

**GETTING THE 'SOFT STUFF' RIGHT -  
EFFECTIVE COMMUNICATION IS THE KEY TO  
SUCCESSFUL PROJECT OUTCOMES!**

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## Introduction

No senior manager with integrity will commit to a project knowing its objectives cannot be achieved. Most projects that are committed to achieve 'impossible' time cost or scope objectives are started because the correct project management messages were not received and/or believed by the managers commissioning the project; this may be caused by:

- a lack of confidence in the data provided,
- a lack of awareness of the availability of relevant information or
- an organisation structure that cannot generate appropriate data to inform the relevant senior managers.

Effective communication with senior managers is not a one-off effort by an individual project manager. Rather it's an on-going collegiate effort by all project practitioners in the organisation designed to inform, educate and influence senior managers so that 'sensible' project decisions become the norm. This effort is significantly helped by the presence of an effective PMO structure, but simply generating accurate project data does not inform senior managers or assist them in making wise decisions.

Wise decision making requires relevant information at the right time. In this context 'relevant' has two components; the information needs to be 'usable' (i.e. pertinent, accurate and understandable) and it needs to be 'used' (i.e. the recipient believes the information is credible and important to the decision).

Credibility is the most critical element in effective communication and also the most fragile. PMI's new 'Code of Ethics and Professional Conduct' requires members to respect themselves and others and to act responsibly, fairly and honestly. The code places particular emphasis on truthful communication and the provision of accurate information in a timely manner. These requirements are the foundation of credibility and the failure of one project manager to live up to these standards damages the credibility of all project managers.

A key element in honest communication is knowing what's possible. Writing on pieces of paper cannot guarantee or change the future; even when the 'writing' is a printout from a sophisticated computer program! It is therefore critical project practitioners clearly explain the limitations of project management processes and make appropriate use of risk management to deal with the inherent uncertainty associated with every attempt to forecast the future.

Some managers in organisations that lack the necessary levels of maturity may find this lack of certainty worrying and when realistic estimates fall outside of their desirable range be inclined to 'shoot the messenger'. Managing these situations requires project managers to be highly skilled negotiators and communicators capable of managing individual stakeholder expectations and creating a positive culture change within the overall organisation.

This paper will outline some key techniques to determine the right stakeholders to focus communication effort on at each stage of a project and suggest strategies for communicating effectively to create positive change in an organisation, including effectively managing the complexity of key stakeholder's expectations and their communication networks.

## Overview of Project Communication

Project communications are multi-dimensional. They include every exchange of information between members of the project team and their surrounding stakeholder community as well as exchanges of information within the project team. The information exchanges can be:

- bi-directional, immediate and direct (e.g. a telephone conversation),
- single-directional, immediate and direct (e.g. an email sent from one person to another),
- single-directional and direct (e.g. a letter sent from one person to another),
- indirect (e.g. information read by a person from the project web-site)

The above list of options is far from complete and each person in touch with the project either as a stakeholder or a team member will be assimilating information about the project from a variety of sources and using the information received to 'colour' their perceptions and expectations of the project. If the person is, or has been, in communication with a number of projects the information received will be influenced by the person's pre-existing knowledge, perceptions and prejudices about 'projects' and 'project management' created as a result of all of the communications they have received.

This creates two obstacles to effective project communication. The first is currency of information; a report written 6 weeks ago may still be in circulation and only just seen by a stakeholder when another piece of information is received that was generated a couple of hours ago. These two pieces of information could show totally different views of the project if there has been a 4 week strike in the meantime, particularly if the information focuses on different aspects of the project. 6 weeks ago the project was showing a healthy cost performance, the current time data shows a major delay caused by the strike. Most managers would be suspicious of an 'OK' cost report on a project that is running over a month late. If the person has incomplete information (and no-one has complete information) the credibility of the project's reporting process will be challenged in the mind of the stakeholder.

The second problem is based around perceptions and prejudices derived from their previous experiences. If a manager believes project reports are 'always over optimistic', based on her experience of the many projects she has experienced to date, the assumption will be your project reports are 'over optimistic' even if you are the world's greatest pessimist.

A project can control many of the issues around the currency of its data; it is much harder to deal with entrenched perceptions built up in a person's mind over many years.

## Underpinning Theories

### Definition of Stakeholders

All communication takes place between people! A report that is written, filed and never read is not a communication; it may be a valuable record but it only becomes a communication when the information is received by someone. The people with whom the project needs to communicate are its stakeholders. For the purpose of this paper the definition of stakeholders is:

*Stakeholders are individuals or groups who have an interest or some aspect of rights or ownership in the project, can contribute in the form of knowledge or support, or can impact or be impacted by, the project. (Bourne 2005)*

Every stakeholder is potentially significant to the project and as a minimum the project's stakeholders include the project manager, project team members, suppliers and contractors, managers within the organisation and customers or users of the project's deliverables. Communicating effectively with all of the key stakeholders within and around a project is difficult, communicating with every stakeholder almost impossible.

### Types of communication

From the perspective of a project, communications flow in a number of defined directions:

- Upwards to clients and managers.
- Downwards to the project team.
- Outwards to a wide range of people including the general public.
- Sideways to peers of the project manager.

Additionally, communications can be internal to the organisation or external to the organisation. Internal communications are usually easier to manage than external communications primarily due to the ability of the communicator to directly interact with the recipient of the information.

Types of communication are generally considered to be either:

- Oral (spoken / heard) or
- Written (read).

Oral communications can carry significantly more information about the 'sender' than written communications through elements such as the pitch and tone of the voice, levels of confidence and the ability to develop empathy.

Communication theory also recognises the difference between formal and informal communications. By their nature, 'formal' communications tend to be more authoritative than informal communications but may also be structured to 'hide' information as well as communicate the 'selected' information.

### Communication Theory

For the purposes of this paper, there are three key factors to consider in the transmission of a message:

- The transmission factors: Message / Medium / Noise
- The people involved and the: Sender / Receiver / Feedback loop (PMI 2004)
- The impact of 'filtering', 'packaging' and 'pattern recognition' on the interpretation of the message by both the sender and the receiver.

