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RELATIONSHIPS IN THE PROFESSIONAL TEAM ON CONSTRUCTION PROJECTS

A Dissertation submitted by

Etienne van Heerden

909406921

in partial fulfillment for the degree

Magister Ingenieriae

in

Engineering Management

University of Johannesburg

August 2006.

Supervisor:  Prof. Leon Pretorius
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ABSTRACT

The engineering construction industry is one that is synonymous with high production, tight schedules, strict cost control and in general high working pressure. Construction is an industry that is generally occupied with technical personnel. It is also an industry where interaction and communication between people is important to improve the chances of success of the project.

Very few tertiary institutions include any psychology or human relations related courses into the engineering curriculum. It is common for an engineering graduate in the construction industry to only stay in a direct technical field for a limited number of years before they are promoted to construction managers or project managers. Although these positions still require a high competency in technical knowledge, financial and human relations issues form a large part of this portfolio.

Most large companies have human relations managers in their employment, but they are far removed from the day to day activities on a construction site. In general their prime function is rather to concentrate on the company's image to their clients and the general public. It is the site agents, contracts managers and project managers who have to deal with the human relations issues on a construction site – a field in which most of these people have had very little or no formal training.

It is the purpose of this study to research from literature, the relationships that exist between stakeholders on construction projects and few basic human relations skills and psychological issues that may assist the technical person on a construction site to improve the relationship they have with personnel working under them.
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LIST OF ACRONYMS

PM – Project Manager
JV – Joint Venture
QS – Quantity Surveyor
NHBRC – National Home Builders Registration Council
ECSA – Engineering Council of South-Africa
CHAPTER 1
INTRODUCTION

1.1 BACKGROUND

Relationships form part of everyday life, whether personal, work related, good or bad. Relationships play just as large a role in the work place as it does in our personal lives. Thriving positive relationships can be a key aspect to success, whether personal or work related. A key aspect to a successful relationship is trust. No personal relationship can thrive without trust.\(^1\) Trust is a requirement for the optimal performance of any business or team.\(^5\) Interpersonal and work relationships form an integral part of the successful running of any business. Motivational factors play an important role too. It is common knowledge that happy workers are productive workers. Managers therefore need to know how to understand and motivate their personnel to perform at their peak.

In any business, the employees normally work together and carry the best interest of the business at heart. When various companies or organisations are required to work together as is the case with construction projects, individuals often lack trust in the personnel of other companies they have to work with. As an example, there is a common perception (which is often justified) that contractors will take short cuts in order to maximise profits. They are therefore not delivering a product as per the original agreement.

This issue seriously affects the relationship between the engineer and the contractor. This can further result in claims, which in turn affects the client. A contractor may not be able to get the required funding from a bank because of a poor credit history or previous liquidation, although his present situation may be very stable. Additional costs may be incurred by the client, if he does not trust his
engineers' decisions and designs. He will then have to employ another person or company to constantly monitor his engineer's performance.

From a positive viewpoint, a contractor can become his client's preferred contractor on future work if he has gained his trust and a good working relationship has been established. This will obviously have positive financial implications to the contractor. Each experience adds to a company's reputation, whether good or bad. It is essential that company's employ people who foster trust and establish good working relationships within their work arena. People who create distrust amongst a company's staff or clients are contributing to the disintegration of a company's reputation. Within such a closed industry, this is a very important human resource issue.

1.2 PROBLEM STATEMENT AND RESEARCH OBJECTIVES

The above section lists but a few examples of the effects of relationships and how especially the lack of trust between the members of the professional team can have an influence on the overall success of a project. This dissertation proposes to investigate the relationship issues that exist in projects with specific emphasis on the issue of trust within the professional team, and the effects that these relationships can have on the project's overall success.

Special emphasis will be placed on the role of the project manager and how he may improve relationships. Psychological and motivational theories will also be touched on to determine what motivates people, which factors influence relationships, what elements can break trust relationships and how these relationships can be restored.
1.3 RESEARCH METHODOLOGY

Human relations and psychology are both widely researched areas with in depth studies available on almost any topic that comes to mind. As the purpose of this research dissertation was not to re-invent the wheel, but merely to give technical people with no formal human relations or psychology background indications of the factors that may influence and improve human relations on construction sites, existing literature was researched.

Informal interviews were held with a limited number of people in the construction industry. A construction company director, two contracts manager, and two site agents expressed their feelings and opinions to the author regarding certain human relations issues on construction projects. The experiences and opinions of these four people is in no way sufficient to draw any generalised conclusions from, especially in an industry that employs hundreds of thousands of people in South Africa alone. It was however enlightening to hear that their feelings and experiences regarding human relations skills, or the lack thereof, were very similar, and that their experiences also corresponded to those of the author's, and interviews from literature.
PARTIES INVOLVED IN A CONSTRUCTION PROJECT

2.1 BACKGROUND

If the full life cycle of construction project is investigated, there are many stakeholders involved. Between all these involved parties a relationship exists to some extent. It may not be obvious at first glance how some of these parties may affect the other, but because they are all linked to a specific goal, which is normally related to the success of the project, the performance of individual parties and the relationship between certain parties have an effect on the overall success of the project. A major contributor to a successful relationship is trust. The question should be asked – is any positive form of relationship possible without trust? Consider the following diagram (Figure 2.1) where some of the stakeholders such as the client and contractor are indicated.
2.2 TYPICAL STAKEHOLDERS IN CONSTRUCTION PROJECTS

The make-up of construction projects is normally as follows, and a stakeholder relationship exists between all parties involved in a construction project, as indicated by figure 2.1. The solid lines indicate a direct relationship, while the dotted lines indicate an indirect relationship with limited interaction.

Figure 2.1 — Typical relationship diagram of parties involved in a construction project

1) Firstly there is the client, who has the need to develop a certain product in order to improve or expand his business. The client may be an individual, a partnership, a company, or even a government organisation such as the National Roads Agency (Ltd).\textsuperscript{13}
2) Secondly there is the consulting or design engineer, whom the client turns to for the design and development for his required need. Design firms may outsource specialised requirements, or deal with vendors for patented designs.

3) With the approval of the client the consulting engineer will appoint a contractor to physically carry out the construction of the project, which he will then oversee. Depending on the size of the project, this may be a joint venture partnership consisting of a couple of contracting firms. Joint ventures are a common occurrence on very large projects, as one firm may not have the required resources to successfully complete the project in the required time.

4) The contractor may in turn appoint sub-contractors or specialists to perform part of the works that does not form part of their core business or are outside their field of expertise.

5) Financial institutions supply funding to clients and contractors. Many projects these days are done on a Build Operate and Transfer basis, (BOT Contracts), where the contractor has to finance the project himself, and is then reimbursed through income generated by the completed project in the operational phase.

6) Local authorities and other building organisations such as the NHBRC (National Home Builders Registration Council)\textsuperscript{14} are more involved in the construction process. Many infrastructure projects such as roads and services associated with a new office park often become the property of the local city council, and here their approval and inputs are of major importance.
7) Suppliers of equipment and materials for the project are important from a quality control and scheduled completion date perspective.

8) The general public and the local communities can become very involved in construction projects, and may even have a major influence on the success of the project. When a project such as a new high speed train is proposed to cut through residential areas since it is the most logical and practical route between two stations, the opinion and objections of the public can stop a project before it has started, or in a good case scenario, cause delays on the commencement of the project. Local communities may become involved through job creation and social upliftment and development by the contractor. Community liaison officers may be appointed to act as the link between the community and the project stakeholders.

There may also be other parties involved in the project, depending on the size and complexity of the project. When the relationships and/or trust between any of the involved parties are jeopardised, it will in some way affect the other parties in this diagram.

