates and engineers availability. When they are not available they are avoiding saying no to the customer and try to force the engineers to resolve. This type of conflict was described as "common enough".

The communication methods of Engineers was a regular source of conflict throughout the interview process. S2 and S3 showed frustration at where there are problems or how engineers often change things on site without informing them. If something goes wrong on site the customer will call them and they had no idea it was happening yet they "get it in the ear" from the Customer. Conflictingly E3 mentioned that conflict can arise from Engineers being too willing to share every detail of the solution with the salespeople who only care that it is scheduled, and running on schedule. This can then arise in frustration from the Engineer who can feeling taken for granted.

E2 described a conflict issue surrounding communication but here the issue lies with the Salesperson informing them of the project after kit and licences have been

ordered. He said that it is an Engineer's job to shape the solution but instead they have to make it work with the hardware that has already been purchased. E2 explained in the interview that Salespeople order hardware without any real knowledge of their implication on other systems in the organisation. As a result of this communication issue conflict arises as the Engineer is frustrated and should have been involved in the scoping for the project.

Engineers main disputed area was when the Salesperson decreases the amount of Professional Service days scoped for the project in order to win the business to earn commission yet the Engineer is left trying to do the work in a shorter space of space than was originally outlined. Engineers often have to work overtime in order to complete the project on time, this was mention by all three Engineers. E1 explained that Engineers often oversell or over commit to customers when the work is sometimes impossible. This can cause confrontation from the engineering team and it pushed out the schedule outing pressure on other work that has been scheduled. S1 explained how Engineers can be "peeved" as when they accompany Salespeople to meet customers they are reliant on the Engineer selling the product technically yet the Salesperson receives the commission for the technical product they sold.

4.3.4 Personalities or process?

Each interview participant was asked if they believe that the conflict between Engineers and Salespeople. Each of the Salespeople believe that personality is the reason behind the conflict. S2 described that it happens when people are under pressure and how they cope with that is personality related. S3 said that he had worked in many companies over the years and no matter what types of process were in place conflict still arose between the departments. Overall the engineers see the division of these teams as a personality based issue. The engineers had a different perspective to the conflict all engineers recognised that personality differences were the back bone of the issue but that there could resolution to all conflicts with the creation of conflict avoiding processes in each of the areas where issues arise. E1 explained that for each of the conflict issues there is a simple solution and that is "policy and intuitive processes". E3 explained that "if the process was there in full it should be easily followed and the number of conflict would be greatly reduced"

After the data was collected and analysed it can be said personality is a variable depending on circumstances. Process is a constant, and as Engineers are process driven (Costa and McCrea, 1996) it was safe to assume that they would believe that there was a solution in organisation. Each Engineer and Salesperson had some personality similarities but each had a different outlook on situations this emphasises that personalities cannot be predicted. The main finding from this study is that IT conflict in Company X is personality based but can be managed and as a result be reduced by the creation of adaptive processes where typical cases of conflict can be prevented by outlining each stage involved in the process.

4.4 Conclusion

This chapter presented the case study and interview findings and discussed conflicts and similarities between Company X and the secondary data collected in the Literature Review.

The case-study findings outlined the current organisation structure of Company X and its procedures in the case of conflict. Its Mediation Procedure is introduced where conflict is escalated to the HR manager.

The personality traits of Salespeople and Engineers in Company X were analysed and were largely similar to the literature. Salespeople were found to socially dominating Extraverts, Potency and Affiliation were present traits which contradicted existing findings (Warr et al., 2005). High levels of Conscientiousness and low levels of agreeableness were found in line with the literature. High stress levels were present yet no Salesperson worked out of hours which contradicted the existing literature on Type-A employees.

The main finding from the Engineers' personality research that the role an Engineer holds is determined by whether they are Introverted or Extraverted. Those in Service Delivery roles tend to be introverted and those in Solutions Architecture are more customer facing and Extroverted. There was nothing in the literature to support this theory. Engineers were found to have low levels of agreeableness and findings relation to their Openness were contradicting. It was found that the Engineers in Company X had low levels of Emotional Stability and High levels of Conscientiousness.

