

## Chapter 3

---

# Stakeholders and the supply chain

*Derek H. T. Walker, Lynda Bourne and Steve Rowlinson*

---

### Chapter introduction

Projects serve the needs of stakeholders by ensuring that their expectations and needs are realised. Project management does not occur in a vacuum but requires an infusion of enthusiasm and commitment powered by the full range of project stakeholder energy sources in an energy grid that can develop a positive or negative trajectory. The key to effectively harnessing this force is for project managers to know how to connect into this organisational grid and how to identify tipping-point key stakeholders and their value propositions. Project managers are unlikely to deliver project success without paying attention to the expectations and needs of key influence-drivers and the diverse range of project stakeholders that may cumulatively exert a significant impact on the perception of project success. A project that does not meet expectations of influential stakeholders is not likely to be regarded as successful, even if it remains within the original time, budget and scope.

Effective project managers require keen analytical and intuitive skills to identify high-impact and cumulative impact stakeholders and work with them to understand their expectations to influence project success. This facilitates managing a process that maximises stakeholder positive input and minimises any potential detrimental impact. The authors argue that project managers need to be able to engage more effectively with the hidden reservoirs of power that are exercised by project stakeholders in the interaction between individuals in their social networks.

In Chapter 4 we discuss business ethics as well as how considering the triple bottom line (3BL) can help us identify a broader set of stakeholders who may be otherwise left out of the project development process resulting in valuable perspectives, insights and support being ignored. Chapter 4 also discusses project governance and the importance of an active and supportive project sponsor – a key and influential stakeholder. Chapter 5, in discussing strategy, explores elements of the ‘politics’ of decision making surrounding the initiation and development of projects, and in particular how the choice of projects to be realised should be determined. Whenever terms

such as ‘politics’ or ‘strategy’ are used there is an implicit recognition that a fundamental issue to be first resolved is identifying stakeholders and influence-shapers by assessing their potential impact upon the way that the project could proceed. This chapter links with Chapter 6 because effective performance measurement systems can only be developed by understanding the project purpose and what benefits are expected to be delivered to whom – that is, stakeholders. Chapter 8 discusses innovation and learning and how the upstream supply chain (clients) as well as the downstream supply chain (suppliers and sub-contractors) have wisdom and knowledge to offer, so identifying them and their potential impact is also of vital importance. Chapter 9 explores the cultural dimension of project procurement, and this is highly relevant to stakeholder management. Chapter 10 concerns attracting and retaining the most talented teams to help deliver project success; again this is relevant to managing project team stakeholders.

This chapter is presented in three broad sections with a vignette at the end of the chapter that prompts relevant questions. The first section deals with stakeholder theory because this forms the basis of our understanding of which stakeholders should be focussed upon, to fairly and effectively apportion attention and consideration of their issues, needs and potential contribution. The section that follows discusses types and sources of power, influence and concepts of trust and distrust, and from this describes how stakeholder management links into these concepts with an upstream focus. The ability to understand the often hidden power and influence of various stakeholders is a critical skill for successful project managers. Stakeholders can be a considerable asset, contributing knowledge, insights and support in shaping a project brief as well as supporting its execution. Project managers welcome any tools that can help them identify and visualise stakeholders’ likely impact, and advances their ability to address the often-thorny problem of stakeholder relationship management. The third section then places the first two sections in context with managing the downstream supply chain with a value focus.

## Stakeholder theory

Successful completion of project deliverables is critically dependent upon relationship management skills, amongst these the need to achieve project objectives that fully address stakeholder expectations throughout the project life-cycle (Cleland, 1999, chapter 6). However, one major task that needs to be undertaken in developing a project’s strategic aims is to identify stakeholders in order to develop a project brief that best addresses their often conflicting range of needs and wishes.

### Identifying stakeholders

Stakeholder theory offers a number of perspectives and expectations that stakeholders may hold. *Social science stakeholder theory* tends to focus

around concepts of justice, equity and social rights having a major impact on the way that stakeholders exert moral suasion over project development or change initiatives (Gibson, 2000). Readers may wish to reflect upon the Chapter 4 ethics section as being relevant here. Thus one prevailing view is that a stakeholder is someone affected by a project and having a moral (and perhaps a non-negotiable) right to influence its outcome. This view is very broad and its consequences unmanageable because there are so many ways in which a project can impact on a very wide range of people – from affecting a business environment through to other more physical or social dimensions that relate to quality of life issues.