2.3 RELATIONSHIPS WITHIN STAKEHOLDER ORGANISATIONS

Further to the above stakeholder relationship diagram (figure 2.1), there are the individuals within each stakeholder organisation that normally fit into the organisation in some type of hierarchy. Each organisation may have a complex make-up with many different individuals on various levels contributing to the organisation’s part in the project. As an example, figure 2.2 shows a typical contractor’s team and the relationships to each other.
From the above it can be seen that a single party or company within the project organisation, may have its own complicated organisational structure. Many stakeholders or companies within the project structure may have similar structures. This means that inter-company relationships can have an effect on the companies' performance within the project structure.
A chain is only as strong as its weakest link, and it is no too difficult to see how the failure of a single party in the chain of command can have a knock on effect through the entire organisation.

The basic definition of a successful project is one that is completed in time, within budget, and to the required specifications. Consider a project where two small contracting companies form a joint venture to fund and construct a new residential development. During the design phase of the development, the owners of the companies could not agree on the architectural style of the development. As the project progressed, many more of these type issues came up. Towards the end of the project, the owners of the respective companies were no longer on speaking terms with each other, due to all the disagreements, and both of them lost personal interest in the project and let their site managers complete the project. The two companies never worked together again after this project. The project ended with all the elements of the successful project, but was it really a success?

In the above example, the differences in personal preference and expectations of two individuals caused a negative effect on the working relationship between two companies.

2.4 SUMMARY

From the previous paragraphs it should be clear that relationships exist between all parties involved in project. The relationship may not be a direct one nor one that is obviously clear at first glance, but a breakdown in any of the direct relationships may have a knock on effect through the relationship structure. The types of relationships that exist between parties are investigated in the next chapter.
CHAPTER 3
IDENTIFYING AND DEFINING RELATIONSHIPS

3.1 INTRODUCTION

The task of defining the term relationship is quite challenging due to the endless flood of books and papers that claim to expose the secrets of "close", "healthy", "happy" or "intimate" relationships. A conceptualisation of relationships that aptly suits the construction industry because of its clarity, breadth and adaptability is given by Hinde. He states that "a relationship is a sequence of interchanges that is essentially dyadic, that occurs over an extended period of time, that has specific cognitive and affective effects. The affective/cognitive states and the interchange sequences mutually inform one another about the status or condition of the relationship; hence they are relatively inseparable. Both must be examined to gain a conceptually defensible understanding of relationship."

3.2 THE AFFECTIVE/COGNITIVE DIMENSIONS OF RELATIONSHIPS

In the context of interacting, Hinde identifies five affective/cognitive issues that need to be addressed when attempting to study or establish relationships.

The first dimension is expectation. While interacting, communicators use knowledge about culture, the social context, and relational history to anticipate how the other party will react to given messages.
Secondly, behavior is usually *goal-directed*. According to Hinde, interaction sequences are targeted towards specific ends with individuals continuously seeking feedback to assess success in achieving these goals.

Thirdly, outcomes are influenced by *values*. By knowing and understanding another party’s values, the chance of cooperation is greatly increased. Values are also evaluative dimensions that negotiators use to interpret outcomes.

The fourth dimension identified by Hinde is *feelings*. Affective reactions including such primary emotions as happiness, surprise, fear, sadness, anger, disgust, and interest, warrant inquiry. Feelings of attachment and affective ties in relationships are also important to assess.

Finally, Hinde advocates tapping the extent to where participants understand or are familiar with one another. When individuals share a long history of interaction they use accumulated personal information to predict and label their respondent’s actions.

The above cognitive and affective understandings are intertwined with the behavioural sequences that carry relational information during interaction.

### 3.3 Contractual Relationships

An organisation with which project and construction managers need to be familiar is that of the purchase of a constructed facility because it forms the basis of and influences so much that is carried out under construction contracts.

In general, to produce a constructed facility, a number of parties have to be brought together to work within a contractual relationship.
The technical and/or financial responsibilities of each party need to be defined and the interrelationships between the parties need to be established.

Fortunately, for many of these organisational matters standard documents and model procedures already exist and are accepted in practice. Also, with experience gained in their use, modifications and improvements are made from time to time.

The party that is the customer of the construction industry, and proposes to either purchase a constructed facility or make use of one of the other services offered by the industry, is variously known as the client, owner, or employer. For the purpose of this general discussion of the contractual organisation the term *client* will be used. A client may be an individual, group of people, a partnership or a company, or a government organisation.

Among other things, a client not skilled in construction practice will probably need to obtain expert advice on one or more of the following:

- Feasibility studies
- Design of the works that are proposed
- Specialist equipment installations
- Preparation of contract documents and specifications
- Tendering procedures and evaluations
- Construction programming and scheduling
- Supervision of the construction works
- Certification of the completed works and final hand over
- Dealing with variation orders and possible claims

The advisors may be from the client’s own in-house staff, or they may be appointed from external organisations.
The organisations to be drawn on may be those whose members that have professional skills in engineering such as civil, mechanical, electrical, architecture, quantity surveying and project management to name but a few. The generic term *consultants* will be used here to describe these professionals in general.

A *contractor* is an individual or company that contracts to carry out the construction works. If only one contractor is appointed he will be known as the *main contractor*, but it is common to have *subcontractors* with specialist skills to deal with specialised aspects of the works. A typical example of such an arrangement, will be a civil construction company that forms a sub contract agreement to complete piling for a large structure’s foundations. Piling is a field that requires specialised equipment and skills that are normally not available in most civil construction companies.

### 3.4 TYPES OF CONTRACT

The *contractual relationships* between the parties, and the professional and commercial skills of the parties involved, will depend on the type of organisation and the contract that the client chooses in order to obtain the construction of the works. The general principles of construction contractual organisations are not rigid and may take many forms, but in general the organisational contractual relationships can be classified in three groups as follows.

- Traditional
- Design and construction
- Management
3.4.1 TRADITIONAL

The traditional contractual organisation (figure 3.1) is one in which the client has a direct contract with consultants to carry out the design of the works and probably also the supervision of the works, with a quantity surveyor (QS) as one of the consultants.

![Figure 3.1 - Traditional Contract Organisation](image)

The QS will give advice on a range of matters relating to the cost of the work as well as preparing some of the contract documents and measuring the work completed for valuation and payment purposes. Consultants are normally in independent professional practice, with no ties to the construction or property development commercial undertakings. Therefore the dotted line between the contractor and the consultant.
The client also has a direct contract with the contractor. The contractor is then likely to be in contract with suppliers and specialist subcontractors for carrying out specialist work and equipment installations. Subcontractors may also be nominated by the client or on his behalf by one of the consultants.

3.4.2 DESIGN AND CONSTRUCT

The organisation for a design and construct project involves the client having a contractual relationship with a design and construct contractor. As is quite obvious from the above term, this relationship involves the contractor to design the proposed constructed facility and then construct it. Consider figure 3.2.

![Design and Construct Organisation Diagram]

Figure 3.2 – Design and Construct Organisation

4
If the client does not have the necessary skills in house to arrange for tenders for the work to be submitted, then the evaluation and selection of a suitable contractor, may be delegated to a consultant to act on behalf of the client. In such an arrangement, the contractor may wish to arrange a contract with a consultant for design services.

A further extension of this arrangement is the *turnkey* contractor. In this arrangement the client will normally only deal with one company. He will discuss his requirement and budget with this company, who will in turn design, construct and manage the project, and once the final product is ready for operation, hand over the “keys” for the completed product to the client.