Conflict with in teams in Company X were then discussed. S2 and S3 saying that in the majority of cases conflict is confrontational initially but ends as a compromise but S1 explained the conflict management style as Avoiding. This probably as result of his management role. It was found that the majority of Engineers will oblige or avoid with certain exceptions.

The main themes of the conflict found in Company X were found to be time and scheduling issues, communication related disputes and reduction of Professional service days. These themes outlined the main areas of conflict within Company X.

Is it process or personality based conflict? This study found that the conflict in this organisation is personality based but it could be effectively and drastically reduced by improving processes and managing the personality differences of employees. It was proven that process is needed to combat personality conflict with each of the conflict descriptions given by employees easily prevented with processes.

Chapter Five: Conclusion & Recommendations

5.1 Conclusion

In order to achieve the aim of this certain objectives needed to be met. After the case study was completed and the interviews carried out all of the objectives outlined in Chapter One were realised. The objectives were as follows:

- Identify personality traits of Engineers and Salespeople
- To investigate the issues resulting in conflict in Company X.
- To understand the conflict management styles used by employees
- To investigate the current processes to uncover possible downfalls

The personality Traits of employees in Company X were investigated and compared with existing literature on this topic. The issues resulting in conflict in Company X were analysed and themed into three areas of conflict. Time and scheduling issues, communication related disputes and reduction of Professional service days were the themes of conflict.

The conflict management styles of the employees' teams were investigated and compared with the existing literature. Most Salespeople's cases were explained as initially being confrontational and dominating in style but interestingly avoidance was also present in the discussions. It was found that the majority of Engineers will oblige or avoid with certain exceptions.

The current processes of conflict management involves the line manager being informed of any conflict within the team, where the line manager cannot resolve the issue it is then escalated to the HR manager who would then engage in a mediation process with conflicting employees. The business processes were also reviewed when conflict themes arose. There are many area where the processes in Company X are not being implemented or are simply not present. Simple rules and process flow documents should be arranged in the areas where they see downfall by way of conflict.

After the analysing the finding of the objectives it was discovered that conflict in Company X is caused by personality conflict but that the processes which are a constant compared to the variable of personalities, can be introduced to reduce the amount of conflict within the organisation resulting from the themes discussed.

5.2 Limitations and Recommendations

This investigation concentrates on one medium-sized SME. As a result of this the findings in this study does not provide evidence that's supports other organisations in the sector. This study is only be representative of Company X.

The qualitative nature of this study means that there is room for interpretation of the data and was aimed at understanding the interviews and the situations of each employee interviewed.

This study contributes as a starting-point into the research area of conflict between IT Engineers and Salespeople.

Further research into the area of conflict within IT organisations is needed, there is little literature available. This research was focused on a particular organisation it would be useful to get an industrywide view of this phenomenon.

It is also a recommendation that the management team in Company X should create and update the organisational processes to avoid conflict in area where it is preventable such as communication and the scheduling of staff and resources.

References

Barbuto, J.E., Phipps, K.A. and Xu, Y. (2010) 'Testing relationships between personality, conflict styles and effectiveness'. *International Journal of Conflict Management*, 21(4): pp. 434-447.

Barrick, M.R., Stewart, G.L., Neubert, M.J. and Mount, M.K. (1998) 'Relating Member Ability and Personality to Work-Team Processes and Team Effectiveness'. *Journal of Applied Psychology*, 83(3): pp. 377-391.

Barrick, M. and Mount, M. (1993) "Autonomy as a moderator of the relationships between the big five personality dimensions and job performance" *Journal of Applied Psychology*, 78(1): pp. 111-18.

Block, J. (2010) 'The Five-Factor Framing of Personality and Beyond: Some Ruminations'. *Psychological Inquiry*, 21(1): pp. 2-25.