*Instrumental stakeholder theory* holds that stakeholders and managers interact and their relationship is contingent upon the nature, quality and characteristics of their interaction (Donaldson and Preston, 1995). In this view, the identification of stakeholders is more concerned with their instrumentality, agency capacity, or being vectors of influence. This implies a need for negotiation, and expected reactions ranging from standoff to mutual adjustment, depending on such intermediate variables such as trust and commitment, and motivational forces (being harmonised or in conflict).

Jones and Wicks' (1999) *convergent stakeholder theory* holds that stakeholder actions and reaction to change leads to project managers needing to develop mutual trusting and cooperative relationships with their stakeholders. Consequently, their actions should be based on ethical standards – see Chapter 4. By meeting both objectives, organisations can gain competitive advantage. This accords with 3BL principles where performance success is defined as meeting financial bottom line performance measures as well as environmental and social responsibility performance measures (Elkington, 1997).

What becomes clear is that 'legitimate and valid' stakeholders need to be identified and their power and influence mapped so that their potential impact on projects can be better understood. Appropriate strategies can then be formulated and enacted to maximise a stakeholder's positive influence and minimise any negative influence. This becomes a key risk-management issue for project managers to avoid many of the project failures detailed in the literature, for example by Morris and Hough (1993).

Briner *et al.* (1996) identified four sets of stakeholders: client; project leader's organisation; outside services; and invisible team members. Cleland (1995: 151) recognised the need to develop an organisational structure of stakeholders through understanding each stakeholder's interests, and negotiating both individually and collectively to define the best way to manage stakeholder needs and wants. He identifies several clusters of stakeholders from the supply chain. Stakeholders have also been described as *The ones who hold the beef* (Dinsmore, 1999) or those who have an interest. Effectively managing these stakeholders is essential at all phases of the project from 'initiation' to 'closeout' (Cleland, 1995).

It becomes necessary to consider what a stakeholder's stake actually is when trying to define what his/her needs or requirements are, or how he/she could impact the project. A *stake* could be an Interest, a Right or Ownership. An Interest is a circumstance in which 'a person or group will be affected by a decision, having an interest in that decision.' A Right is either a 'legal right when a person or group has a legal claim to be treated in a certain way, or to have a particular right protected' or a 'moral right'. Ownership occurs 'when a person or group has a legal title to an asset or a property' (Carroll and Buchholtz, 2000: 65). Most project stakeholders will have an Interest, many will have a Right – people with a disability or citizens with a right to privacy, and some will have Ownership – as in workers' right to earn their living from their knowledge or shareholders in an organisation.

The definition of *stakeholder* that will be used in this chapter is: *Stakeholders are individuals or groups who have an interest or some aspect of rights or ownership in the project, and can contribute to, or be impacted by, either the work or the outcomes of the project.*

Figure 3.1 illustrates stakeholders in four groups: upstream stakeholders, comprising the paying customer and end users of the product/service; downstream stakeholders who include suppliers and sub-contractors; external stakeholders are often ignored and comprise the general community and independent concerned individuals or groups who feel that they will be impacted by the project and its outcomes, invisible stakeholders who engage with the project team in delivering the ultimate project benefit but whose

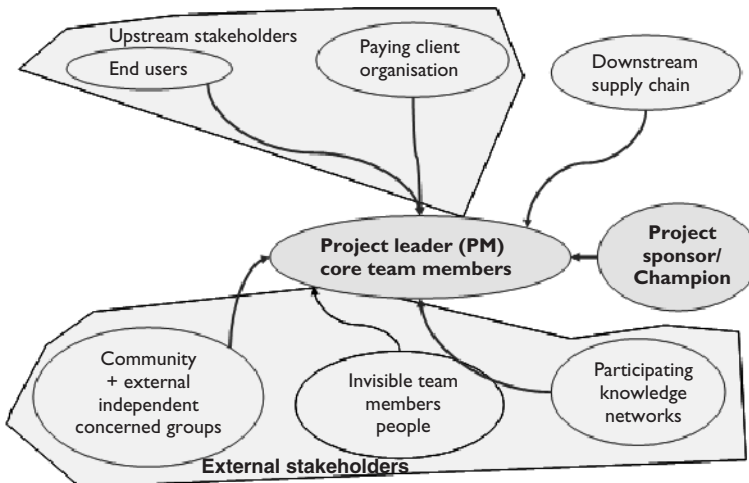


Figure 3.1 Stakeholder types.

