

CONSTRUCTION INDUSTRY STANDARDISATION AND EFFECTIVE COMMUNICATION

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ABSTRACT

Purpose of this paper - The purpose of the paper is to investigate the role that standardisation of documents play in respect of communication efficiency in the construction industry.

Methodology - A literature study on communication planning, -flow, -structure and -execution was done to underpin the empirical survey of continuous standardising construction documentation, and the role it may play in effective communication between stakeholders in the construction industry.

Findings - The results show that standardisation and standard communication instruments play an important role in effective communication, but also indicate the need for improvements in these standards and the links they established.

Value - Based on the analysis of the standard communication instruments and their importance, as indicated by the respondents, a proposal may be made to improve the effectiveness of standard documentation and the links between the various communication instruments.

Key words: Communication instruments, standardisation, standard documents, communication links.

1. INTRODUCTION

There are different communication instruments, such as contracts, specifications, reports, manuals, schedules, calculations, drawings, computer files, disks, print-outs, photographs, agenda's and minutes of meetings (Knipe, 2002: 117). The management of documentation and communication used in a project is used by a number of subcontractors, the storage and retrieval thereof for further use.

These instruments describe a range of documents and also different versions of those documents as they pass through the lifecycle of the project at each phase.

From a standard documents and communication structures, -flow and -planning can be modified as necessary to meet the requirements of each project.

2. STANDARDISATION

Standardisation is the process of developing a uniform practice that people are to follow in doing their jobs (Smit & Cronje, 2002:195). The main purpose of standardisation is to develop a specific level of conformity.

This process of standardisation has certain advantages for the management of a project:

- Less different documents
- Records are easy to handle
- Training is simpler and more uniform
- Communication planning and especially -control is simpler
- Better utilisation of documents and the compiling thereof
- Easy to use in one project or another, although these are totally different projects.

The only disadvantage of standisation is:

- Once the standarisation of a process, structure, commnunication instrument or flow of communication are complete, there is a strong indication not to vary it (Adendorff & De Witt, 1999:27).

Standardisation contributes to increased productivity because the documents and communication from one project to the next are the same or similar and thereof less confusion is created.

3. COMMUNICATION PLAN

Communication planning pulls the project together. The project manager and project office are at the heart of the project's information and control system. It is the project manager's responsibility to develop not only the project organisation structure, but also to

develop the project's communication plan and lines of communication. The communication plan should outline:

- Who (lines of communication sender- and receiver-responsibility and authority)
- What (scope of communication and format)
- How (e-mail, document, telephone, meeting, presentation)
- When (schedule)
- Feedback (confirm message received and understood – document control)
- Filing (retrieval, storing, disaster recovery) (Burke, 2003: 274)

4. COMMUNICATION FLOW AND INSTRUMENTS

4.1 Formal communication

Communication flows in four directions: downwards, upwards, horizontally and laterally. These basic communication flows are shown in Figure 1.