Boag, S. (2011) 'explanation in personality psychology: "Verbal magic" and Five Factor Model'. *Philosophical Psychology*, 24(2): pp. 223 – 243.

Brown, N.W. and Joslin, M. (1995) "Comparison of female and male engineering students". *Psychological Reports*, 77: pp. 35-41.

Campion, M. A., Papper, E. M, and Medsker, G, J. (1996) 'Relations between work team characteristics and effectiveness: A replication and extension'. *Personal Psychology*, 49: pp. 429-452

Carter, L. C. (2005) *How to manage conflict in the organization*. 2nd ed. Rhode Island. Amacom.

Choo, F. (1986) 'Job stress, Job Performance, and Auditor Personality Characteristics, Auditing'. *A Journal of Practice and Theory*, 5: pp. 17-34.

Collis, J. and Hussey, R. (2009) Business Research: A Practical Guide for Undergraduate & Postgraduate Students. 3rd ed. Hampshire: Palgrave Macmillan.

Connelly, M., Gilbert, J., Zaccaro, S., Threlfall, V., Marks, M. and Mumford, M. (2000) 'exploring the relationship of Leadership skills and Knowledge to leader performance'. *Leadership quarterly*, 11(1): pp. 65-86.

Costa, P. T. Jr., and McCrea, R. R. (1992). Revised NEO personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) Professional manual. Odessa, Florida: Psychological Assessment Resources, Inc.

Digman, J. M. (1990) 'Personality structure: Emergence of the five factor model'. *Annual Review of Psychology*, 41: pp. 417-440.

Dodge, A.F. (1938) 'Social dominance and sales personality'. *Journal of Applied Psychology*, 22(2) pp. 132-139.

Eisenkraft, N., & Eifenbein, H. A. (2010) "The way you make me feel: Evidence for individual differences in affective presence". *Psychological Science*, 21: pp. 505-510.

Fox-Hines, R., & Bowerstock, R. B. (1995) "ISFJ, ENTP, MBTI; what's it all about". *Business and Economic Review*, 41(2): pp. 3-8.

Fretwell, C.E., Lewis, C.C. and Hannay, M. (2013) "Myers-Briggs Type Indicator, A/B Personality Types, and Locus of Control: Where Do They Intersect?". *American Journal of Management*, 13(3): pp. 57.

Glazer, S., and Beehr, T.A. (2002) "Similarities and differences in Human Values between nurses in four countries". *International Journal of Cross-Cultural Management*, 2: pp. 185-102.

Goldberg, L. R. (1990) 'An alternative description of personality": The Big-Five Factor Structure'. *Journal of personality and Social Psychology*, 59: pp. 1216–1229.

Goldberg, L. R. (1994) "How not to whip a straw dog". *Psychological Inquiry*, 5: pp. 103-113.

Gross, M.A. & Guerrero, L.K. (2000) "Managing conflict appropriately and effectively: An application of the competence model to Rahim's organizational conflict styles". *International Journal of Conflict Management*, 11(3): pp. 200.

Hannif, A. and Sultan, S. (2011) "Type A-B Personality And Locus Of Control: A Combined Factor Determining Job Satisfaction". *Business Review*, 6(2): pp. 90-96

Herried, C., Peterson, M. and Chang, D. (1985) "Type A, occupational stress and salesperson performance". *Journal of Small Business Management*, 23(3), pp. 59.

Holland, J.L. (1959) "A Theory of Vocational Choice". *Journal of Counseling Psychology*, 6(1): pp. 35-45.

Hough, L. M., (1992) "The 'Big Five' Personality Variables - Construct Confusion: Description versus Prediction". *Human Performance*, 5(1): pp. 139-155.

Hough, L. M., Eaton, N. K., Dunnette, M. D., Kamp, J. D. and McCloy, R. A. (1990) "Criterion-related validities of personality constructs and the effect of response distortion on those validities". *Journal of applied Psychology*, 75: pp. 581-595.

Inceoglum I, & Warr, P. (2011) "personality and job engagement". *Journal Of Personnel Psychology*, 10(4): pp. 177-181.