### 3.4.3 MANAGEMENT

*Management* contractual organisations are generally formed to provide one of two types of service. The first is the management contracting and the second is construction management. Consider figure 3.3. For management contracting the client has a contractual relationship with a contractor who acts as management contractor. It is normal practice for the management contractor to be precluded from undertaking any of the construction and to provide purely management services. The client also contracts directly with consultants to provide design and cost consultancy services. The management contractor then contracts directly with other contractors to carry out the construction work.
A construction management organisation is one in which the client enters into direct contracts with a professional construction manager, design and cost consultants, and a works contractor. The contractor undertaking the work is then in a direct contractual relationship with the client rather than with the construction manager. The construction manager will undertake such management functions as are delegated by the client.

From the above discussion it should be evident that a variety of project organisations can be formed to complete a project. Various forms of relationships are established in each of these organisational configurations.
3.5 HUMAN RELATIONS

It is the nature of human beings to be sociable, companionable and fond of the company of other people – even at work. Anthropologists, psychologists and sociologists all agree that people are reinforced by the relationships formed in a certain group.

Human Relations in its most general sense, refer to all interactions that occur between people, whether organisational or personal, conflicting or cooperating.

Human Relations is not just about making people feel good about themselves, and neither is it manipulating others to get your own way. It is about being direct, honest and positive in dealing with others. Poor interpersonal relationships and communication are all too common, and dealing with these issues is not common sense. An understandable misconception is that managers should only manage. Managers should be human, and also humane, but most importantly they should be leaders. They should set good examples, be facilitators and standard setters.

3.5.1 NEED FOR HUMAN RELATION SKILLS

When people work together in a group to achieve a common objective, there is a possibility that conflict will arise because of differences in their individual viewpoints. Many people do not know how to resolve conflict in a constructive manner. This should be a definite requirement for a project manager. It has been found that the majority of managers who fail, do so not because they lack the technical expertise, but they do not have human relation skills.
Many project managers in the civil engineering arena are civil engineers. Their careers started in a purely technical field and evolved to a management position. For most project managers the technical portion of their positions forms but a small part of their daily responsibilities, and the managing and motivation of people becomes a much larger part. People and human relation skills therefore are often lacking. Human Relations is a separate field of study and normally a discipline only included within the business management curriculum of tertiary education institutions. Few tertiary education institutions have any human relations courses as part of the requirements to obtain a technical degree or diploma.

From both the managerial and workers' perspective, good human relations are necessary for people to achieve economic, social, and psychological satisfaction from the work they do. "The study of human relations in business and industry is the study of how people can work effectively in groups to satisfy both organisational objectives and personal goals." 2

One of the tests for a successful project manager would be his ability to meet project objectives as well as to fulfill workers' personal needs at the same time. It is important to understand that a person's personal needs and goals are inextricably linked to their professional ambitions. The most successful workers are those who maintain a balance between their personal and professional lives.
3.6 NEGOTIATION RELATIONSHIPS

"I can’t even get to the table with these bozoz. Hey, if they don’t want to talk they can just suffer the consequences!"  

The above quote is from an actual labour management negotiation session and characterises an often neglected area of negotiation research - relationship development. Before negotiators start exchanging proposals, they must develop a working relationship that permits them to focus on the task.

Negotiations form part of any business, and in the construction industry and project management field it is also a critical part of the success of the project. Negotiations form a critical part of the tendering process. It is in this activity where many man hours are spent negotiating until an agreement is reached. The relationships that are formed during negotiations are vital to the successful outcome of the negotiation process. For the purpose of this discussion successful negotiation outcome will be defined as an outcome where all parties involved walk away without feeling that they were at a disadvantage.

The successful negotiator should be able to establish a relationship with his opponents whereby the opponents (and himself) can compromise and still feel content with the outcome. By starting negotiations off with a confrontational relationship, all parties will be much more reluctant to compromise, and the risk then exists that no agreement will be reached at all.

When establishing a negotiation relationship, considerable attention should be given to the “image” that one projects. In one study, 62 groups who were paired off against one another in competition became deadlocked over an issue. The groups where given full access to information about one another’s positions and then selected representatives to negotiate a settlement. In only 2 of the 62 groups did the representatives compromise sufficiently to reach an agreement.
The other 60 representatives remained steadfastly loyal to their groups' position, although impartial judges had no problem in deciding which groups' position was logically superior. In many of these groups the negotiators' attitudes were the main downfall of the negotiations. Negotiations may only be successful if a give and take relationship is established.

One way of overcoming the "image" or reputation of the negotiator, is by empowering groups of representatives to negotiate. The negative impact of this, is that there may be more than one opinion within the group, which may cause internal confrontation in the group. However, internal confrontation is more likely to be resolved as the representatives should put their organisation's values and objectives first.
3.7 SUMMARY

Relationships may be complicated and different interpretations of the term relationship may be encountered depending on the type of relationship that exists, and depending whether it is a personal or work related relationship. Hinde's definition of relationships was used for its inclusion of the affective and cognitive effects.

The type of contract agreement entered into may also have an effect on the types of relationships that are formed in construction projects. The traditional, design and construct, and management contract forms were briefly discussed.

Positive human relations have been determined to be a key factor to the success of any organization and a requirement for forming long lasting relationships. Managers should endeavor to be humane and be leaders that people look up to and wish to follow. By learning certain human relations skills, negotiation skills may also be improved.

Trust has been identified as an important factor during negotiations and in forming positive relationships. This issue is discussed in detail in the next chapter.
CHAPTER 4
TRUST AND RELATIONSHIPS

4.1 DEFINING TRUST

"Without trust, the everyday social life which we take for granted is simply not possible". Luhmann\(^1\) makes this point in the opening statement of his book Trust and Power.

The first substantive definition of trust in the Oxford English Dictionary is "confidence in or reliance on some quality or attribute of a person or thing, or the truth of a statement".

It is important to consider what various parties understand by trust. The following are some of the main issues that people mention when questioned about trust:\(^6\)

- Honest communication – Can they be trusted?
- Reliance – What is it that one does when one trusts someone
- Outcomes – What happens when one trusts someone or some party?
- Building Trust – trust in relationships
- Levels of trust – different understanding of trust
- Reputation – trusting people and organisations
4.1.1 HONEST COMMUNICATIONS

Many sources agree that trust is concerned with the way people communicate with each other.\textsuperscript{1,3,6} People have to be open and willing to share important and all relevant information with all the parties concerned. They have to be honest and reveal information that reflects the true situation. If a team member or party has an issue with an aspect of the project and refrains from discussing it openly or purposefully neglects to bring it up, it may cause chaos and distrust when it does eventually come to light.

Trust can only exist where there are clear paths of communication. It is extremely important that people give the required information when it is required. It is probable that when there are clear communication channels between parties involved in a construction project, people can put their requirements to one another more effectively, ensuring better end results in the final product.

4.1.2 RELIANCE

When people trust they are relying on the information that they are given. People are forced to some degree to trust that the people they work with will get things done by the time and standard they said they would. If you do not believe a person or party will fulfill their obligation there is no trust. Construction requires reliance all the time.\textsuperscript{6}

Consider the following example. A client is reliant on his appointed consultant to provide the contractor with the required information at the required times. Should the consultant not provide the required information when it is needed by the contractor, the contractor may submit standing time claims. Although claims are a standard contractual procedure, it is almost always unpleasant and will most certainly cause some friction or conflict in the contractual relationships.
Depending on the contract contents, the consultant will most probably have to reimburse the contractor for his delays, as he is the one responsible, but the client’s project is delayed, and he may also get frustrated with the consultant.

One has to be aware of how much one is reliant on another party or person. Even when there is mistrust, a small element of trust will remain, otherwise one would do the job oneself.

In many construction projects one does not get to choose the people one works with. They are appointed by another party involved in the project, and one must rely or trust that they will do what they are required to do. With complex type projects there are many specialist trades. This means that not every one will have the expertise to understand what every single party is doing and will have to rely on that person or party’s experience and competency.

An important point to remember is that when one make promises one must keep them, no matter how small. Small issues such as being on time for meetings can build relationships, confidence and trust.

