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DEVELOPING A MODEL TO OVERCOME THE ORGANISATIONAL COMMUNICATION DEFICIENCIES BETWEEN STAKEHOLDERS IN THE ASSET MANAGEMENT INDUSTRY

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ABSTRACT

In providing Asset Management (AM) services, strategic partnerships are established for reaching organisational objectives and to obtain a competitive advantage. For this relationship to be optimal, effective communication is essential. Stakeholders collaborating in this relationship however, have diverse backgrounds, knowledge and experience and are not always effective communicators. The problem is the likelihood that service delivery objectives are not being met due to communication deficiencies. Although research about effective communication is available in other service providing industries, such as aviation and medicine, it remains a challenge in the AM services industry. This paper identifies the root causes of communication deficiencies in the AM services industry and presents a model, the COMMPAS model, that could support AM stakeholders in overcoming these deficiencies.

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1. INTRODUCTION

Effective communication is an essential element to obtain full cooperation in a partnership to reach the partnership objectives and achieve competitive advantage [1]. Feliu-Mojer (2015) [2] argues that effective communication skills are no longer perceived as soft skills and are becoming one of the core professional skills that are expected to be present in a professional.

In a study of the top communicators of organisations carrying job titles such as chief executive officer, executive director, president and so forth, none of the organisations studied was efficient in communication [3]. This proves that, even though organisations have found ways to transmit orders, share information and any form of communication, it remains to be something that can be improved upon and add value. Even though the importance of communication skills in professionals is realised, training opportunities for communication skills for professionals are still limited [2].

Similarly, communication is identified as a challenge in the asset management (AM) industry [4]. Numerous solutions have been developed to support organisations to improve their own communication efficiency. Such solutions address communication issues in the line of strategic planning, organisational effectiveness and customer- and employee relations [3]. The nine Knowledge Areas of Project Management Body of Knowledge (PMBOK) can be used as an example, where one of the knowledge areas is Project Communication Management, the SBAR situational briefing model and using vision to improve organisational communication. There are, however, limited academic resources that address communication challenges in the PAM industry, specifically communication challenges between asset management service providers or consultants, asset owners and contractors. The purpose of this study is to explore the opportunity of addressing these challenges and to develop a model to support PAM organisations with improved communication, enabling them to reach their service delivery objectives.

2. THEORETICAL FRAMEWORK

The qualitative Hutter-Hennink [5] research design is followed for this research. The process of the qualitative research cycle consists of three interlinked cycles, namely the design cycle, the ethnographic cycle and the analytic cycle. The specific research methodology adapted from the Hutter-Hennink design is illustrated in Figure 1. The research design is based on the first, design cycle of the qualitative research cycle. The cycle commences with formulating the research questions, to establish a focus in the research and give direction to the search for literature and theory. The second data collection cycle is based on the ethnographic cycle and consists of selecting a fieldwork approach. The fieldwork approach covers *how* data will be collected as well as *which* research methods will be used. For this study, the data collection cycle consisting of implicit activities, such as in-depth interviews and focus group discussions. In the third and final analytic cycle the model is constructed. This cycle comprises of developing codes to describe and compare, to categorise and conceptualise and to develop a theory. Activities such as code development and data preparation are performed by using the Atlas.ti qualitative data analysis and research software. Each of the three cycles is presented in the rest of the paper.