#### **The Message / Medium / Noise.**

The three elements of an effective communication are:

1. Selecting the right messages to send to a stakeholder.
2. Choosing the right medium to use and often the right messenger.
3. Minimizing unnecessary 'noise' in the transmission.

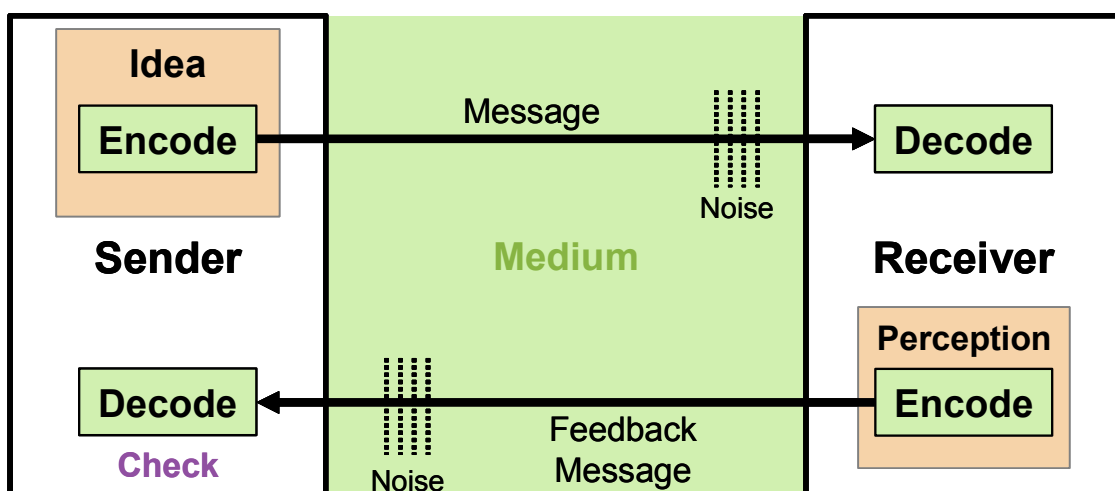
The 'right' message is not the message the sender wants to send, it is the message the receiver is prepared to receive and respond to. This means the message has to be relevant to the receiver and couched in terms that address the issues and interests of the receiver. This requires the sender to think from the perspective

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of the stakeholder (empathy) and link the needs of the sender (i.e. the project) directly to the needs of the receiver (i.e. the stakeholder). If the interests of the receiver are not engaged it is highly unlikely the message will be listened to and acted upon.

Having designed an effective message, the second element of an effective communication is making the message easy for the receiver to access and use. This involves using processes preferred by the receiver to transmit the message. Is it better to send an SMS message or make a quick telephone call? If the receiver is a 'people person' who likes conversation (and hates the cryptic language of SMS) using SMS to communicate key project data probably will not be effective. Wherever people form part of the transmission medium (presentations, coffee meetings, etc) making sure the 'right' person is given the job of carrying the message is vital. The messenger needs to build rapport and communicate effectively with the receiver.

The last element in designing effective communications is minimizing 'noise'. 'Noise' exists in every communication medium and distracts the receiver from the contents of the message. The art of effective communication is to make sure the message is as clear and easy to receive as possible. Unnecessary graphics and colours in reports, background chatter in a presentation, etc all distract the receiver and cloud the message, reducing the effectiveness of the communication. A well designed message is interesting, attractive and clear; any embellishments should enhance the impact of the message, not distract from it.



**Fig. 1 – Communications Structure**

### The Sender / Receiver / Feedback loop.

The three elements of a successful communication are:

1. The sender creates the message (encodes) and sends it to the receiver.
2. The receiver interprets the message (decodes) and creates a feedback message (encodes) to let the sender know the message has been received and understood.
3. The sender receives the feedback (decodes) and checks the receiver has understood the message as intended.

In the project environment there are a number of specific problems with this ideal model. One key issue is that effective feedback is often very difficult to achieve. Passive, or pull, transmissions (e.g. a receiver

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accessing a report from a project web site) may occur without the project knowing; alternatively, the simple receipt of an email containing a key attachment by someone does not mean the receiver has read the attachment even if they acknowledge receipt of the email.

Another major issue is the multiple meanings of the same or similar words which can create illusions of agreement (or disagreement) even with effective feedback (this is discussed further in 'filtering and pattern recognition' below). When a PMI trained project manager tells an Architect the 'plan' needs to be finished this week (meaning a PMBOK style amalgam of schedule, risk, cost, HR, etc sub-plans) and the Architect agrees (meaning the design drawing for the project) both side of the communication understand exactly what they have agreed to but have a completely different outcome in their minds.

### **Filtering, Packaging and Pattern Recognition.**

Filtering, packaging and pattern matching are the most uncertain elements in any communication and they are always, unavoidably, present in everyone's thinking processes. All communications are filtered, by the sender and by the receiver, the only counter is to recognise this happens and seek to maximize the beneficial aspects or reduce the disruptive effects.

The brain uses 'filtering' to survive; filtering includes 'packaging' and 'pattern matching'. Your senses (vision, hearing, smell, touch and taste) bombard the brain with significantly more information per second than the brain is capable of processing. The brain solves this problem by filtering out most of the information it deems 'unimportant'.

Packaging includes stereotyping people and events (there is no such thing as a positive stereotype) and dealing with regularly experienced objects and places as a single entity (filtering out the detail). If you are looking for your car in a car park you see 'your car' (one piece of data), the eyes record the dust on the tires, the smudges on the windscreen, etc. The brain discards this extraneous data from conscious processing, the package 'my car' is adequate and your brain's processing power is available for other things such as avoiding traffic. This changes on the weekend when you are focusing on cleaning the car – then the dust and smudges matter and are 'seen', i.e. processed by the brain for action. 'Where is the car?' and 'Is the car dirty?' are different thought processes using different filters.