Source: Adapted from Walker, 2003: 261.

cooperation and support is vital for project success, and also the knowledge network that interacts with the project delivery team in a variety of ways; and finally there is the highly visible project stakeholder group, comprising the project sponsor or champion as well as the project delivery team.

People naturally tend to form knowledge networks to share and re-frame knowledge that they routinely or occasionally use. History provides many such examples of learning communities, for example, the medieval guilds of Europe, and more recently clusters of people in knowledge-sharing networks centred around a particular skill forming 'tech clubs' or communities of practice (COPs) (Wenger *et al.*, 2002). A COP shares knowledge and skills and sustains its members through obligations to exchange knowledge, providing access and accessibility to shared insights and knowledge about work practices (Wenger *et al.*, 2002: 4). This hidden stakeholder group is often ignored, and yet COPs provide a significant source of influence and referential support that project managers can tap into.

Apart from the stakeholder groups identifiable by their more obvious connection with projects, there are clear and major groups that are invisible but whose cooperation and support is vital for project success. These groups would include family support networks – this has family-friendliness (work-life balance) and workplace implications discussed in greater depth in Chapter 10 – but it also includes communities of practice and other social networks. People naturally tend to form knowledge networks to share and re-frame knowledge that they routinely or occasionally use.

### **Identifying stakeholders influence**

Cleland (1999: 151) offers a process for managing stakeholders: identifying appropriate stakeholders; specifying the nature of the stakeholder's interest; measuring the stakeholder's interest; predicting what the stakeholder's future behaviour will be to satisfy him/her or his/her stake; and evaluating the impact of the stakeholder's behaviour on the project team's latitude in managing the project. He also provides practical advice on how to do this. Most stakeholder groups and individuals, however, are external and hence many project management sub-processes are impossible to achieve for these stakeholders. Many organisationally internal individuals lie outside the boundaries of authority available to project managers. Cleland (1999: 175) offers, after the first step of identifying stakeholders has been achieved, a simple way to visualise stakeholders and their likely impact and influence. The approach is simply to list stakeholders along one axis of a table, list the significant stakeholder interest along another axis of the table and to then indicate the perceived magnitude of their interest. This simple idea is illustrated in Table 3.1.

This idea can be expanded using concepts derived from risk management. Risk assessment can be undertaken using a probability-impact analysis;

Table 3.1 Stakeholder interest intensity index (VIII)

Stakeholder interest	Stakeholders vested interest intensity index (VIII) value									
For colleagues and COP	1	2	3	4	5	6	7	8	9	10
Develop team's skill base	VH	H	N	N	L	VL	H	VH	L	N
Enhance workplace environment										
Family-friendly policy										
Demonstrated lessons learned										
Exemplar of better practice										
High-profile/strategic project										

Vested Interest (v) levels 5 = Very high, 4 = High, 3 = Neutral, 2 = Low, 1 = Very low

Influence impact levels (i) 5 = Very high, 4 = High, 3 = Neutral, 2 = Low, 1 = Very low

Vested interest-Impact Index (VIII) =  $\sqrt{(v^*i/25)}$  eg if Vested Interest (v) level = 4 (high) and Influence impact levels (i) then VIII =  $\sqrt{(4*4/25)} = \sqrt{(16/25)} = 0.80 = \text{high}$

however, we need to distinguish between not only the size of impacts and their probability of occurring, but also the nature and timing of feasible responses to such risks (Ward, 1999). Ward and Chapman (2003) later argued that risk is perhaps a misleading term and that uncertainty would be a better term to use.

As a first step in assessing the potential impact of a stakeholder interest in terms of contributing to project success, the product of an interest-strength and its influence-impact potential may provide a useful form of visualising these two dimensions of stakeholder interest. From the stakeholder perspective, they have a vested interest in the project's success that varies in intensity from very low to very high. Also the impact of that interest can be assessed in terms ranging from very high to very low. This provides a means by which a stakeholder interest intensity map can be developed. It can also be segmented as seen above and can be applied to a sub-set of stakeholders. In this illustration we are illustrating collegial and COP interest. This could be useful in designing strategies for maximising collegial support and commitment to project success and developing success criteria measures. The 'impact' part of the index relates to the power that these individuals may have to exert influence. Their influence is bounded by their source of power.