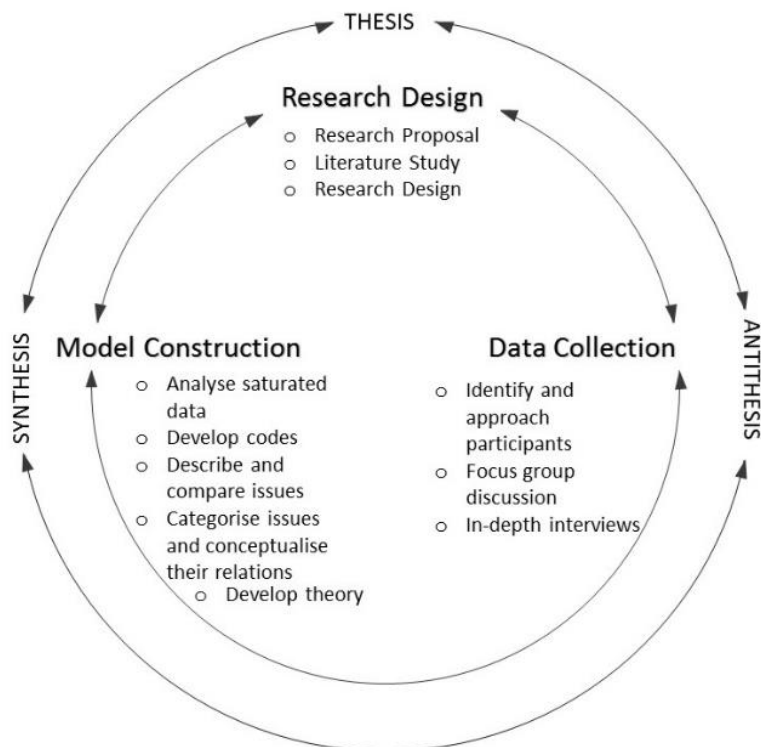


Figure 1: Adapted Hutter-Hennink Qualitative Research Cycle

3. LITERATURE REVIEW

The scholarship of organisational communication is vast and includes models such as: Laswell Formula [6]; Shannon-Weaver Model of Communication [7]; Osgood-Schramm Circular Model [8]; Dance's Helical Model [9]; Berlo model [10]; Barnlund model [11]; the McGreavy, et al. [12] approach to Organisational Communication as a Complex System; using vision to improve organisational communication [13]; and the Situation, Background, Assessment, Recommendation (SBAR) situational briefing model [14].

The majority of these organisational communication models have linear representations of communication which skews the emphasis towards the sender [15]. More recent models, such as using vision to improve organisational communication, however states that effective communication is better achieved by creating a shared context and using receiver-oriented approaches to communication. The problem however with most of the existing models are the predominant focus on communication basics, while there are little indications about how to support organisations in overcoming communication deficiencies.

Two models which do provide support for organisational communication beyond the basics, is the SBAR situational briefing model and the use of vision to improve organisational communication. A summary about each of these models is provided:

According to Leonard [14] the SBAR model produces the best results for managing communication in a complex environment. The SBAR model is a situational briefing model that originates in the medical industry. The model is effective since it is easy to remember, it enables structured conversations which are necessary in critical situations where attention and action is urgent, and it sets expectations for what will be communicated ([14]; [16]). The SBAR model consists of four elements, namely; situation, background, assessment and recommendation, which are explained at the hand of medical examples as it is originally illustrated by Leonard [14]:

- Situation: “Dr Preston, I am calling about Mr. Lakewood, who is having trouble breathing.”
- Background: “He is a 54-year-old man with chronic lung disease who has been sliding downhill, and now he is acutely worse.”
- Assessment: “I do not hear any breathing sounds in his right chest. I think he has a pneumothorax.”
- Recommendation: “I need you to see him right now. I think he needs a chest tube.”

The advantages of the SBAR model are threefold; critical information is transmitted in a predictable structure; the standard communication method creates familiarity in how people communicate and critical thinking skills are developed as the person initiating the communication needs to provide assessment of the situation and what they think the solution is prior to starting the conversation.

A different approach to organisational communication is to use vision to create a shared context to improve communication [13]. Kelly [13] questions the classic communication models such as the Shannon-Weaver and Berlo Model based on the challenges Quirke [15] offers against these models. Quirke argues that a primary reason for communication deficiencies is that managers and supervisors underestimate the central role of the receiver in the communication process and argues that more context should be shared for a receiver to decode a message. Quirke lists many reasons why context is traditionally not shared, one for example is that the emphasis is on task focused communication to get immediate results which results in context being left out.

It is evident from literature that before the emergence of vision-directed communication, barriers to organisational communication were categorised into interpersonal barriers and organisational barriers [15]. Interpersonal barriers include: the perception and perceptual selection process; semantics; channel selection; and inconsistent verbal and non-verbal communication. Organisational barriers include: physical distractions; information overload; time pressure; technical and in-group language; status differences; task and organisation structure requirements; and absence of formal communication channels. The vision-directed approach delivers a solution to these barriers [15].

The vision-directed communication model addresses both the interpersonal and organisational barriers. Kelly [13] supports this by stating that this approach: builds a shared context through by reinforcing the organisation’s values and beliefs; minimise communication barriers and reconceptualised problems as opportunities; and finally, the approach uses artefacts, symbols and ceremonies, which in itself are messages that are present even when the sender is absent.

4. DATA COLLECTION AND ANALYSIS

The data collection for the study is conducted in the form of focus group discussions and in-depth interviews. The analysis of the data is performed by developing inferences and codes, describing and comparing codes, and finally categorising and conceptualising the codes.