**Fig. 2 – Packaging**

Pattern Matching is the expectation of the same outcome from an action or occurrence as was experienced before, especially if the experience has been repeated. Each new stimulation of the brain causes synapse

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paths to form as neurons connect to create a memory. To save energy the brain tries to deal with each new stimulation by trying to match with previously stored patterns - this is the first and automatic response and reinforces the existing patterns within the brain if there is a match. Pattern matching can cut in very early when only a small part of the message or event has been experienced (effectively blocking out the rest of the message or experience as the brain locks onto the existing memory).

Filtering is heavily influenced by an individual's past experience; consequently each person's perception of what is 'real' is different as their 'reality' is experienced through their personal filters. The person's prior experiences allow patterns to be recognised and assumptions made about the appropriate 'package' for them to use. This process changes the message actually received by the receiver, as well as the receiver's perception of the message.

In the project context this can be positive, *'the PMO's reports are always spot on'* or negative *'the engineer's reports are always too technical'*. Where the danger lies is that whilst one engineer in the past may have *'always been too technical'*, the new engineer may be a far better communicator whose reports are ignored because of the stereotyping of *'all engineer's reports being too technical'*. Awareness helps minimize the effect of filtering on project communications and effective communication is enhanced by the sender routinely checking the receiver's perception of the messages he or she has received.

### Culture.

Culture is 'how we do things around here' and cultural norms are the 'unwritten rules of behaviour' within the culture. A person's culture (national, professional, organisational) influences how messages will be sent and received (communication style) and the filters used by the person's mind. Understanding the appropriate communication style operating within the culture you are attempting to communicate with helps build empathy and prevents misunderstandings.

## Defining Successful Projects

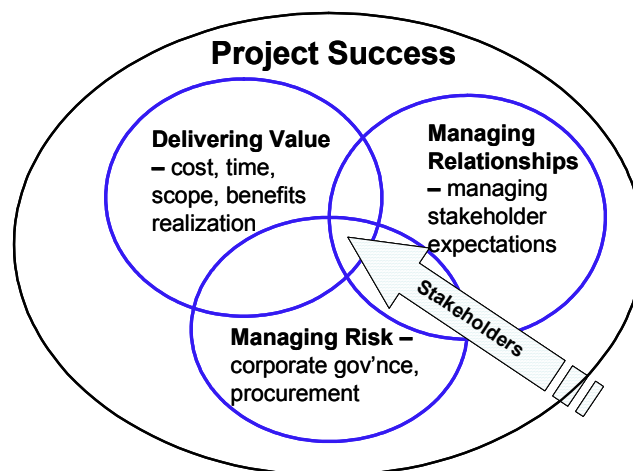


Fig. 3 – The three pillars of project success

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Projects are successful when they meet or exceed their key stakeholder's expectations by delivering the expected benefits in terms of value (time / cost / scope), within an acceptable risk profile, whilst maintaining effective relationships with the key stakeholders (Bourne, 2007).

The critical element in achieving a successful project outcome is understanding and managing the expectations of the project's key stakeholders. Unrealistic expectations are unlikely to be achieved! Similarly, delivering 'exactly what was asked for' when it is not what is actually needed will be seen as a project failure by unsatisfied stakeholders. The key to understanding and managing stakeholder expectations is effective, two way, communication and effective communication is the basis of, and dependent on, maintaining effective relationships with the key stakeholders.

Some symptoms of communication failure around projects include:

- Time too short and/or insufficient budget, causing the project to overrun. Potential communication failures include:
  - Project estimates not believed (lack of credibility).
  - Project estimates not requested (lack of visibility / understanding).
- Scope not properly defined, causing the project to fail to meet expectations. Potential communication failures include:
  - The relevance and use of project management processes not communicated to decision makers (lack of understanding).
  - Inadequate time allowed for planning and scope definition (lack of credibility).
  - Failure to identify and communicate with all key stakeholders (ineffective processes).
- Failure to create adequate contingencies causing the project to overrun. Potential communication failures include:
  - False belief in the accuracy of PM processes (failure to communicate limitations).
  - Lack of information on, or recognition of, the inherent variability of the project environment (failure to receive and/or research information).
  - Lack of confidence in PMs to manage uncertainty and risk (lack of credibility).

The above list is far from exhaustive, but does serve to demonstrate the key linkage between relationships (senior managers to project managers), project communications (messages received, believed and understood) and project success from a communication perspective. The other key factor is that one project on its own cannot change the perceptions and beliefs (filters) of senior managers exposed to 'project communications' from numerous projects over many years.

We would suggest that one of the significant root causes of 'project failure' is the failure of project related communication within an organisation. Conversely where project related communication is effective the likelihood of project success is enhanced. An untested but sustainable hypothesis is that the improvement in the proportion of successful projects delivered within organisations with 'mature project offices'<sup>1</sup> identified by KPMG in their program management reports was due to the improved communication of project related messages within the organisation facilitated by the PMO (KPMG 2003).

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<sup>1</sup> For more on PMOs see [http://www.mosaicprojects.com.au/Resources\\_Papers.html#Proj\\_Off](http://www.mosaicprojects.com.au/Resources_Papers.html#Proj_Off)



## Elements of Effective Project Communication<sup>2</sup>

The elements of effective project communication identified thus far include:

- Designing the right message, including the relevance of the message to the receiver, the accuracy of the information, the timeliness of the information and the clarity of the information conveyed.
- Selecting the right medium and the right messenger for effective communication; including ensuring the message is received (access to the receiver) and perceived as credible.