### 4.1.3 OUTCOMES

Relying on other people is important, but the main goal of most construction projects is to deliver a functioning product to the client. There are consequences to trusting people. When people decide to trust, they are taking a risk on the outcome of the project. One would obviously rather trust a person or company that has a reputation of competence and “being up to the job”. When trust has failed it may have a direct impact on the outcome of the project.
4.1.4 BUILDING TRUST

Trust is built up during the course of a project, or many projects in some cases. Relationships are built up over time. In the same way trust can be broken down. Even on a project where trust has been built up it can still be broken down, and it may not be easy to rebuild.

Many companies are using team building days to boost team morale. This can also be used as a way of establishing trust. These types of functions are normally very informal. One therefore gets to see a different side of a person from the one would see every day in the work environment. By getting to know something of a person's personal life one may be able to better understand and predict the way they behave or interact at work. Since the personal side of a person's life is generally the more honest one, it may give one some insight to the person's trustworthiness. Employers can also establish the trust of their employees by fostering positive relationships by organising social events outside of the workplace.

4.1.5 LEVELS OF TRUST

Many people have different views of trust depending on their level or position within the organisation. The more operational the individual, such as foreman or tradesman, the quicker trust needs to be established. At the same time however these individuals have a more limited view of trust focusing only on tasks or smaller projects. Senior management and directors will also focus on relationships on a more strategic level. Figure 4.1 illustrates these levels of trust.
4.1.6 REPUTATION – INDIVIDUAL AND ORGANISATION

People tend to rather trust individuals than organisations. Organisations are built up by their people, and it is the company’s people that have built up their reputation. This does not mean however that the company does not have individuals within it that are not totally committed. A company with a good reputation might still have individuals working for them that do not perform to the company’s required standard.

However, the role of an organisation’s reputation is important for two reasons. Firstly, the construction industry is considered a “small world”, where people constantly work with the same people over many years. Organisations build their reputations and this has an impact as to whether people feel comfortable about working with them in projects. Although people tend to rather trust individuals, an organisation’s reputation could cloud the decision on who to trust on a project. If you have for instance worked with “John Smith” before and know and trust the quality of his work, but he works for a company that has a bad reputation, the
company's reputation would most certainly cloud one's judgment on working with him. An organisation's reputation is most certainly a valuable asset.

Secondly, trusting relationships are not only inter-organisational, but also intra-organisational. Effective teams are built when people have the authority to make decisions and the information that they are passing between one another is accurate and honest. If an organisation does not trust its own people, its ability to build trusting relationships with other organisations can be severely hampered.

4.2 THE BENEFITS OF TRUST

As already established, trust within the construction industry is of great importance. The question is still often asked: "why do we need to trust or is it wrong not to trust?"

When considering how and why individuals take the decision on whether or not to trust, it is important to consider how the decision to trust impacts on the running and outcome of a project. Some of the main benefits are:

- Uncertainty – with better communication uncertainty is reduced
- Risk – risk can be better managed between people working together on a project
- Flexibility – trusting relationships mean people are more able to respond to new information and approach work in a more flexible manner
- Time and Money – time and money can be saved
4.2.1 UNCERTAINTY

Construction is more susceptible to uncertainty than many other industries. Information can change, or new information can be discovered. For example, soil conditions may vary from initial tests and estimates on a construction site due to insufficient testing, which may change the requirements and scope of the design. This may cause contractors to be delayed, causing friction and stress, especially on a project with a tight time schedule. New information may affect the way the work is carried out. If members can produce information that is clear and accurate, the other members can rely on it, and uncertainty will be reduced.

Trust becomes very important when addressing uncertainty. On any construction project things may change, it is the nature of the industry. Architects and engineers always try to improve their designs as the project continues, contractors may come up with alternative construction methods which may be more practical and more cost effective. One needs to be confident in the knowledge that the people you are working with are willing and able to address these changes and deal with them.

4.2.2 RISK

Where there is uncertainty there is risk. When uncertainty is reduced the outcome can be predicted more accurately. With an improved understanding of risk, contingencies and estimated project duration may be reduced. It is indicated that a potential financial benefit may be generated from a trusting approach.
4.2.3 FLEXIBILITY

Problem solving on a project may be aided by honest communications and the reliance on the other team member’s fairness. Problems that fall outside the scope of the contract can be solved on the ground by members that trust each other. On construction sites clients or consultants often request the contractor to do something that is outside the scope of his work without the supporting paperwork. A contractor will only agree to such a request if there is a trust relationship that exists. The project team can reduce time and contingency measures due to the problem solving capacity that trust gave them. The team members can feel confident that all the parties in the team will look to solving the problem rather than apportioning blame.

4.2.4 TIME AND MONEY

One of the primary reasons for organizations entering into business ventures is profit. Profit is the reward or benefit of a well managed business. The importance of developing trusting relationships can be isolated to this reason. People are in business to make money, and building trust should be undertaken because it saves time and money in carrying out construction projects. Also when trust is earned future business can be secured. Making a once off massive profit from a contract will also not do anything good for one’s business. It will most probably be the last time that one’s client will deal with one because he will feel cheated – trust has been broken. By being fair and reasonable one can create work security for one’s company in the long run.

The cost of conflict can also be considered and compared to the advantages of trust, and it will be seen that the costs of conflict far outnumbers that of trust. Any organisation who has been involved in arbitration will know the cost of conflict.
This is however also just the short-term costs. What costs are involved with losing future business?

All companies in the construction industry are engaging in business to make profit. “Trusting behaviour removes costs brought about by poor communication, adversarial approaches to problems and the results of these problems, which may end in expensive litigation and loss of reputation.”

**4.3 HOW TO BUILD TRUST**

Most individuals start with a baseline level of trust where they are prepared to put their faith in someone. If a person has not given one any reason not to trust him, or his reputation has not preceded him, one normally tends to trust to a certain degree. It is almost a case of “innocent until proven guilty”.

Although one may begin with a baseline level of trust, there are factors that enable trust to be built and allow for more effective working. The main ways of building trust are:

- Experience – working with people on a day to day basis
- Problem solving – how sharing and solving problems helps communications
- Shared goals – a joint understanding of the roles and aims of the project
- Reciprocity – team members supporting and rewarding each others trusting behaviour
- Reasonable behaviour – working fairly and professionally with the members of the project team
4.3.1 EXPERIENCE

Relationships are built by working together. One learns by experience to trust or not to trust people that one works with. If people constantly prove themselves to be reliable they will be trusted.

4.3.2 PROBLEM-SOLVING

The construction industry can be unpredictable. Problems arise almost on a daily basis and new information or changes are not uncommon. The nature of trust is not just about how people work together when things are going well, but also about how they work together to solve problems. The ability of a team to solve problems as a team is vital. Problem solving to mutual satisfaction is easier when project teams trust each other. It is also an important element in the building of trust on construction sites and builds a positive experience of working together. When parties cannot learn to solve problems together, it will most certainly create problems in the long run for the entire project.

4.3.3 SHARED GOALS

Some case studies have identified team building as forming the basis of trust. This is highlighted as important for two main reasons. The first is that it allows for the creation of shared goals. Shared goals mean that everyone can be seen fulfilling a joint task, rather than viewing their own role as separate from the rest of the project team. When people understand the shared goal, communication is improved.

The second is the creation of mutual understanding, which is inextricably linked to the idea of shared goals. This means that members of the project team
understand the role and position of other members on the project team, or their individual or organisational goals, and understand the difficulties that they may experience. When a person feels like part of a team, he can communicate more effectively.

In one case study project the contractor made a conscious effort to build teams. He organised an “away-day” prior to the contract, with a mixture of work and recreation. The team members found this very useful, as relationships were established prior to work.