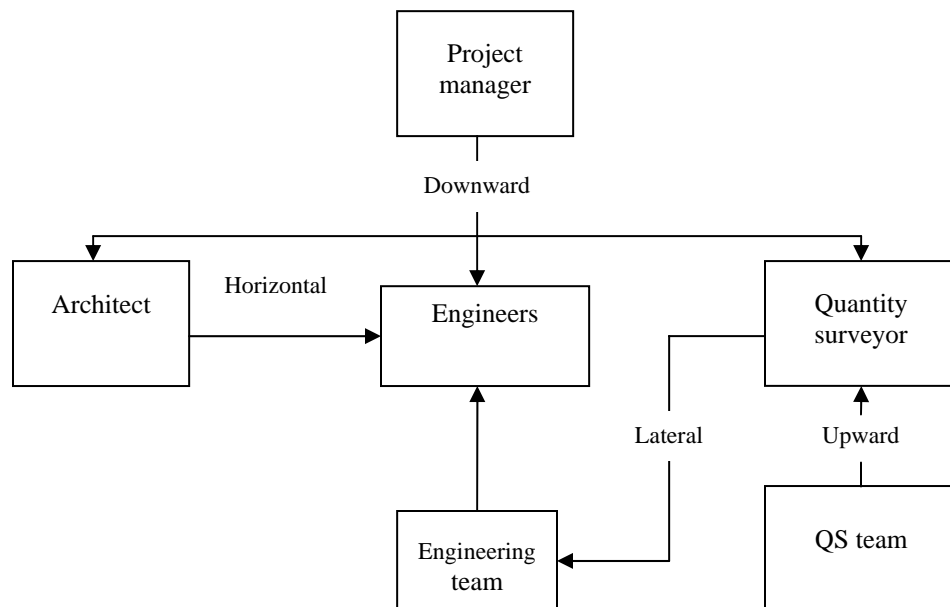


Figure 1 Communication flows

Source: (Adapted from Smit & Cronje, 2002: 372)

Downward communication starts at the top and flows down through the project levels to workers. The major purpose of downward communication is to provide subordinates with information on goals, strategies and policies. Downward communication is likely to be filtered, modified, or halted at each level as managers decide what should be passed down to employees.

When employees send a message to their superiors, they are using *upward* communication. The main function of upward communication is to supply information to the upper levels about what is happening at the lower levels.

Horizontal communication occurs between people on the same level of the hierarchy and is designed to ensure or improve co-ordination of the work effort. It is formal communication, but does not follow a chain of command. Effective horizontal communication should prevent tunnel vision in the organization.

Lateral communication takes place between people at different levels of the hierarchy and is usually designed to provide information, co-ordination or assistance to either or both parties (Smit & Cronje, 2002: 371-372).

4.2 Informal communication

Informal communication, commonly called “the grapevine”, can begin with anyone in the organisation and can flow in any direction. The grapevine’s prime function is to disseminate information to employees (both managerial and non-managerial) that is relevant to their needs. Grapevine/rumours = information without a factual base.

In the construction industry, the following are informal communication methods:

- Regular contact
- Mind reading
- Motivation to speak (Smit & Cronje, 2002: 373).

4.3 Project communication instruments

Project communication, as shown in Figure 2, is *internal* and *external* communication between members of an organisation at all levels in order to achieve a mutual goal or goals.

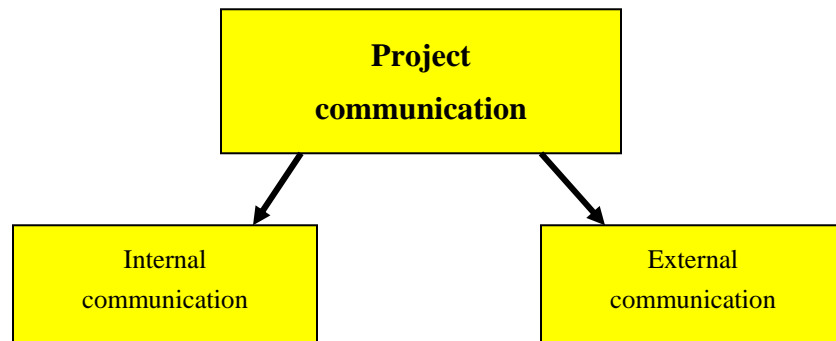


Figure 2 Project communication

Source: (Adopted from Le Roux, 1999: 286)

To achieve goals, it is necessary to communicate or interact at various levels of the organisation – this is known as internal communication. Members also have to communicate with individuals or groups who are not members of the project. This is referred to as external communication.

4.3.1 Instruments of internal communication

Different methods of instruments of internal communication exist:

- *Oral communication* occurs in the form of meetings, discussion groups, talks including the grapevine, interviews, announcements and conversations, both face to face and over the telephone
- *Written communication* takes place by means of letters, circulars, memoranda, manuals, reports, seminars and minutes of meetings
- *Non-verbal communication* can convey powerful messages in the business world by means of gestures, appearance or attitudes
- *Electronic communication*. It is possible to send messages all over the world at a very high speed. Messages can be sent and received using computer terminals, electronic mail (e-mail) and fax facilities (Le Roux, 1999: 286-287), (Smit & Cronje, 1992:377-379)

4.3.2. Instruments of external communication

Every member of a project is involved in communication with customers, shareholders, the media, the government, labour unions, the community and members of the general public, on a daily basis. The external communication to each, conveys a particular image to the outside world (Le Roux, 1999: 286-287; Smit & Cronje, 1992:377-379).