A third key element is designing a message that is memorable! To communicate for effect, the message needs to be effective. Messages need to be 'sticky' to be successful<sup>3</sup>, where SUCCESS =

- **S** – Simplicity, avoid unnecessary complications and jargon
- **U** – Unexpectedness, the receiver needs to learn something new and interesting
- **C** – Concreteness, the message needs to be about something 'real' or tangible to the receiver
- **C** – Credibility, the message needs to be believable (supported by data)
- **E** – Emotional, the message needs to address 'what's in it for me'
- **S** – Stories, the message needs to be in context and part of a 'continuum' of information

Another critical element is the organisational culture within which the project related messages are communicated. Where overall corporate governance requirements focus on effective project governance and support open effective communication, the opportunity to develop a culture of effective communications is significantly enhanced<sup>4</sup>. Organisation's 'boards' recognise they need effective and accurate project data to govern the organisation and develop systems to encourage openness. However, whilst open communication is easier in the 'right culture' professional project managers have an ethical responsibility to communicate honestly and effectively regardless of the culture, the job of communication is just more difficult and needs greater skills where the culture is counter-productive.

### Understanding Influence Networks

One of the tools available to project managers and one of the factors influencing both the culture and the communications surrounding any project is the network of connections between stakeholders. Some of the connections include:

- Direct links from the project to its stakeholders
- Links between the project and its PMO
- Links between the PMO and its stakeholders
- Links between other projects and their stakeholders
- Stakeholder to stakeholder links independent of the project

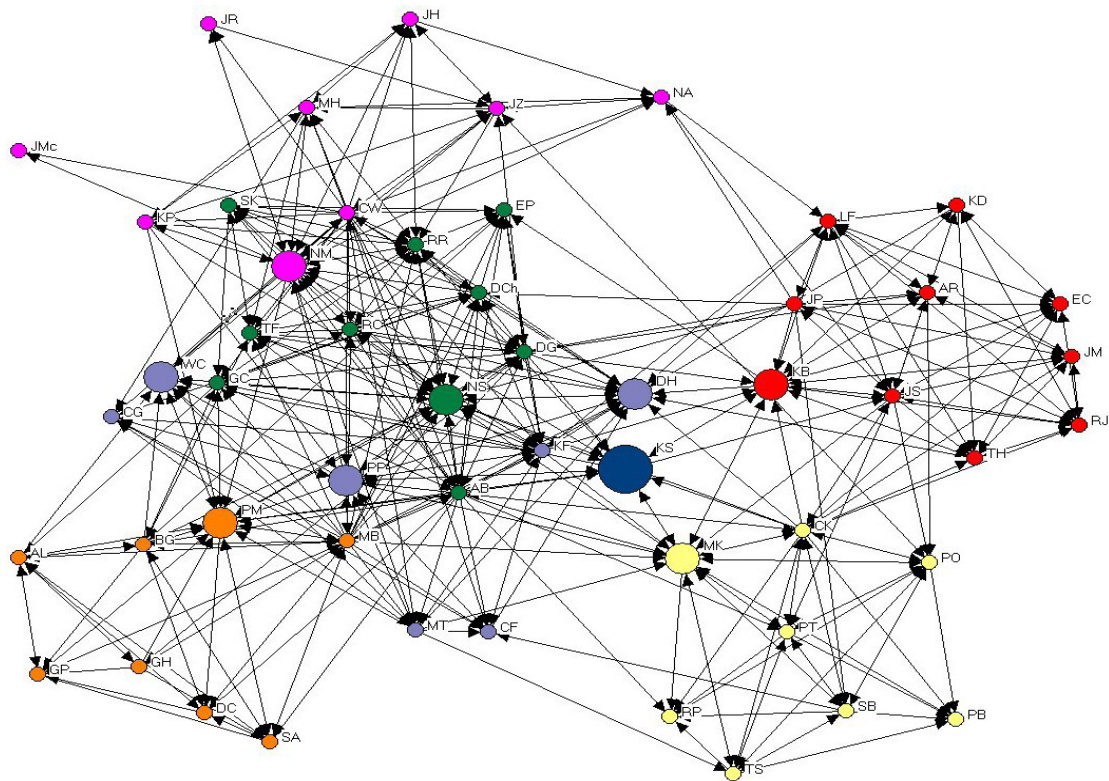
Understanding this pattern of communication and influence is difficult and never 100% complete but the communication aware project team are always looking to understand as much about their overall communication environment as possible.

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<sup>2</sup> See also Addendum A at end of paper – *Cialdini's Six Laws of Persuasion*

<sup>3</sup> Made to Stick: Why Some Ideas Survive and Others Die – Chip Heath and Dan Heath.

<sup>4</sup> For more on 'project governance' see: [http://www.mosaicprojects.com.au/Resources\\_Papers.html#Governance](http://www.mosaicprojects.com.au/Resources_Papers.html#Governance)



**Fig. 4 – Influence Networks (Bourne 2007)**

The denser a network (i.e. more interconnections), the more resistant individuals within the network are likely to be to change away from the ‘cultural norm’ due to the ‘pull’ of all of the network connections back towards the ‘normal’ behaviours of the group; the group can be said to have a ‘strong culture’.

However, from a communication and influence perspective, if the project team understands who influences whom, they can enlist the help of appropriate ‘friendly’ network members to pass messages and influence the behaviours and expectations of stakeholders outside of their direct communication links. Changing the culture of the group is a much bigger issue that needs time and a concerted effort from the whole project management community.

### The Interaction of Messages and Influence Networks

The network of influence within an organisation tends to be holistic. It spans the organisation rather than surrounding a single project. This means that the communications from any project have the potential to influence perceptions of every project. This is a ‘two edged sword’!

On the positive side, repetition builds belief and creates understanding. If every project is delivering similar reports management get used to seeing them, develop an understanding of the information they contain and over time become confident in using the data as an aid to decision making. Changing and creating cultural norms takes time and requires a consistent effort. However, ‘one bad apple spoils the barrel’ and the impact of one ‘bad project’ on an emerging culture can be devastating. Bad news and poor perceptions seem to have a far greater impact on a network than good news and good perceptions.