Another case study project uses a less formal mechanism by giving repeat business to the same close “knot” of contractors and consultants as a means of developing shared goals and mutual understanding. Another benefit of doing this is that personnel have already established relationships and trust has already been established. By involving members at the early stages of the project, they can bring their expertise to the table and build relationships earlier rather than later.

4.3.4 RECIPROCITY

Another builder of trust is the idea of reciprocity, or “one good turn deserves another”. People felt that if they had put themselves out for other people and made sacrifices to make the other party’s life easier on the project, then the favour should be returned at some or other stage. Failure to do so can seriously damage a relationship and the trust that was established. People will not make the effort to help someone if they know that the other person will not do the same for them.
4.3.5 REASONABLE BEHAVIOUR

Reasonable behaviour is a vague term, and depending on a person’s personality and mentality can have different meanings. Individuals in more senior positions believed that it was about behaving professionally. Again different people may have different opinions about professionalism, but in general most people in senior positions understand and respect the professional code of conduct.

At the production level people talked about being “easy going” and “pulling their weight”. The idea behind reasonable behaviour is not necessarily about being non-confrontational, but is about acknowledging what the people that one is dealing with understands as reasonable.

People in general are more likely to respond to people who they like, but this does not guarantee trust however. A likeable person is not necessarily good in his job or all that reliable. Vice versa it does not mean that trust cannot be established if there was no personal interaction.

If relationships have been established by contractors on previous projects, they will know each others’ strengths and weaknesses, and with money as a motivating factor, they may abuse this knowledge and existing trust.
4.4 BREAKDOWNS OF RELATIONSHIPS AND TRUST

From interviews found in literature, parties were in general very clear as to why trust broke down.\textsuperscript{6,18} In general, the main reason for the breakdown of trust was people not fulfilling their obligations or being untruthful. It represents the opposite of what has been discussed thus far.

Some of the issues that arise when there are difficulties in relationships are listed below:\textsuperscript{6,4}

- Circumstances beyond an individual’s control – what happens when outcomes are affected by external factors.
- The human element – understanding that mistakes can happen and can be learned from.
- Fair Representation – making honest and open assessment of what problems have occurred and why they have occurred.
- Fixing the problem – finding the appropriate solution

4.4.1 CIRCUMSTANCES BEYOND OUR CONTROL

In general problems rarely happen in isolation. Quite often problems are a culmination of issues rather than any single individual’s fault. If the communication is good within the project team they may quickly identify or even predict the problems and act timeously to solve them. When an event is beyond someone’s control, people are generally sympathetic. This does, however, depend on the facts being made clear. When a problem is made clear as soon as it comes to light, it is often cheaper and easier to solve.
4.4.2 THE HUMAN ELEMENT

A comment often made is "we're all human". It is understood and accepted by most that people do make mistakes. There may be misunderstandings or incorrect choices made. This is also considered to be part of learning, and people tend to learn the most from the mistakes they have made. If trust has been established, it is easier for a person to admit his mistakes to other parties and get their input on how to rectify the matter if this is still not clear. This is however easier said than done should the mistake lead to a serious failure, in which case most managers should advise their staff not to admit to any negligence while a detailed investigation is carried out. Such failures or mistakes may have serious legal implications.\textsuperscript{17}

The opportunity to learn from other people's mistakes and inform other parties involved of the mistake, (without unnecessarily embarrassing the person who made the mistake), should be embraced. In such an instant the whole team can learn from this. A blame culture should be avoided at all costs since this does nothing for a persons' self esteem and only breaks down the relationship and trust instead of building it. If blame is shifted from one person to the next and nobody is prepared to accept responsibility, people will only try and hide their mistakes in future rather than owning up to them. This affects not only an individual's sense of self but the organisation's culture too.
4.4.3 FAIR REPRESENTATION

A successful and trusting project team will have fair and free access to enable communication between all parties, where people can communicate without fear of their message being distorted. Communications need to be rationalised. Having a chain of command and structured channels of communication does not always work as well as desired.

Contractors often feel that if they were allowed to talk to the client directly instead of through a consultant, they could give and receive valuable information faster and without distortion. When information gets even slightly distorted, it can cause confusion, which can lead to the breakdown of trust. It is also understood that the chain of communication is there for a reason and that if people start talking to whoever they want, certain parties often get left out of the loop. Free access to all parties can work successfully if all parties involved are informed of the communications.

4.4.4 CORRECTING THE PROBLEM

Using the following brief case study, the issue of correcting mistakes can be better explained.

A client had to award a project to a contractor after it was put out to tender. The contractor who offered them the best and most cost effective option was one who they had used before and experienced some problems with. The client made a decision to meet and discuss these issues with the contractor, where normally these negotiations will mostly be done through the consultant. The client informed the contractor of the issues they had with the contractor and problems they had with the project in general, and asked the contractor if he could explain what went wrong.
Here the contractor and the client could discuss the issues directly, solve the problems and put together an action plan that could avoid a similar situation arising again. The client was then happy to proceed using the same contractor again.

There are however some cases where trust is not that easy, and sometimes impossible to re-instate. This generally occurs where one of the parties feels that the behavior causing the breakdown of trust is potentially malicious.¹

Again the main issue is to maintain open communication channels. Problems are normally only seen as unsolvable if the communication breaks down. The main approach to fixing a problem is considered to generate a forum for discussing it, rather than ignoring it. Find a solution to the problem and move on.

4.5 SUMMARY

Trust has been determined to be a major role player when establishing successful relationships. Luhman¹ feels so strongly about this issue that he goes as far as stating that everyday life is not possible without trust. How is a successful relationship possible when there is no trust between parties?

Certain issues that may build trust, as well as others that may damage trust were discussed. It should be considered that people are only human, and mistakes will happen. It is how these mistakes are dealt with that is important. Open and honest communication can be a successful driver in building trusting relationships.

The next chapter expands on other factors that may influence relationships as well as trust in the construction industry.
CHAPTER 5
OTHER FACTORS INFLUENCING RELATIONSHIPS

5.1 INTRODUCTION

In the following sections factors that will lead to positive relationships and trust other than that of individual behavior will be discussed. Company culture and the effect financial position can have on the way people behave on a project will be discussed. The main factors that will be discussed are:

- Culture – what are the values that are important to companies and how individuals express this in project work.
- Money – how does money affect a companies’ ability to engage in trusting behavior.
- Project Factors – does the size and complexity of projects for example change the type of relationships that need to be established
- Contract Agreement – are all involved happy with the contract they entered into
- Psychological Factors – a few basic principles to understand human nature
- Interpersonal Conflict – there are positive and negative consequences of interpersonal conflict.
5.2 ORGANISATION CULTURE

As stated previously, organisations have reputations and these are often based on peoples' experience of working with them. Often when people behave in an adversarial way, they say that they are reflecting the "policy" of the organisation. Their way of working is dictated by the leadership of their organisation. At a more senior level, people that were interviewed felt the need for a cultural change throughout the industry. These people have realised that one cannot just carry on by trying to make a profit. There most certainly are organisations with cut-throat reputations. This is a reputation that most organisations are trying to steer away from, and will most certainly cost them money if prospective clients are wary of them.

If a company is going to work in trusting teams, it needs the support of their leadership to follow this approach. Most senior level interviewees felt that any policy to pursue the trusting way of working had to come from the top. This must then be supported by an equivalent commitment to implement and support the policy at all levels. Communication and trust must be reciprocal and work up – down and down-up. An open door policy should exist within a company so that complaints can be discussed and problems can be avoided in future projects. This goes along way in building trust internally and ensuring that employees propagate the company's good reputation.
5.3 FINANCIAL POSITION

The financial position of an organisation can influence the behavior of its employees. The construction industry is quite cyclical, and in the current situation construction companies are tendering at very low profit margins to try and win contracts. To make this worse, organisations that are in a bad financial state and desperate for work, will underbid in order to be awarded work. This is where most organisations jeopardise the relationship with the client, because they start looking for all sorts of loopholes in the contract and even take shortcuts on site to ensure some profit.