5. STRUCTURE

Structure defines lines of authority and communication, specifies the mechanism by which tasks and programmes are accomplished. The performance depends on the co-ordination between the parties involved, the system of communication, the culture of the project, the staff members and the communication structure (Aaker, 1992. 331).

Intercultural communication is in many ways far more complicated, e.g. languages, because participants need to be aware of an increased potential of misunderstanding. Project team members are part of different sub-cultures. In a project team there may be communication problems because of these differences and expressions in different professions (Peltoniemi & Jokinen, 2004:3-4).

Figure 3 shows the framework for analyzing projects

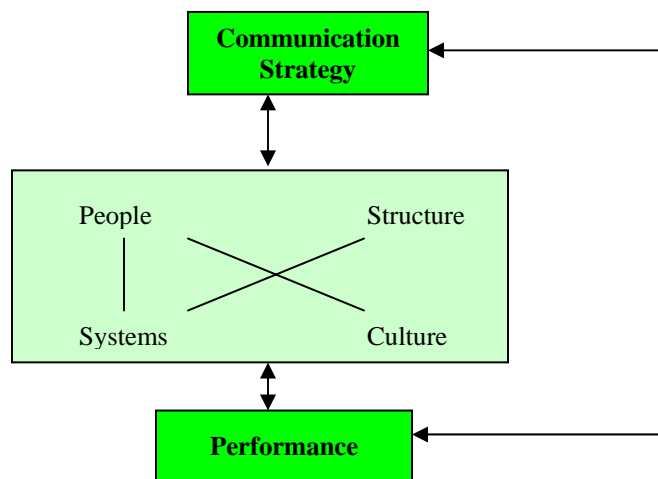


Figure 3 A framework for analysing projects

Source: (Adapted from Aaker, 1992: 331)

People, systems, culture and structure may be used as communication strategies to ensure the performance of the project. Every sub-project has a different set of people, systems and culture to that of the main project. This strains the project, increases communication problems and makes it less likely to complete a project without incidents (Aaker, 1992: 331-332).

6. COMMUNICATION AND THE INDUSTRY

Research was done by the Department of Quantity Surveying and Construction Management of the University of the Free State.

The opinions of relevant parties in the building-, property development- and construction industry on what good communication entails, was determined and interpreted. The effectiveness of professional communication and communication instruments, were established.

The survey was conducted to establish the current performance of professional consultants in respect of their communication and communication instruments in the construction industry. Professionals (architects, engineers, project managers and quantity surveyors) were requested to respond to the questionnaire. More than a thousand questionnaires were sent to these professionals in the RSA. The response rate was less than 10%.

The following are some of the most important findings:

- Communication is strategic – now more than ever. In an information-driven age, communication is an integral part of the corporate strategy
- Writing is still the core skill for communication. Verbal, written and contractual communication was rated almost the same in importance

Figure 4 shows the respondents ratings for verbal, written and contractual communication skills of Architects, Engineers, Project Managers and Quantity Surveyors.

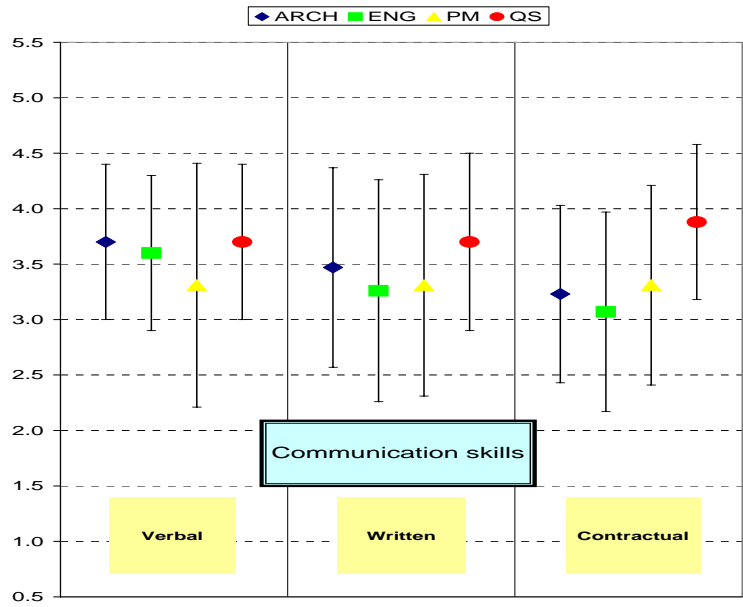


Figure 4. Communication skills

Source: (University of the Free State, Department of Quantity Surveying and Construction Management, 2007) The ratings are: 1 = low, 3 = intermediate, 5 = high