Developing credibility for all project messages requires a coordinated and concerted effort; this is frequently a role adopted by the PMO<sup>5</sup>. To be successful time needs to be devoted to:

- Developing the credibility of Project Managers and 'project management'.
- Developing the credibility of project management systems and reports.
- Recognise the varying degrees of accuracy and uncertainty in any project situation and not promising the unattainable.

## Dealing with uncertainty and complexity

### Uncertainty

All project forecasts are wrong! Tasks will be accomplished quicker or slower than planned, will cost more or less than planned, etc. In a mature organisation, the likely degree of uncertainty is recognised and managed. Immature organisations tend to seek 'certainty' where none exists.

Writing numbers into a cost control system does not and cannot control costs. This is as true of a simple cost control system built in an Excel spreadsheet as it is of a multi million dollar ERP system such as SAP or Oracle Financials. The estimated values entered into the system are estimates derived from what the project team think might be likely to occur in the future. The actual price paid for anything is what it actually costs in the market at the time it is purchased. Good estimating can be reasonably accurate if the market remains relatively stable or changes at a predictable rate. When the assumptions of 'predictability' break down the costs paid can alter dramatically. Recent examples include the rates paid to contractors during the Y2K 'boom', the possible cost effect of climate change and the cost of structural steel in SE Asia caused by the Chinese building boom. In the unlikely event of a collapse in the Chinese economy, the cost of structural steel in Australia would halve in a matter of weeks.

Similarly, the information written into a schedule does not guarantee anything about what will happen in the future. People have been trying to accurately forecast the future for centuries by means of Tarot cards, the 'stars' and numerology to name a few techniques. Given the highly subjective nature of a schedule (Weaver, 2006; Weaver, 2006) attempting to treat the schedule as some modern form of astrology that can accurately predict future outcomes is dangerous, as George E.P. Box once said "All models are wrong but some are useful" (Box 1976).

The usefulness of a well constructed schedule, WBS, cost plan and most other predictive models used by project managers is not their ability to control the future (this is a dangerous illusion) but their ability to communicate complex ideas, generate agreement on objectives and facilitate coordinated team action to achieve the project's objective, in line with the plans. As reality 'bites' and work fails to proceed in accord with the plans, the degree of deviation can be measured, corrective actions agreed and the updated documents used to communicate the adjusted objectives to the project team and stakeholders. The schedule and other project data models are a means to visualize an uncertain (risky) possible future and then manage the consequences of risks as they eventuate.

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<sup>5</sup> See 'Designing a PMO to Succeed and Survive': [http://www.mosaicprojects.com.au/Resources\\_Papers\\_064.html](http://www.mosaicprojects.com.au/Resources_Papers_064.html)

However, this paper is not about risk management<sup>6</sup>; its focus is on communicating for effect. The importance of risk and uncertainty in the project communication environment is the damage caused by the false attribution of certainty to uncertain outcomes. Every time the 'certain outcome' fails to eventuate, credibility is destroyed. Whereas managing uncertainty effectively helps build credibility as long as the key 'senior management' stakeholders in the process understand what is happening and why. Effective risk and contingency management identifies the degree of uncertainty in each estimate, develops appropriate levels of contingency and manages the project within acceptable parameters. Effective monitoring and reporting systems provide plenty of warning if the underlying risk assumptions start showing signs of being too optimistic or pessimistic and when these findings are communicated in a timely and effective manner, credibility is enhanced. However, this approach to managing projects requires the trust of senior managers (i.e. the project management processes require credibility) and the projects needs to be operating in an effective communication environment.

### **Complexity** (Cooke-Davies 2007)

The ideas in 'complexity theory' reverse the traditional views of project management developed over the last 50 years and move from a Cartesian/Newtonian/Enlightenment<sup>7</sup> paradigm from which the practice of project management has emerged to a more 'complex' view!

Traditional views of projects and project management have tended to treat the 'idea of a project' as a real object. This is an easy enough assumption to make when the product of the project management effort is a building, aircraft or other tangible object itself. It is less useful when the product is intangible (eg a business culture change).

The underpinning ideas in complexity theory separate and re-define the three key elements involved:

- The 'objects' are the people engaged in planning, managing and executing the project work
- The 'idea' they collectively create and share is the concept of 'this piece of work being managed as a project'
- And through their coordinated efforts, the objectives of the project are achieved (the project's product or artefacts)

Within this framework, the people and their relationships can be described as follows:

- Each individual, or stakeholder, is an 'actor'; members of the project team are 'project actors'. The resources of the project actors (knowledge, effort) combine to make the achievement of the project outcomes possible.
- One actor interacts with another actor to form a relationship. Each relationship can conduct ideas, knowledge and influence and has a power dimension.
- The combination of many relationships forms the 'social network' around the project and within the project. The project network can be considered as being both independent of the larger organisational network and an integral part of it.

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<sup>6</sup> For discussion on the 'risk' aspects of projects and communications see 'The Meaning of Risk in an Uncertain World'. Due for publication 2008.

<sup>7</sup> For more on the origins of project management see 'Trends In Modern Project Management - Past Present & Future': [http://www.mosaicprojects.com.au/Resources\\_Papers\\_061.html](http://www.mosaicprojects.com.au/Resources_Papers_061.html)

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- The project network can be considered to hold 'social capital', the knowledge, desire and capability to achieve the projects outcome (Brookes 2006).
- The larger network (and the project network) defines the culture within which the project team operates.

Complexity theory has developed from and includes the earlier fields of study known as 'chaos theory'; it can be defined as the study of how order and patterns arise from apparently chaotic systems and conversely how complex behaviour and structures emerge from simple underlying rules. Some of the ideas appear directly relevant to understanding project management from a communications perspective.

The first idea is from the early days of 'chaos theory'. The 'Tipping Point' described the way natural systems can absorb influences with minimal (or predictable) change until the 'tipping point' is reached and then there is a sudden catastrophic change. This idea is particularly relevant when thinking about 'culture change' in a network. The social network can absorb a lot of pressure to change and targeted individuals may change whilst under direct 'pressure' but the 'cultural norms' prevail and there is little real change until the 'tipping point' is reached, then there is a sudden shift to a new set of 'cultural norms' and people retaining the 'old ideas' are seen as being out of touch.