Katzenbach, J. R. and Smith, D. K. (1993) "The Wisdom of Teams: Creating the High-Performance Organization". *Harper Business*, New York.

King, N. (2004) 'Using Interviews in Qualitative Research In: Cassell, C and Symon, G. (eds.) *Essential Guide to Qualitative Methods in Organizational Research*. London: Sage, pp.11-22.

Kline, P and Lapham, S. (1992) "Personality and faculty in British Universities. Personality Individ". *Diff.*, 13: pp. 855-857.

Kvale, S., and Brinkmann, S. (2009). *Interviews: Learning the Craft of Qualitative Research Interviewing*. London: Sage.

Mackenzie, N. and Knipe, S. (2006) "Research Dilemmas: Paradigms, methods and methodology". *Issues in Educational Research*, 16(2), pp. 193-205.

Mattick, B. & Miller, D. G. (2006) "Teamwork pays", *The Journal for Quality and Participation*, 29(4): p. 30.

McCrae, R.R. and Costa, P.T. (1991) "The NEO Personality Inventory: Using the Five-Factor Model in Counseling". *Journal of Counseling & Development*, 69(4): pp. 367-372.

McCrea, R. R. (1996) "Social Consequences of Experimental Openness". *Psychological Bulletin*, 120: pp. 323-337.

Moberg, P.J., (2001) "Linking conflict strategy to the five-factor model: Theoretical and empirical foundations". *International Journal of Conflict Management*, 12(1), pp. 47-68.

Mount, M., Barrick, M. & Stewart, G. (1998) "Five-Factor Model of personality and Performance in Jobs Involving Interpersonal Interactions". *Human Performance*, 11(2): pp. 145-165. Myers, I. B., & McCaully, M. (1989) "Manual: A guide to the development and use of the Myers Briggs Type Indicator" 15th ed. Palo Alto, CA: Consulting Psychologists Press. V

Opt, S. K., & Loffredo, D. A. (2003) "Communicator image and Myers Briggs type indicator extraversion-introversion". *Journal of Psychology*, 137(6): pp. 560-568.

Peterson, R., Smith, B., Martorana, P. and Owens, P. (2003) "The impact of chief executive officer personality on top management team dynamics: on mechanism by which leadership affects organizational performance". *Journal of Applied Psychology*, 88(5): pp. 195-808.

Popkins, N.C. (2015) "The Five-Factor Model: Emergence of a Taxonomic Model for Personality Psychology". *Northwestern University*. Pp. 1-14.

Rahim, M.A. (1983). "A Measure of Styles of Handling Interpersonal Conflict". *Academy of Management Journal*, 26(2): pp. 368.

Rahim, M.A. (2011) *Managing conflict in organizations*. 3rd ed. Boston: Transaction publishers.

Rahim, M. A., (2001) 'Managing organizational conflict: Challenges for organization development and change', R. R. Golembiewski (Ed.), Handbook of Organizational Behavior. 2nd ed., revised and expanded, Marcel Dekker, Inc., New York, pp. 365-87.

Rotter, J. B. (1990) 'Generalized expectancies for internal versus external control of reinforcement'. *Psychological Monographs*, 45: pp.89-93.

Russell, H, & McGinnity, F. (2014) "Under Pressure: The Impact of Recession on Employees in Ireland", *British Journal Of Industrial Relations*, 52(2): pp. 286-307.

Saunders, M. N., Thornhill, A. and Lewis, P. (2009) *Research Methods for Business Students*, 5th Ed. England: Prentice Hall.

Spector, P. A. and O Connell, B. J. (1994) "The contribution of personality traits, negative affectivity, locus of control and Type A to the subsequent reports of job stressors and job strains". *Journal of Occupational and Organizational Psychology*, 67: pp. 1-12.

Tupes, E.C. & Christal, R.E. (1992) "Recurrent personality factors based on trait ratings". *Journal of personality*, 60(2): pp. 225-251.