Figure 5 shows the importance of communication instruments used by professionals.

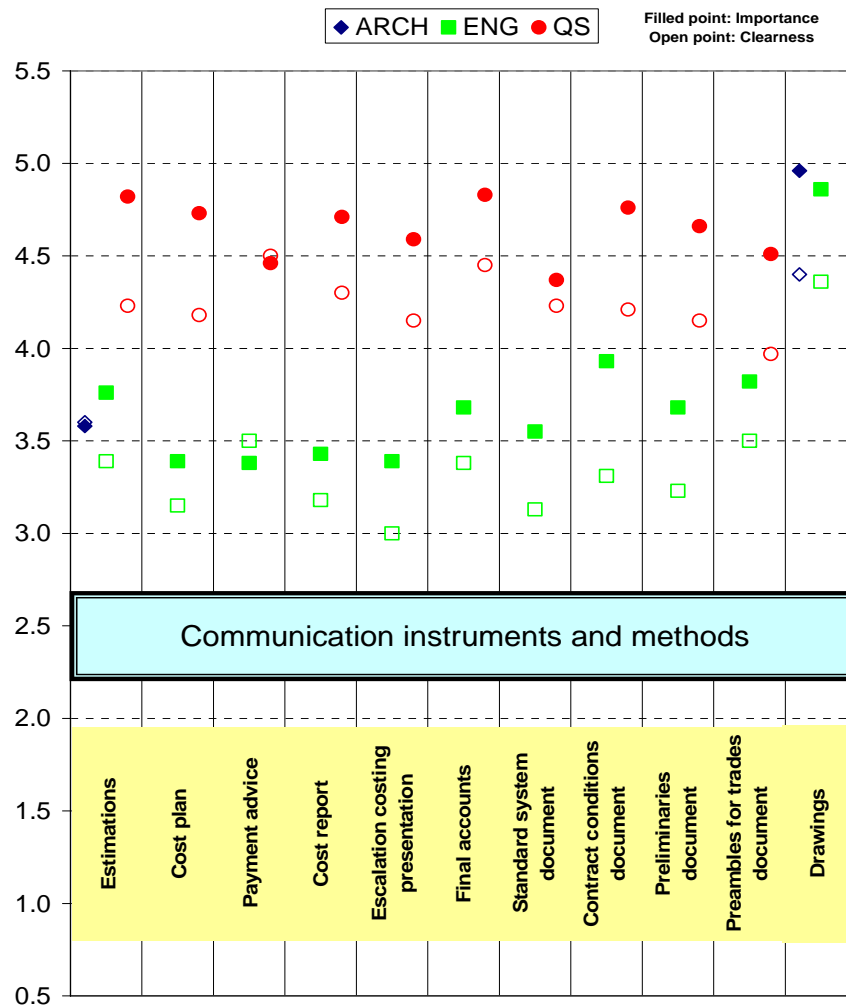


Figure 5. Importance of communication instruments used by professionals

Source: (University of the Free State, Department of Quantity Surveying and Construction Management, 2007) (The ratings are: 1= low, 3= intermediate, 5 = high)

- Results on communication instruments indicate which instruments are high in importance and for which professionals

Effective communication can contribute towards the success of a project.

7. CONCLUSION

For each project, it is important that the project-related information is fully documented to ensure that all the people involved understand what has and is happening.

Each project has a great deal of communication and documentation. With many projects using the same communication instruments, over and over again, the running of the project will be much easier and more understandable if communication instruments, -plans, -structure and -flow are a standard process. Standardisation will provide a system for effective management that is not too complex, and may contribute towards the effective execution and completion of a project.

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