Figure 3.2 illustrates the process of influence shaping through social networks. With an organisation or entity is a number of opinion-shapers and they tend to belong to several social groups. For example, Group 1 may have affiliates through university classmates and alumni and Group 2 may represent belonging to a professional association (or indeed any type of 'club'). Mentoring and seeking validation from reference groups can lead, for example, a sponsor to refer to a key network link who then seeks information, knowledge and advice from network colleagues. This helps to explain how opinion-shapers outside any organisation can exert a hidden (though not necessarily sinister) force that contributes to or results in firm

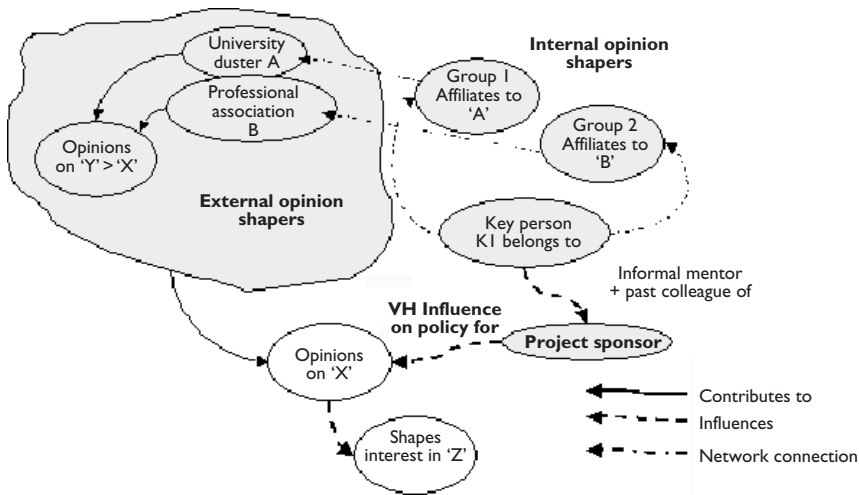


Figure 3.2 Influence mapping.

impressions and perceptions being formed about issues. In this way, we can see that tools that help us visualise influence and impact are pivotal in any stakeholder management approach.

### Supply chain members as stakeholders

Figure 3.1 illustrates upstream and downstream stakeholders in a supply chain. Supply chain management will be discussed in more detail later in this chapter, but here we are merely establishing the theoretical justification of viewing both upstream and downstream supply chain partners as valid stakeholders. Supply chain members working in well integrated projects share access to systems, knowledge and motivation to cooperate as seamlessly as possible to the extent that they appear to be one organisation rather than an integrated flow of separate organisations.

In Chapter 7 we discuss IT tools used by supply chains, such as Enterprise Resource Planning (ERP), and other e-business programs including web portals and customer relationship management (CRM) systems. These systems are intended to connect organisations seamlessly in terms of data and information flows to facilitate efficiencies. Bessant *et al.* (2003) argue that supply chains should be viewed as mechanisms for upgrading and transferring *appropriate practice*, and they explain this term to include experimentation to improve and fine-tune processes and ways that they cooperate to deliver projects. They also mean appropriate practice to include joint learning as experimental improvement initiatives, as well as effective joint problem solving activities. In Chapter 8 we highlighted and

discussed the implication of users, clients/customers as well as supply chain members being generators of practical knowledge and sources of innovative improvement ideas (Von Hippel, 1988; Leonard-Barton, 1992, 1995; Cavaleri, 2004; Cavaleri and Seivert, 2005).

Bessant *et al.* (2003) undertook a series of interviews in six detailed supply chains case studies in: the semiconductor industry equipment; production of tubular structures for the oil and gas industry; the computing equipment industry; two different chains in the chemicals industry; and the aerospace industry. Their findings have particular relevance to stakeholder management. First, they found that one leading partner in the supply chain needs to take on the role of coordinator. This is a traditional role of the project management team. However, in the construction industry, there has been long-term criticism about the way that smaller sub-contractors and suppliers have been treated, being often left to pick up any time slack lost through poor scheduling or consideration of production and delivery logistics (Latham, 1994; DETR, 1998). While upstream supply chain partners are often well considered and their reaction and impact is well thought through, small downstream supply chain partners are frequently poorly consulted and engaged with for joint problem solving so that avoidable delays and costs are incurred because of problems with planning, logistics and production.