The idea of 'Nonlinearity' builds on from this. Nonlinearity suggests that you can do the same thing several times over and get completely different results. Small differences may lead to big changes whilst big variations may have minimal effect. The 'butterfly effect' describes the situation where minute changes in the starting condition can have major and unpredictable consequences in non-linear systems – all human relationships are non-linear. These ideas seriously question the validity of 'detailed programming' attempting to predict and control the future path of a project.

The complete unpredictability of Nonlinearity is counteracted by the idea of 'Strange Attractors'. Strange attractors are most easily thought of as recurring patterns that have quasi-predictable features. The behaviour of dynamical systems in nature (eg the weather) has a degree of predictability. However, complex systems can follow a number of qualitatively different attractors depending on initial conditions and external influences. The idea of a 'normal degree of predictability' underpins most project processes including estimating, scheduling and risk analysis; however, the actual outcomes are highly dependent on the actual starting conditions.

This brings us to the concept of 'complex dynamical systems'. These systems are continuously both receiving and transmitting 'energy' to their environment. After a period of time receiving energy, the systems reach a point of irreversible change (bifurcations) where the outcome is inherently unpredictable.

Self-organising systems are complex dynamical systems that appear capable of self-organisation and exercising choice in a manner that makes them inherently unpredictable. Feedback loops contained within the system ensure that 'rich patterns' are produced and the system itself behaves in its own unique way. Importantly, how the system will behave cannot be determined by studying its parts. These ideas apply to shoals of fish, ant colonies and human social groups. As these self-organising systems go about their daily business they are continually exchanging energy and matter with their environment. This allows them to remain in a state that is far from equilibrium and allows spontaneous behaviours and new patterns to emerge in response to stimuli; 'living on the edge of chaos'.

Complex adaptive systems are self-organising systems that have the capacity to learn from their experience. This 'system description' appears to relate very closely to a project team, living on the 'edge of chaos'; responding and adapting to its surroundings (ie the project's stakeholders) and learning as it advances. These ideas offer a new set of insights on the management of projects; the key strand of

research into complex adaptive systems that this paper will focus on is the concept of 'Complex Responsive Processes of Relating'.

'Complex Responsive Processes of Relating' (CRPR) puts emphasis on the interaction among people and the essentially responsive and participative nature of the human processes of organising and relating. *'Organisation is an emergent property of many individual human beings interacting together through their complex responsive processes of relating'*. They use of 'language' in conversations to simultaneously transfer information and ideas, negotiate social status and develop power relationships. The 'actors' intentions, choices and actions / reactions are influenced by and influence their conversations as they operate within the dynamic of their daily interactions with other people. The process of 'organising' is the human experience emerging from the continual interactions between actors who are all forming intentions, choosing and acting in relation to each other as they go about their daily work together. The future seen from this perspective is therefore under perpetual construction by the movement of the human action itself. Consequently, the actors, interactions and emerging organisation are located in a specific context (the organisational network and culture) and are oriented towards an 'unknown future' that the group is in the process of continually creating.

The consequence of accepting these theories is to shift the focus of 'project management' from the object of the project to the actors involved in the project (ie, its stakeholders), and to recognise that it is people who create the project, work on the project and close the project. Consequently the purpose of most if not all project 'control documents' such as schedules and cost plans shift from being an attempt to 'control the future' - this is impossible; to a process for communicating with and influencing stakeholders to encourage and guide their involvement in the project and create a jointly held objective for the team to work towards achieving. The rich symbolic languages of schedules, Earned Value reports, etc, are powerful modes of communication provided both the sender and the receiver properly understand the language being used. Unfortunately with many stakeholders a 'translator' is needed to interpret project documentation such as 'critical path schedules'.

This consideration of complexity theory and stakeholder communication is as important on small internal projects who's survival is totally dependant on the whims of 'senior management' (the project must adapt to survive) as on large, complicated engineering and defence projects that are practically impossible to cancel once they have started.

## Communicating for Effect

Creating an effective communications environment that is receptive to project messages and that recognises uncertainty is difficult. The attitudes, behaviours and beliefs of managers in the organisation's network need to shift from a naïve expectation of 'certainty' to a recognition that the organisations major commercial advantage is likely to be derived from its ability to effectively recognise and manage risks in it's environment.

The majority of 'memes' currently present in the project management memplex are derived from the 'command and control' theories of scientific management<sup>8</sup>. Shifting these ideas towards a collaborative view of pro-active risk management and an 'uncertain future perpetually under construction' requires a concerted and orchestrated communications effort across the project management spectrum.

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<sup>8</sup> See 'The Origins of Modern Project Management': [http://www.mosaicprojects.com.au/Resources\\_Papers\\_050.html](http://www.mosaicprojects.com.au/Resources_Papers_050.html)

### Getting the 'soft stuff' right...

The messages/ideas need to be succinctly expressed so that they are easily transferred from person to person (contagious) and are relevant and memorable to the managers in the organisations 'network' (stickiness). Over time some managers will begin to accept the new paradigm (but will quickly revert to the old 'norms' if the pressure of the new ideas is released). Eventually a 'tipping point' is reached when a critical mass of people in the network accept the new ideas are accepted as 'normal' and non-believers are seen as 'out of date'.

Achieving this type of culture change is difficult and takes time. In the early phases there is a 'Catch 22' situation where short term credibility is lost by appearing to be uncertain about 'facts' (ie recognising uncertainty) but credibility is needed to communicate effectively and shift the management paradigm from 'expecting certainty' to effectively managing uncertainty. This communication effort requires careful planning and management to eventually persuade the organisations management group to accept the inevitability of uncertainty (and any other new ideas).

Addendums A and B to this paper contain abstracts from books focused on the art of effective persuasion.

## Tools for project communication management

This section will briefly look at some of the tools and techniques available to help develop and implement an effective project communication plan.