For relationships and trust to be built, it is important that organisations are financially stable. This does not mean that an organisation that is experiencing financial insecurity cannot be trusted. All organisations have to start somewhere, and their growing years will be accompanied by some financial growing pains. When there is trust, there is normally a successful project, and with success, money is the reward. What may established from this is that financially stable companies progress to where they are because of trusting relationships they have established with clients by delivering successful projects.

Further to the company’s financial position, the individuals’ financial position may also have an influence on his relationships with his superiors and colleagues. Should the individual feel he is being taken advantage of in terms of salary and what is expected of him, his motivation may be influenced. One of the most common reasons for people changing organisations is money and the promise of a better package. Within a certain ethical framework, loyalty goes to the highest bidder.
5.4 PROJECT FACTORS

All projects vary in size, scope and complexity. All these factors also have an influence on the levels of trust that can be maintained on the project. Consider how the following factors can influence the trust on the project.

5.4.1 PROJECT SIZE

The first element that changes with the size of a project, is the number of people involved on the project. Obviously on larger projects there will be many more people working on the project, and managing these relationships becomes more complex and difficult. On large projects, many people that are involved may never even meet face to face. There are only a limited number of relationships that can be maintained and time is required to build and maintain trust. Time is one of the most important commodities one can give anybody. How can one establish a trust relationship if one has never made the time to see key people?

On smaller projects there are less people in the supply chain, so they will understand each others' roles and can communicate with a greater percentage of people in the project team. A problem with smaller projects is that they are often of short duration, so time is limited to establish relationships with certain people. Besides the time, money for teambuilding is also not always available on small projects due to limited budget. Large projects with more people involved may limit opportunities in working with certain partners, but they offer more time to establish long lasting key relationships with the partners that one gets a chance to work with.

The level of trust required between small and large contracts can also vary. A person that is suspicious of relationship building and thinks that everyone is out to get him, will not survive on a large project where there are more people that
one needs to trust in order to carry on with the work. People working on smaller projects noted that relationships were more orientated around tasks and problem solving, rather than relationships built by design teams working on longer projects.\(^4\)

### 5.4.2 BUDGET AND COST

The available budget can impact on the levels of trust required on a project. A contract that is on a very tight budget, reduces the levels of trust due to the risk involved. If there is a larger budget available, the risk of a mistake costs less and therefore the levels of trust are more relaxed and normally higher.\(^6\)

### 5.4.3 COMPLEXITY

Complexity makes the need for good relationships all the more important. The greater the level of complexity in a project, the greater the need will be for trust. There are three main reasons for this:\(^6\)

- Firstly, a complex project may contain many specialist factors that all parties may not be competent in. This means people must rely on the communications and actions of specialist contractors and suppliers to complete the project.

- Secondly, complex projects have much more information. The communication aspect of trust becomes very important. The more information passing between people, the more important it is that people can rely on these communications.

- Finally, at the site level of the project, there will be multiple interfaces between different trades and organisations. To limit conflict at this level,
there needs to be a high level of information exchange to ensure people are working together effectively. This kind of complexity can be mitigated through inclusive planning.

5.5 CONTRACTS

Contracts and agreements form the basis of the relationships that individuals and companies enter into during the course of a project. Often the type of contract may influence the ability of parties to form trusting relationships. The factors may be,

- Contract format – does the type of contract influence trust?
- Is the contract fair? – what are the issues surrounding fairness of contracts between parties?
- Formal vs. informal – how trust impacts formal and informal arrangements in relationships.

5.5.1 CONTRACT FORMAT

Contract format can be seen as an aspect that could influence the development of a trusting relationship. Traditional approaches may be seen as supporting the adversarial approach to construction projects.

Partnerships are often seen as a useful instrument for building trust in project teams. Continuity of personnel and long-term relationships mean the consequences of relationships are placed in long-term context. Partnering, although useful in promoting trust, is not the only form of contracting in which trust can be built.
A client in one of the case studies mentioned that they had used management contracting, and although they had no formal agreement, they often used the same companies again and again in a partnering type arrangement. The main types of contract were discussed in Chapter 3.

5.5.2 FAIR CONTRACT

For trust to be built, it is important that all parties involved feel they are getting fair reward for the work they are putting into the project. If the profit level is equitable, and in some cases protected, then the parties do not feel the need to squeeze more profit through the use of claims, variations and day rates.

Whenever there is money involved, an element of mistrust exists. With good reason, parties are always looking out for their own best interest. Because everyone does this, one can’t help but wonder where the other party is trying to do one in. Contractors are becoming increasingly clever in finding loop holes in contracts or errors in bills of quantities to substantiate claims or alter tender rates, but at the same time, and mainly because of the contractors’ claims, clients are making contract documents tougher and tougher to protect themselves against any claims. These factors do not influence relationships positively.

The contract price must reflect the work that has been done. It should not be expected of the client to bear inefficiencies, but it should not be onerous on the contractor. If a contractor “bought” work, then trust immediately becomes a problem. The contractor accepted an “unfair” contract, possibly out of desperation, but this means that he will always be on the lookout and waiting for the smallest opportunity to recover what he feels he may have lost at the outset.
It is a common concern in the construction industry that the time and cost savings required for contracts are becoming more difficult to achieve. It is mainly the clients that drive this, but it does put pressure on the project team. Clients often put unrealistic timelines to their projects, and greedy and unrealistic contractors go for these projects. Unfortunately projects that start off this way rarely end as success stories. Under-promise and over-deliver is the maxim that contractors should strive for.

5.5.3 FORMAL VS. INFORMAL CONTRACTS

By signing a contract, the agreement becomes formal and binding. Many people feel that once one has sorted out the basics of the contract, one must put it in a drawer, and then talk about how one is actually going to do the project. If one has to go back to the contract, it means failure of the trust relationship. The commercial realities of construction must be accepted.

The contract can be called the “rulebook” of the project. The contract provides the parties involved with the “rules” and specifications. By signing the document both parties accept the contents and agree to abide by the “rules”. Should a party not live up to his end of the bargain, the contract provides legal recourse to recover losses or rectify sub-standard work. The formal contract is a necessary replacement for trust in the construction industry and is required for the protection (especially financial) of the parties involved.
5.6 PSYCHOLOGICAL FACTORS

Very few technical people will have had any form of formal psychology training, just as it would be highly unlikely to find a psychologist with any knowledge of civil engineering or construction. The reality is however that in construction people have to deal with other people, and it would therefore be beneficial to managers to understand what psychological factors motivates and influence people.

5.6.1 MOTIVATION IN ORGANISATIONS

Motivation is defined as the degree to which an individual is personally committed to putting in effort to accomplish a specific goal or activity. Many factors aid in motivating an individual but, there are two basic factors, namely, intrinsic (internal incentives) and extrinsic (external incentives) rewards.

Extrinsic rewards are based on goods, services or monetary rewards. These can be provided as incentives to individuals by companies in the form of incentive programs, group lunches, weekends away, even simple rewards such as a set of movie tickets to the sales person who added a bit of team spirit during a bad performance week.

Intrinsic rewards, can be achieved by:

- Development of personally satisfying and meaningful organisational goals
- Social reinforcement of collective goals through participation in satisfying organisational groups
- Active involvement, participation and personal identification with organisational goal setting and goal accomplishment
- Sharing of social rewards from collective efforts and activities
What makes this complicated, is that the two incentives are not independent and additive but interrelated and often counteracting aspects of human motivation. For example, a manager who decides whether an employee gets a reward or not, is exerting power over the employee and so takes the power away from the employee, thereby reducing intrinsic motivation.