Strong relations were established with a PAM organisation, through which eligible research participants were identified. Participants have been invited to participate in the study by means of a face-to-face introduction or a phone call. Participants who agreed to contribute to the study were collaborated with further by means of emails until a time had been confirmed to meet face-to-face (if possible) or via Skype, to conduct the in-depth interview or focus group discussion. The recruited participants covered profiles such as, Business Area Manager (BAM), Field Engineer, Project Coordinator, Call Centre operator, Asset Care Engineer and Contractors. There are language and cultural differences within these subgroups as well.

Focus group discussions and in-depth interviews with the selected research participants produced a dataset from which communication deficiencies are identified. Inferences are developed to represent issues raised by research participants. These inferences are analysed and refined by using the Atlas.ti software to develop a list of codes that serve as markers of evident issues which arose from the participant data gathered. A summarised list of the issues based on the coding process is provided with an explanation to clarify each issue:

- *Cloud volume of information* - Communication deficiencies do not exist as a result of too little information, but rather due to too much information that is stagnating at the resources, such as the software that is used to capture data of the physical assets, and not shared with stakeholders.
- *Engagement* - Employees are not making an effort to communicate effectively due to a lack of engagement.

- *Feedback* - No feedback is given when work is done.
- *Incomplete Information* - Miscommunication and confusion is a result of an order, an assignment or feedback that is given but the message is incomplete.
- *Interdependent* - The inter-dependency of stakeholders leads to a delayed decision-making process.
- *Lack of Experience* - New employees do not have experience about what essential information to share with whom. The difference in work experience amongst the diverse workforce also leads to messages that are interpreted differently by each of the role players in the communication system.
- *Lack of Knowledge* - Employees lack knowledge regarding communication skills and also knowledge of each other's fields of expertise, and therefore they misunderstand each other.
- *Language and Culture* - Misunderstandings occur due to differences in vocabulary and manner of communicating, which stem from different languages and cultures.
- *Role definition* - Unclear role definition becomes a communication deficiency when employees are not sure to whom to send information, or do not know that an order is relevant to them when they receive it.
- *Update* - Employees are not always sharing new information as it becomes available, which leads to communication deficiencies due to stakeholders not always having and receiving the most up-to-date information.
- *Urgency* - Urgent information is not conveyed timeously, which means the urgency is either not comprehended or not appreciated.
- *Volume of Priorities* - Too many priorities lead to role players being too busy to communicate with each other properly or at all, or they do not react to a request from a colleague as it is not of high priority to them personally.
- *Volume of Role Players* - Too many role players become a deficiency when the number of people that must constantly be kept informed is too great and too many stakeholders are dependent on the authority or contribution of another, whether it is a contribution of time, money or intellect.

The listed issues are described and compared, categorised and conceptualised to expand the understanding of the issues. By grouping the issues, similar root causes are investigated to develop insights of how the issues are integrated and how they influence each other, or which issues stem from the same root cause. The conceptual model illustrated in Figure 2.

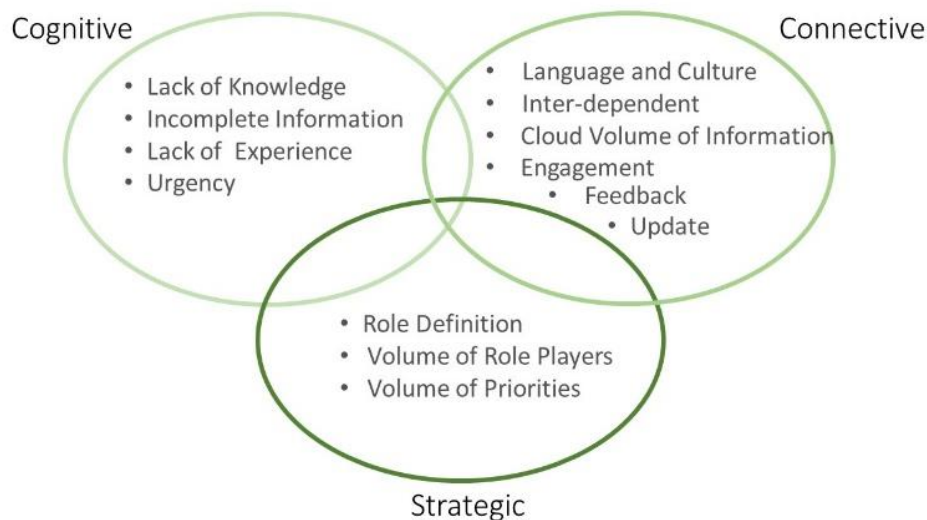


Figure 2: Conceptual Model as preparation for final Communication Model.

Conceptualisation is done by investigating the categories developed from analysing the issues, to devise higher-order categories from the data. The categories are further developed into three domains, namely the cognitive, connective and strategic domain. This is the foundation on which the COMMPAS model is built.