### Stakeholder Mapping and Prioritization

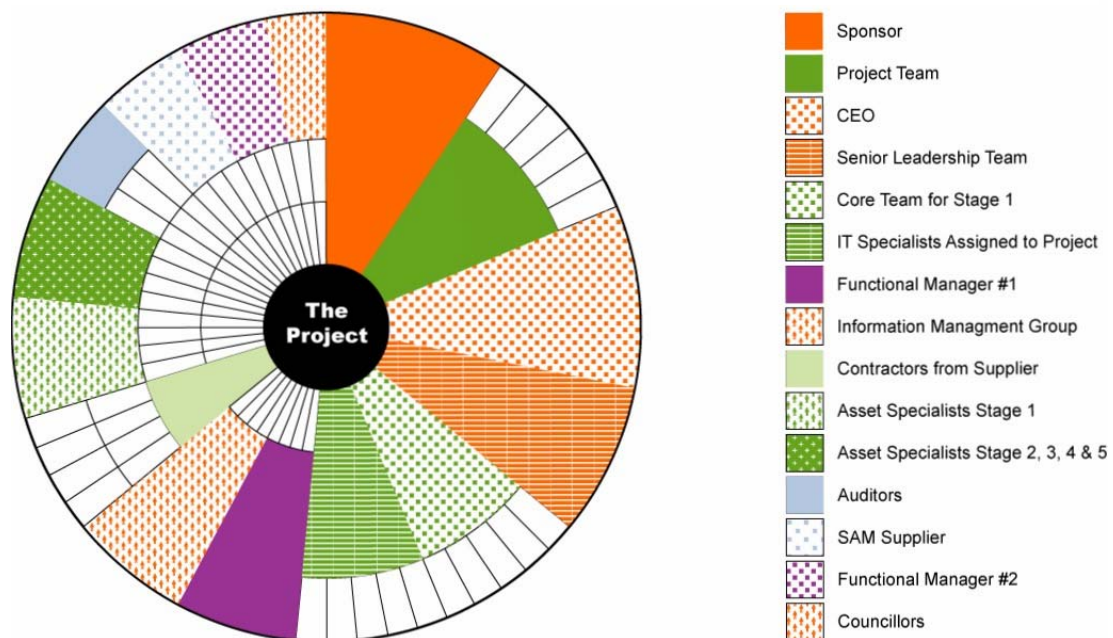


Fig. 5 – The Stakeholder Circle® See [www.stakeholder-management.com](http://www.stakeholder-management.com)

No project or PMO will ever have adequate resources to communicate fully with every stakeholder. The communication effort needs to be focused on the people who it is most important to inform or influence at any given time in the life of the project. Whilst it is unwise to ignore any stakeholder the amount of effort devoted to different stakeholders can be varied significantly to obtain the maximum benefit from the effort expended. Therefore understanding who are 'most important' and the characteristics of these key stakeholders is a critical first step. Tools such as the *Stakeholder Circle*<sup>®</sup> have been developed to assist in this process and more importantly facilitate the updating of assessments as the dynamics of the project change.

### Communication Planning

Having identified 'who' to communicate with, the next step is determining the 'what' and 'why': communication planning. Some stakeholders may simply need routine reports. Key stakeholders that the project may need to influence to help build support or mitigate unfavourable perceptions normally need a more thoughtful approach. Understanding the stakeholder's interests and aligning the project communications to the needs of the stakeholder are critical. The concept of 'mutuality'; trying to balance 'what the stakeholder can do for the project' with 'what the project can do for the stakeholder' is a key concept (Bourne 2005). However, this is a far more resource intensive process than simply 'reporting'.

Project team members and contractors are also stakeholders. The internal communications system needs to be planned and properly resourced as well as the external communications.

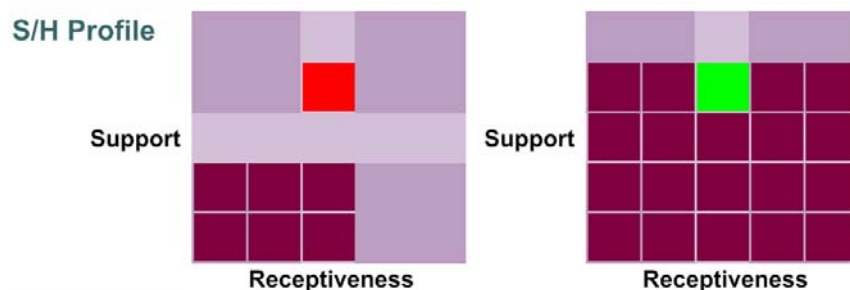
### Communications Implementation

Communicating effectively is a two way process. As well as the traditional distribution of information a well designed communications system encourages feedback to ascertain that its messages are:

- Being received and correctly understood.
- Relevant and useful to the recipient.
- Achieving the required or desired effect.

Additionally, the project team needs to be skilled in effective listening (intelligence gathering) tapping into their networks to identify emerging trends, opportunities and problems as early as possible (Bourne & Walker, 2003).

### Communications Monitoring and Feedback



The dark purple indicates the level of 'support' and 'receptiveness' on a 5x5 matrix. The coloured square indicates the optimum levels determined by the project team.

**Fig. 5 – Measuring improvements in the levels of a stakeholder's Support and Receptiveness over time (Bourne, 2007)**



A project's stakeholder community is constantly changing. Communication monitoring and feedback include testing to see if the communication plan is having the desired effects within the stakeholder community. Monitoring changes in the stakeholder community and updating the communication plan to keep it as effective as possible is the key to long term communication success and ultimately project success.

## Conclusions

Effective project communications requires a collegiate effort from the entire Project Management community. The maximum effect is achieved when all projects communicate with senior management in a consistent and effective manner.

Credibility is critical for effective communication; it takes time to build but is easily damaged. One of the key elements in building credibility is to embrace uncertainty and manage risks proactively. Ignoring uncertainty simply postpones the inevitable problems and destroys credibility when the illusion of 'certainty' breaks down.