Extrinsic rewards can weaken the individual's sense of competence and self-determination, thereby reducing the intrinsic motivation.

Internal and external rewards must be carefully managed within an organisation and by managers, as extrinsic incentives can place constraints on intrinsic incentives.

5.6.2 NEEDS THEORIES OF MOTIVATION

There are three popular theories of human motivation based on individual’s need fulfillment:

- Maslow's Hierarchy of Needs
- Hertzberg’s Two-factor Theory of Motivation
- Schutz’s Interpersonal Needs Theory

5.6.2.1 MASLOW’S HIERARCHY OF NEEDS

Maslow developed a theory based on the idea that people need to satisfy a variety of needs. However, these needs are hierarchical in nature and only once the first level of needs has been successfully attained can one move onto the next level.
True motivation is only attained once one reaches one's full potential at the self-actualisation level where intrinsic motivation allows one to satisfy one's own beliefs and values.

Figure 5.1 – Maslow's Hierarchy of Needs

5.6.2.2 HERTZBERG'S TWO-FACTOR THEORY OF MOTIVATION

Hertzberg proposed a human theory that was aligned to Maslow's theory in that Hertzberg's hygiene factors are inline with Maslow's survival and safety needs and his motivation factors are inline with Maslow's affiliation, esteem and self-actualisation needs. However, Hertzberg defines a complicated set of relationships between the hygiene and motivational needs and is very organisationally orientated.
- Basic hygiene needs (these are extrinsic): salary, security, work conditions, status, company policies and administration
- Higher order motivational needs (Intrinsic): personal growth, achievement, recognition, responsibility, promotion and satisfaction

Minimal hygiene needs must be met for an individual to be able to focus on motivational needs. Hertzberg suggests seven principles to consider so as to enrich employees' positions.¹²

- Relieve employees' admin controls while maintaining their accountability for performance, so as to allow for more creativity
- Increase employees' personal accountability of their work, so as to increase their personal responsibility and recognition
- Allow employees to complete an entire project instead of sections, so as to increase sense of accomplishment
- Give employees more authority to increase their responsibility
- Provide employees with regular direct feedback, thereby increasing internal recognition
- Provide opportunities to employees for new growth
- Provide aid to employees to become experts in their chosen direction, thereby increasing recognition, responsibility and growth

5.6.2.3 SCHUTZ'S INTERPERSONAL NEEDS THEORY¹²

Schutz's Interpersonal Needs theory is based on the premise that human needs can be satisfied through the development and maintenance of effective interpersonal relationships. His theory is also organizationally orientated in that people are motivated to fulfill these give-and-take needs and harnessing these needs encourage people to do their best for the organization.
People need opportunities:

- To exert control and to be controlled by others in certain situations
- To show affection and for it to be returned
- For the inclusion of others with them in social groupings

5.6.3 GOAL THEORIES OF MOTIVATION

There are two models, Expectancy Theory and Path-Goal Theory. The Goal theory of motivation propose that by identifying specific organisational tasks for specific employees, specifying the activities required to achieve the success, and matching individual and organisational goals, employees will be motivated to work towards the desired goals.

5.6.3.1 EXPECTANCY THEORY

Vroom defines motivation as the process that governs how individuals choose among different activities. There are three basic assumptions namely:

- Organisation members have 'outcome expectancies'
- Organisation members perceive 'valences', or specific values.
- Organisation members perceive 'effort expectancies', this amounts to the effort needed to achieve the goal.
5.6.3.2 PATH-GOAL THEORY

Effective leadership is key to this theory in that the leaders need to clearly identify the route to reaching the desired goal. The rewards for attaining the goal must also be clearly communicated to employees. It is very much performance related. Coaching, mentoring and providing the necessary organisational support and feedback is essential.

5.7 INTERPERSONAL CONFLICT AND ITS’ EFFECT ON RELATIONSHIPS

Nothing challenges the healthy self-concept more than dealing with conflict. All human interaction is accompanied by some degree of conflict. The decision making function itself is almost synonymous with conflict. When there are as many parties involved as with most construction projects, conflict almost becomes part of the daily routine. As stated above, the decision making process alone creates conflict, and one of a manager’s main responsibilities is making decisions. Group decision making produces even more conflict than individual decision making. In the construction organisation, group decisions are common and all stakeholders will sit together to best plan the project’s way forward. The degree and frequency of conflict will depend on the types of relationships that have been established between the stakeholders.

The healthy organisation will be one that deals constructively with conflict. Different organisations may choose different approaches to conflict resolution, depending on the type of climate and culture of the company or organisation. A noted psychologist, Morton Deutsch, determined that how people in a team, group, or organisation believe their goals are related, is important in understanding how effectively they work together.
This cooperative conflict theory is a powerful way to understand conflict. This research confirms that when people believe their goals are compatible, they know that as one succeeds, others succeed. On the other hand, people may believe their goals are competitive, and if one wins, others lose. Employees’ views of professional and organizational goals as cooperative or competitive affect employees’ orientation and intentions toward each other, and therefore it affects the relationship.

Research confirms that where a cooperative relationship exists, information is shared, resources shared, and employees know each others point of view and assist and support each other. This helps cooperators complete tasks quicker, reach high quality solutions together, reduce stress, strengthen work relationships and foster future collaboration. In this environment of trust, conflict can be managed productively and all frustrations can be revealed.

Those who view goals as competitive foster the suspicion that people are only looking out for their own interests. This mistrust halts the flow of information and resources and creates unproductive conflict that deters productivity, increases stress and decreases morale. As production is of key importance in any engineering project, it is clear that this is an unwanted situation.

The entire construction project, from client to contractor to suppliers is dependant on teams and team based management, and the underlying assumption is that team based management will increase project productivity because teams foster higher creativity, energy and performance. However, should conflict arise in the team, decisions will take longer to be made, which may delay other aspects of the project.
5.7.1 ADVANTAGES AND DISADVANTAGES OF CONFLICT

Conflict is not a tangible product, but lies in the minds of the people who are parties to it. It does however become tangible when it manifests itself in arguing, brooding or fighting. The problem lies with the inability of people to manage and resolve conflict effectively. If managed correctly, conflict can be constructive, if not, conflict can be a destructive force in individuals and organizations. If conflict is managed correctly and in a creative manner, it can be motivational. Using potential conflict as a tool to promote healthy competition can be a beneficial way to control the conflict within a group or organisation.

Conflict is constructive when:

- People and organisations grow and change positively from the conflict
- The conflict provides a win-win situation
- Involvement is increased for everyone affected by the conflict
- Team cohesiveness is increased

Conflict is destructive when:

- Problems are not resolved
- It drains energy from more important issues
- Team spirit and relationships are affected
- The team or individuals become divided

Conflict in teams serves a productive purpose when it is focused on the differing perspectives and judgments of how to reach a project goal. Conflict becomes unproductive and harmful to the team effectiveness when it focuses on another team member rather than an issue. Personal attack will diminish team cohesion and damage working relationships.
Conflict is however a natural, healthy occurrence when people work together and prevent complacency in teams, which may deter growth.\(^2\)

5.8 SUMMARY

Many factors may have an influence in our relationships. A lot of emphasis has been placed on trust in establishing positive relationships in the previous chapter, but other factors such as company culture, financial position and psychological factors, amongst others, have been identified to be major role players as well.

There are basic psychological theories such as Maslows' hierarchy of needs\(^{12}\) that are simple enough for any manager to understand and utilise. It is as essential for managers to be aware of human relations and psychological issues as it is for an engineer to be computer literate.