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The concepts that are developed are rooted in the data, thus each of the three domains represents a group of communication problems. Each domain, together with the group of issues that are associated with each domain, are explain:

The *cognitive* domain represents barriers of effective communication that relate to the act or process of knowing. Some employees simply lack the knowledge of either how, what, when or with whom to communicate. This domain covers either the fact that knowledge is lacking in some way, or how the acquisition of knowledge is integrated into the system.

The issues associated with the cognitive domain are:

- **Lack of Knowledge:** From the data, it is evident that employees do not always have knowledge about the various areas within the organisation. It is imperative that the knowledge level in an organisation is managed.
- **Incomplete Information:** Information shared is often incomplete, which leads to stakeholders misinterpreting a message. This result in work instructions not being completed or being completed incorrectly due to the stakeholder being uncertain of what is required of them.
- **Lack of Experience:** The lack of experience identifies areas for learning opportunity to continuously improve communication skills, as well as areas where knowledge should be expanded.
- **Urgency:** Immediate information is often needed to make a decision, which leaves employees frustrated when they are unable to proceed due to the required information not being immediately available.

The *connective* domain addresses barriers of effective communication that are rooted in the relationship between role players and the responsibilities that they have towards each other. What connects actors in the communication system is activities such as feedback and teamwork. If these activities are not performed properly, the result is a breakdown in communication.

The issues in the connective domain are:

- **Language and Culture:** The different ways of communicating and different terminologies that are being used results in miscommunication.
- **Interdependent:** Stakeholders are interdependent on each other for obtaining information. The interdependence for information becomes an issue when urgent decisions need to be made or action needs to be taken, thus hindering progress.
- **Cloud Volume of Information:** The information needed to make decisions and to execute work is available but gets lost along the connections between stakeholders. It is either not shared by the stakeholder that has the information, or it is not attended to by the stakeholder that receives the information.
- **Engagement:** Engaged employees and actors in the communication system are essential. Disengaged employees, tend to not contribute to the link between role players by not giving feedback or not taking part in the team context.
- **Feedback:** The action of sending new information when a task is completed is not being followed thoroughly and results in complications. The act of feedback strengthens the link between actors and ensures that the optimal amount of information is shared with relevant actors.
- **Update:** Role players are not mindful of the importance of keeping all relevant stakeholders up to date.

The *strategic* domain represents deficiencies that are rooted in the strategies of an organisation and how they align their resources with their organisational goals.

The issues in the prospective domain are:

- **Role Definition:** Stakeholders are uncertain of their roles when it comes to more detailed responsibilities, which results in uncertain and less motivated employees.
- **Volume of Priorities:** The number of priorities that stakeholders must consider impede them from integrating continuous communication into their activities.
- **Volume of Role Players:** The number of role players in asset management service makes communication complex. A system needs to be in place relating to who communicates with whom and who should be kept up to date by whom.

1. THE COMMPAS ORGANISATIONAL COMMUNICATION MODEL

The construction of the *Communication in Managing Physical Assets* (COMMPAS) model is based on the domains described in the conceptual model. The domains are integrated and interdependent to increase the probability of effective communication between AM role players. The COMMPAS model is illustrated in Figure 3. The model consists of the following components: the outer component consists of the culture and vision of communication that encompasses and informs the entire model and which is implemented and conserved by means of training, which is the middle component, and the SBAR communication technique as core component.

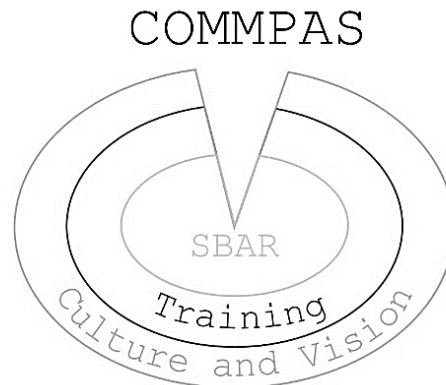


Figure 3: COMMPAS Organizational Communication Model

The elliptic form of the model illustrates the three organisational elements (culture, vision and training) that must be encouraged and developed continuously. The model is implemented inward, starting with the outer circle. Once implemented, the three elements of the model support and further establish each other.

4.1 5.1 Outer component: Culture and Vision.

The first and most important step is to develop a communication vision that establishes and governs a culture of communication in the organisation. This is the foundation of effective communication in a PAM organisation that employs a diverse work-force with different skills, languages, cultures, knowledge capacities and experience. The content of the vision would be specific to the organisation. It must essentially entail a plan and standard for communication in the organisation, which states the importance of *effective* communication to the organisation, for example that feedback about a job is a priority and should be approached with the same importance as the job itself.