An effective PMO is a major asset in helping develop credibility for the Project Management community. The PMO can assist in developing effective communication models, help focus effort on the right stakeholders for each project, and more importantly, focus effort on those stakeholders that have influence in the overall network of managers within an organisation.

Finally, the process of 'communicating for effect' needs to be managed in an ethical and open manner. The objective is not 'win-lose'; a project cannot 'win' if its stakeholders lose. The benefit of effective communication is the alignment of stakeholder expectations with the project's outcomes so that the stakeholder's needs and expectations are fulfilled and the project is perceived to be a success.

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## Addendum A

### Cialdini's Six Laws of Persuasion:

In any negotiation all parties should arrive at a conclusion they achieved a good/reasonable/liveable outcome that is fair and reasonable; especially is an on-going relationship is involved. These laws can be used positively to create agreement or manipulatively. If someone else is using the principles in a manipulative way the easiest option is simply to name the tactic to neutralise it.

**Law of Reciprocity:** People in general try to repay in kind 'gifts' received from another. The receiver feels obligated to some degree to follow this 'tit-for-tat' rule. Try to identify small 'gifts' that can be offered during the communication process that is of use to the receiver; a small concession on your part is likely to result in a similar concession from the other side.

**Law of Commitment and Consistency:** People like to appear consistent in their thoughts and actions. Once they have made a 'stand' the tendency is to 'stick to it' and to justify earlier decisions (even if they are wrong). If the person you are communicating with makes a series of small commitments to the relationship it becomes increasingly difficult for them to change position. Conversely avoid backing people into 'corners'. The more often a person says 'yes' to small decisions the more likely they will say 'yes' to the big decisions.

**Law of Liking:** When you like someone you are more inclined to want to please them. Building empathy and rapport aids the communication process. The more points 'in common' that can be identified between two people the more likely rapport will develop. Common experiences, friends, associates, etc. all help. Beware of the 'good cop – bad cop' ploy where you may find yourself aligning with the friendly person opposite and accepting their agenda in preference to yours.

**Law of Scarcity:** 'Scarcity' increases the value of resources. If a person is not sure if they want to 'buy' something (or are deferring a decision), their attitude is likely to change as soon as it becomes 'the last one available' (or the last chance to agree). The more time you spend in negotiation (as long as you are not under time pressures), the more likely the other side will find time becoming 'scarce'.

**Law of Authority:** When someone you admire endorses a product or idea as being 'good enough for them' to own/use/buy, then it's good enough for you. This is the power of 'expert testimonials'; but always check the independence and voracity of other peoples 'experts'.

**Law of Social Proof:** When people are not sure of the 'proper response' to a situation they tend to look at others around them to determine what is 'socially correct behaviour'. If people believe others are engaging in a specific behaviour, it must be the proper thing to do. This law is closely aligned to discussions on 'culture' and can operate positively or negatively.

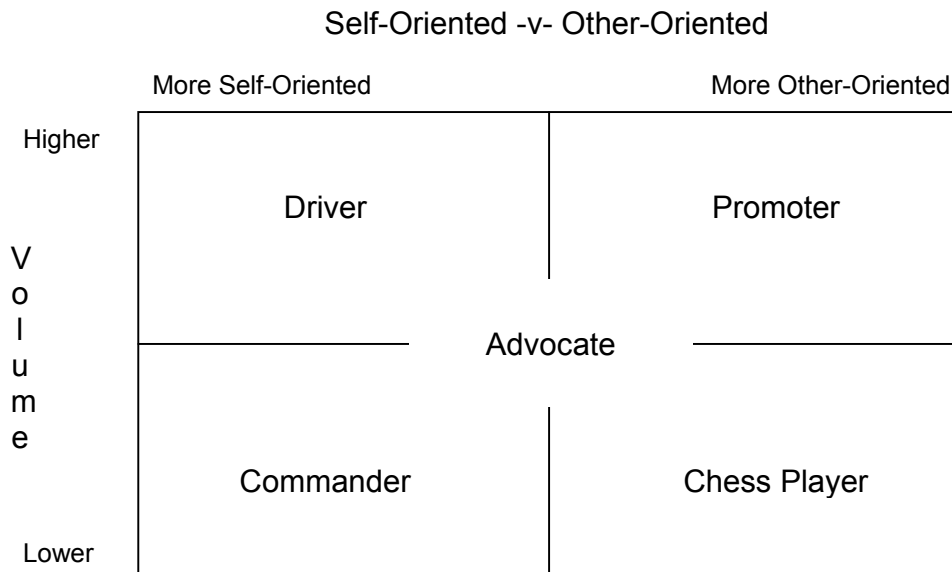
Being adept at persuasion is the key to success in communications and negotiations but you must be ethical, not manipulative in the ways you use persuasive techniques; as stated in the conclusion above, a project cannot 'win' if its stakeholders lose.

Source: Cialdini R.B. Influence, The Psychology of Persuasion, William Morrow, New York, 1993.

## Addendum B

### Five Persuasive Styles:

A new book (2007), 'the art of WOO' identifies five persuasive styles based on the level of 'volume' or enthusiasm in your presentation and the orientation of idea you are selling, 'self-oriented' is about defining your view 'other-oriented' is tailored to appeal to a specific audience.



### Five Persuasive Styles

When used well, all five styles can be effective in persuading people to 'buy into' and support your ideas (but done badly all can be very detrimental):

- 'Drivers' have a very direct / blunt style of communicating.
- 'Commanders' tend to speak from a position of quiet confidence and credibility / authority.
- 'Promoters' are out-front people with a wide circle of relationships.
- 'Chess Players' tend quietly to arrange situations to let others achieve their ends.
- Advocates rarely have to force ideas, using skilled advocacy to help others see and adopt ideas as their own.

Source: Shell G.R. & Moussa M. The Art of Woo: Using Strategic Persuasion to Sell Your Ideas. Penguin Group, New York, 2007.