Through conflict, relationships may also be improved if the conflict is resolved in an amicable manner.\(^3\) Conflict may however have a destructive effect on relationships when it can not be resolved. Good communication and negotiation skills therefore become a valuable asset in forming relationships.

Various aspects and issues that influence relationships have been discussed up to now. The project manager on construction projects is the one person that is linked to almost every other involved party in the organisational structure of the project. Special emphasis should be placed on his function and influence on construction projects.
CHAPTER 6
THE ROLE OF THE PROJECT MANAGER

6.1 INTRODUCTION

In the civil engineering and construction industry, it is often the case that project managers lack in interpersonal skills. The main reason for this is that engineers are generally technically orientated people. They normally start out in a very technical position soon after qualification, whether in a design or construction field. After sufficient design or site experience has been gained, they may be appointed over other engineers and start moving over to a managerial position.

They may then be appointed to lead and manage smaller projects, and depending on opportunities and experiences gained, be appointed as a project manager over large construction projects. Human resources and interpersonal skills do not form part of the education syllabus at most tertiary institutions, neither do most managers currently in the engineering industry focus on mentoring or coaching, unless it is to the benefit of their organisation or an engineering body's requirement. Without formal training, people skills will only be learnt by dealing with many people from different cultures and backgrounds, and over a substantial period of time.
6.2 FUNCTION AND RESPONSIBILITIES OF THE PM

The project managers' position is in the centre of the entire organisational structure. Where certain parties involvement and dealings with other parties may be limited, there is normally some link between the PM and all parties involved in the project. Considering figure 2.1 these links are obvious. Listed below are a few items that may form part of the responsibilities of a project manager on a typical large construction project.

- Dealing with and reporting to stakeholders such as joint venture partners.\(^{15}\)
- Negotiating with contractors, sub-contractors, suppliers etc.
- Interviewing and appointing suitable staff members
- Managing the project team
- Motivating staff
- Taking disciplinary action against non-performing staff
- Handling public relations issues and dealing with the press
- Keep track of project performance by receiving regular feedback from managers on issues such as expenditure, budget, progress and staff issues
- Making recommendations on corrective action should any be required
- Be a leader

In any organisation a chain is only as strong as its weakest link. No project can therefore afford to have a "weak link" project manager. The successful project manager will establish relationships at the start of a project with all parties involved, and maintain these relationships within reason throughout the project.
When considering some of the responsibilities of the project manager, it is clear that it will be very difficult for one person to perform all the functions himself, and he therefore needs to be able to delegate responsibilities, and manage the people that manage these functions for him.

6.3 MANAGEMENT SKILLS REQUIRED

Managing has been defined as the art of getting things done through people, and it requires three sets of skills: technical, administrative and interpersonal. These three skills are just as important to the success of the project manager. Most managers may be able to get by for some time if they have a deficiency in one of the three skills if they are very strong in the other two. Someone who lacks technical skills, for example, may be particularly good at delegating technical responsibilities (administrative skill) and selecting highly qualified people to provide that expertise (interpersonal skill).

However, the lack of interpersonal skills will likely prove to be a fatal flaw for any manager's career. The person who does not possess interpersonal skills, will not be able to establish and maintain successful relationships with the people he works with. In establishing interpersonal relationships, one must be able to understand, predict and influence human behavior.

Project Managers must be able to delegate responsibilities. He can never expect to achieve success if he wants to handle everything himself. There is the saying that "if you want it done properly, then do it yourself." The successful PM will be able to delegate responsibilities and must be able to trust that it will be done as he expects it. PM's are therefore reliant on their subordinates to achieve success in order for himself to achieve success.
It should be a pre-requisite that a project manager be able to choose his team, identify their individual strengths and weaknesses, thereby allowing him to motivate, delegate and control the team effectively and thereby ensuring the success of the project.

If necessary a project manager should be able to enforce disciplinary action on any individual who is unable (the end result being to eliminate him from the company) or unwilling (the end result being to motivate or retrain him to be an asset) to do his job.

Most importantly, communication channels must be set up and maintained by the project manager and all parties involved. Through these open, honest and effective communication channels, the chances of success of the project may be greatly improved.$^{2,3}$

Through conflict, relationships may also be improved if the conflict is resolved in an amicable manner.$^3$ Conflict may however have a destructive effect on relationships when it can not be resolved. Good communication and negotiation skills therefore become a valuable asset in forming relationships.
CHAPTER 7
CONCLUSION AND RECOMMENDATIONS

7.1 CONCLUSION

Construction projects involve large numbers of people from different organisations coming together, working to very tight deadlines. Relationships, whether direct or indirect, exist between all parties involved in a project. The relationship may not be a direct one nor one that is obviously clear at first glance, but a breakdown in any of the direct relationships may have a knock on effect through the relationship structure.

The need to quickly build teams and establish clear and honest communications between team members is important. Once the communication channels have been established, relationships will be formed, and the communication network can be used to maintain these relationships. Ideally, the relationships that are formed should be preserved from project to project. Individuals and companies will much rather choose to work on a project with another party that they have worked with before and have established a relationship with. A further advantage of working with another party where a relationship has been established already, is the shared experience. The parties will already know the other's systems and procedures, capabilities and also their organisational culture.

There is the conception that the norm in the construction industry is a "blame culture". If parties can establish successful relationships, it will be simple to establish a "problem-solving culture". If there is trust and a positive relationship between parties, it is possible to admit mistakes and by working together find the best solution to the problem, instead of hiding mistakes and blaming others.
The role of the project manager and line managers were discussed, and certain aspects highlighted on how they should treat their people to motivate them, but individuals working on construction projects should be aware of and accept that construction is an industry where information changes rapidly and the deadlines do not move. Successful relationships and team spirit will only be able to be established if individuals are willing to adapt to the changing information as the project progresses.

Many factors may have an influence in our relationships. A lot of emphasis has been placed on trust in establishing positive relationships, but other factors such as company culture, financial position and psychological factors, amongst others, have been identified to be major role players as well.

Relationships may be complicated and different interpretations of the term relationship may be encountered depending on the type of relationship that exists, and depending whether it is a personal or work related relationship.

Positive human relations has been determined to be a key factor to the success of any organisation and a requirement for forming long lasting relationships. Managers should endeavor to be humane and be leaders that people look up to and wish to follow. By learning certain human relations skills, negotiation skills may also be improved.
7.2 RECOMMENDATIONS

It has been established that people that have been trained in a technical environment do not always possess the required human relations skills when they are promoted to managerial positions. Project managers especially have to deal with stakeholders and personnel on all levels. Technical and financial competence should therefore not be the only requirements for advancement to managerial levels, but emphasis should also be placed on human relations skills. These skills can be learnt through experience in dealing with people, but may take many years, and may also be accompanied by many lessons through mistakes. It is recommended that organisations send staff that display managerial qualities on basic human relations courses and even include basic human psychology and motivational theories.

One does not need to become a psychologist to understand and motivate most people, and with the vast amount of research and literature available on human relations, interpersonal skills and psychology, by reading up on some of these issues one may already improve one's skills.

It is essential for any professional person to remain up-to-date in their field of expertise. Therefore, attending training courses, seminars and being actively involved with a mentor and even being a mentor to someone in a position below one's own can teach one invaluable lessons.

Being pro-active and becoming involved with the planning of social events and suggesting methods to uplift one's colleagues and improve relationships will not only benefit the organisation but one's own understanding of the organisations' culture. One should talk to other professional people and find out what their organisations do to build their reputation and promulgate positive feedback from their employees. Many interesting and effective solutions can be found.
Active success and even the notion of success can create a huge positive impact on an organisation. Active participation in pushing an organisation forward to success is the greatest motivation of all!!
LIST OF REFERENCES

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18. **Interviewees** – Due to confidentiality and legal issues, as well as the informal nature of the interviews, the names and companies of the interviewees can not be made public.