4.2 5.2 Middle component: Training.

Training is the tool by which the organisation's communication vision and standards, as well as the practical conduct regarding communication such as the SBAR model, is instilled. Developing the training programme follows a three step needs assessment:

- Conduct an organisational analysis to determine where the training is needed in the organisation and which organisational goals they aim to address through the training;
- Conduct a task analysis to determine what the training will cover, i.e. what must the trainee learn to be an effective communicator according to the standards and practice (conduct/vision) of the organisation; and
- Conduct a person analysis, to determine who needs training, what their current knowledge capacity is to address the gap between what they currently know and what they are required to know to identify what they need training for i.e. what they are supposed to be able to do after having completed the training.

This framework is used to guide organisations to develop a personalised and effective training programme. The content and participants of the training programme should be specific to the organisation.

4.3 5.3 Core component: SBAR model.

The SBAR technique for communication is the core element of the model. It is a practical tool that standardises the communication process within an organisation, to support role players to communicate effectively.

Confusion and uncertainty regarding what information to include when sending a message is eliminated. The lack of shared experience that leads to miscommunications amongst role players, is eliminated by the SBAR technique that includes comprehensive information in a concise message. The receiver of the message can interpret it more easily, due to their familiarity with the method of communicating, which increases the probability of the receiver decoding the message as it was encoded by the sender.

The foundation for effective communication is set by means of a culture and vision of communication, it is carried over and implemented by means of training and it is practised at the hand of the SBAR technique.

2. CONCLUSIONS AND RECOMMENDATIONS

The partnership between a PAM service provider and their clients and contractors respectively, is a strategic relationship that is established to benefit all stakeholders. The relationship represents a set of organisational objectives that can only be met as a result of an effective synergy. A critical success factor for an effective synergy, is open and effective communication between the partners or role players in the relationship [17].

Communication deficiencies are the result of root causes that could be summarised into three categories: cognitive deficiencies, connective deficiencies and strategic deficiencies. To address these deficiencies, the solution must include: a platform for effective knowledge transfer, a shared vision by all role players in the communication system to understand their role in the system and the importance thereof, and a technique or practical strategy by which each employee can effectively communicate important information. Extensive research and data analysis serves as evidence of these statements.

The COMMPAS model is an integration of the three solutions that address the three categories of root causes. The three elements in the model are: a communication vision and culture of communication, training, and the SBAR communication technique. The model is a continuous process of these three elements, which could be seen as concentric circles that work inwards and outwards to complement each other.

First, a vision of culture and of communication should be established in an organisation. It is important for role players in the communication system to understand the importance of communicating information and of keeping each other up to date. In a complex environment with a diverse work-force, it is imperative to have a shared vision for communication. Secondly, how the culture and vision of communication is carried through to the organisation is through training, which has proved to be the most effective technique to transfer knowledge. Thirdly, at the core of the model, is the SBAR communication technique, which serves as the simple, practical framework to support all role players in the communication system to communicate effectively. This situational briefing technique eliminates the issue of different role players not having the same knowledge and experience, as it provides a concise and comprehensive framework to transfer critical information.

This study was successful in identifying the root causes of communication deficiencies and delivering a model that supports PAM service providing organisations in overcoming these deficiencies. The model has the potential to be further developed into a universal model for all service providing organisations or to be developed into an organisation-specific solution for communication deficiencies.

Although the contributions made by this research accomplishes the research objectives, however, recommendations to further develop and improve this research is necessary. The dynamics of the relationship between a PAM service provider and their contractors and clients respectively, is a complex relationship. The service provider would be dependent on the buy-in from both the client and the contractor for the COMMPAS model to work optimally. This dynamic could be further investigated to develop a strategy that enables the service provider to extend the COMMPAS model to their partnerships.

Implementing a new communication model results in changes in an organisation. Change management, specific to implementing a communication model, could be investigated.

An opportunity for further research and development of the COMMPAS model is to develop an implementation guide or strategy to support organisations in successfully implementing the COMMPAS model, with minimum additional time and costs. Further a more detailed framework for training material that is employee-specific is required. In other words, training should address the specific knowledge that an employee who transfers the knowledge at the hand of a training method requires and which suits the employee's learning abilities.

It is evident that training is a successful technique to transfer knowledge. However, in a complex environment with different stakeholders and different knowledge capacities, it becomes difficult to teach the same material to all stakeholders using the same method. Training methods could be developed that suit the knowledge capacity and learning ability of each stakeholder or sub-groups of stakeholders and enables all stakeholders to obtain the required knowledge.

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