Van Der Molen, H., Schmidt, H. & Kruisman, G. (2007) 'Personality characteristics of engineers'. *European Journal of Engineering Education*, 32(5): pp. 495-501.

Varvel, T., Adams, S. G., Pridie, S. J., & Ruiz Ulloa, B. C. (2004) 'Team effectiveness and individual Myers Briggs personality dimensions'. *Journal of Management in Engineering*, 20(4): 141-146.

Warr, P., Bartram, D., and Martin, T., (2005) 'Personality and Sales Performance: Situational Variation and Interactions between Traits'. *International Journal of Selection and Assessment*, 13(1): pp. 87-91.

Watson, W. E., Minzenmayer, T., & Bowler, M. (2006) 'Type A personality characteristics and the effect on individual and team academic performance'. *Journal of Applied Social Physchology*, 36(5): pp. 1110-1128.

Witt, L.A.,Burke, L.A.,Barrick, M.R. and Mount, M.K. (2002) 'The interactive effects of conscientiousness and agreeableness on job performance'. *Journal of Applied Psychology*, 87: pp. 164-169.

Yin, R. K. (2009) Case Study Research, Design and Methods, 4th ed. USA:Sage.

Appendices

.

Appendix 1: Interview questions

1	How would you describe your Personality?
2	How would you describe your relationship with work?
3	How do you think your colleagues perceive you when you work as part of a project team?
4	What part do you feel that you play in this team environment?
5	How would you generalise the personality traits of your colleagues in the IT department? Would they be similar to yours in any way? Please explain your thoughts.
6	Would you describe the conflict style in your IT to be avoidance, confrontational or compromising, please explain the reasoning behind you answer?
7	How would you generalise the personalities of those colleagues working in the Sales department.
8	When working in a team with a salesperson do ever find yourself in situations where conflict arises? If yes, describe a typical case of conflict between Salespeople and Engineers from your experience?
11	In your opinion, what do you feel is the reason this conflict occurs within this working team environment?
12	Do you feel that there is anything within the company processes that can reduce conflict or is it personality based?

Appendix 2: Engineer Interview Example

- I How would you describe your Personality?
- E2 I am probably outgoing and sociable, I could be called stubborn perhaps and I suppose less a team player more a soloist. And I like to get on with people as much as I can but I am not afraid of conflict when it does arise.
- I How would you describe your relationship with work?
- E2 I am lucky enough to be doing a job that I am passionate about, I really enjoy it, I take personal pride in it so it is definitely engrained in my life, I am the sort of person who will follow up on problems after I go home, I will read up on technical stuff and issues we are having in work outside of working hours, I think because of that also my relationship with work is quite personal in that I take personal pride in the work that I deliver and am responsible for. If I am pushed out of my comfort zone which happens on occasion when you are put into jobs that you are not overly familiar with or out into jobs that I haven't done before you do feel anxious at times because you are taking responsibility for a large organisations IT environment you know if it goes wrong there are very few people you can call because your considered to be top of the technical chain somewhat. And if you push the wrong button or do the wrong thing you can take an awful lot of systems offline. So anxious would be a common enough feeling in some situations but that's mixed with a mild euphoria when you get it right and a slight panic at times when you get it wrong. My ideal project is one where you can see tangible change at the end, sort of see the results of your labour generally it means working on smaller short projects rather than large projects. In my time in the public sector I would have worked an awful lot on very large projects where you are a very small cod on the wheel which meant that you didn't actually feel that you were achieving anything partly because you were in the public sector but also partly because the projects were so large that they took such a long time you never really got to see the end product so given a choice I would much prefer to work on small single pieces of work where you have a large say on the output and then you can feel the pleasure of delivering something that is beneficial to people that you can take credit for, It's nice to responsible for something. One of my personality traits is that I am impatient and the best way to talk to people I find is on the phone, you can pick it up and get much more information in a much quicker timeline via phone also, I find that emailing people there is an awful lot of misinterpretation of the way emails are written and someone writes them with a certain tone in mind so I would be quite concise and use fewer words in my emails it could be construed as rudeness by other people.
- I How would you generalise the personality traits of your colleagues in the IT department? Would they be similar to yours in any way? Please explain your thoughts.

- E2 It depends on the level of the game they are playing, so if you are talking at the enterprise architecture in this organisation and most organisations they are generally quite outgoing, confident and extraverted types of people, when you move more toward service delivery you tend to go into a quieter type of person generally, a person you would see more a chess player maybe, not quite as outgoing and outspoken and I don't know what the reason behind it is but generally if you are in the architecture and enterprise role you spend much more time in front of the customer to translate the business need to the technical requirement so you actually have to be able to interact with business and technical people and \I think you need somewhat of an extravert personality to do that whereas when you are simply managing systems and servers you don't quite need that personality. It seems the personality matches the role, In that support roles can take quieter.
- I Would you describe the conflict style in your IT to be avoidance, confrontational or compromising, please explain the reasoning behind you answer?
- E2 In my case it's not avoiding its confrontational, I'll go to battle with anyone if I feel my idea is right, however I would also be the first to admit when I am wrong and take those principles on board, now in the past I would not have done that as freely, there is no one size fits all in that area, so I think it depends on their personality and the people involved so you may have a situation, and this has happened in the past, if you have a very strong personality on an IT team or project team it may drown out the good ideas of those other who have so much to offer but aren't listened to and in order for that to not happen you need a very strong team leader on board who is willing to give everyone a voice and sort of act like a referee almost, so generally it's he who shouts loudest wins. So I shout loud.
- I How would you generalise the personalities of those colleagues working in the Sales department.
- E2 Again no one size fits all but again they are egotists they are extraverts by nature in sales I think and unfortunately most of them believe their own sales pitches too much they would be hesitant to take advice on board from who they see as inferiors or subordinates -I am referencing the technical teams there. So opinionated extraverts unwilling to take on board advice from those who perhaps might have something to offer.
- I When working in a team with a salesperson do ever find yourself in situations where conflict arises? If yes, describe a typical case.
- E2 Yes, quite often. Not on every engagement or contract but perhaps when you are doing projects you tend to be the last person asked about how these solutions should be implemented you are put into a situation sometimes whereby technological elements or the equipment has been ordered and decisions have been made and then you are asked to come in an implement

it, whereas if it was left up to you, you would have done it in a different way. You are not in a position then to say, well listen guys send back all that kit and turn this upside down because it's the wrong thing. So not being involved from the start but being told what to deliver puts you in conflict because you don't get to shape the solution and without being able to shape it you can't take pride in it but also to yourself I think the difference is, technical teams are ignorant of cost and want to put in the best solution for them and the customer whereas sales teams are concentrated on cost but perhaps don't have an understanding of the broader implications of the technology they are putting in so It may impact 3 or 4 other systems in the clients site in the sales team don't take that into account. Whereas the technical team will understand that a lot better. So conflict is really about not having that early engagement with the customer where you can actually shape the solution without being brought in too late that would be generally the most conflict I would see normally.

- I Describe a typical case of conflict between Salespeople and Engineers from your experience?
- I Do you feel that there is anything within the company processes that can reduce conflict or is it personality based.
- E2 Absolutely some are personality based but not all and process can definitely help, I think for example when a system is being spec that they absolutely have to have sales teams involved but they have to have technical teams involved, so early engagement of the technical resource to sanity check the solutions being put into the customer site will benefit both the customer sales team and technical team by having sort of a holistic view of what's going in. I know, for example in previous organisation we had technical account managers who are a bridge between the technical team and the sales team, and they would act as a sort of if you like the customer advocate in the organisation so when a salesperson is going to implement a solution into a customer site the technical account manager who works for the sales company would say well actually they are using XYZ so ABC is not the correct fit for that have you thought about DEF and that worked very well, It's something that I think we should be doing here, really it comes down to making sure that technical decision makers are involved before any full solution is specked to the customer.