Bessant *et al.* (2003: 182) highlight four supply chain learning (SCL) themes from the six case studies that they consider require more detailed analysis and development:

- 1 The importance of implementing SCL on a platform of 'good practice' supplier management (and the need to review such programmes to add the SCL dimension).
- 2 The concept of supply chain coordination or 'governance' and the roles which can be played by different actors in the SCL network.
- 3 The role of facilitation and the skill sets and enabling toolkit which permit effective learning networks of the kind reported here to evolve.
- 4 Processes through which a shared learning agenda (and related 'curriculum', assessment frameworks, etc.) can be developed. Early evidence suggests this needs to take place at a sector or supply chain level – for example, via business associations.

The above themes are consistent with the general literature, for example – Spekman *et al.*, 2002; Sherer, 2005 and Maqsood *et al.*, 2007. To achieve this kind of improvement these stakeholders need to be carefully considered as part of a broad stakeholder engagement approach to procurement.

### **A stakeholder management system example**

This section will focus on explaining the process and antecedents to a stakeholder engagement, and a management tool developed by one of the



authors for her doctoral thesis (Bourne, 2005). The basis of a stakeholder identification, impact assessment and engagement strategy planning relates to how the stakeholder relationship with the PM team will be managed.

### **Underlying concepts**

Three underlying concepts govern this relationship – trust, power and commitment. French and Granrose (1995) define relationships in the following way:

- ‘Exploitation’ – One person uses another to achieve his/her own selfish objectives without considering any benefit to the other;
- ‘Reciprocity’ – two persons are each using the other in a way that ensures each partner benefits. In this type of relationship there is a sense of stability and balance, absent from exploitation relationships. These relationships are based on rewards and ‘give and take’; and
- ‘Mutuality’ – This relationship is beyond exploitation and reciprocity. The two parties treat each other not as means but as themselves, by taking an interest in the other’s goals and needs.

‘Mutuality’ is the superior of the three relationships. Whether they are organisations working to form partnerships or organisations dealing with employees, each party must have ‘mutuality’ as their goal. The concept of organisations working with their employees or with other organisations in less than superior exploitation relationships is one where it will be more likely to breach ethical bounds because the idea of mutual benefit is ignored or not understood. The minimum that any stakeholder engagement strategy must aim for is ‘reciprocity’, but by the definitions of ‘mutuality’ will ensure the building and maintenance of robust and successful project relationships (French and Granrose, 1995).

### **Trust, commitment, power and stakeholder management**

A special edition on trust in the 1998 ‘Special Edition Issue of the Academy of Management Review volume 23 number 3’ provides some useful literature to understand the concept. McAllister (1995) reported on results from a quantitative study of 194 managers that provides empirical evidence to support the model developed as proposed by Mayer *et al.* (1995) and Rousseau *et al.* (1998).

Figure 3.3 illustrates the model developed by Mayer *et al.* (1995). They identify three factors that support trustworthiness: ability, benevolence and integrity. Ability means the capacity to do something, benevolence refers to intentions and integrity refers to coherence between what is promised and what is delivered. These factors are in turn modulated by the trustor’s

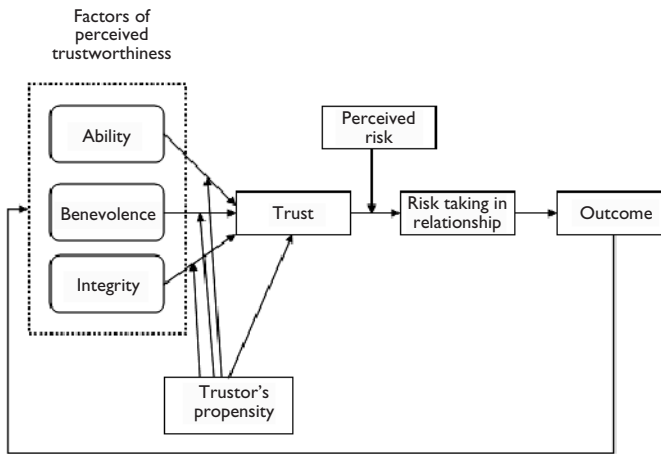


Figure 3.3 A model of trust building.

Source: Mayer *et al.*, 1995: 715.

(i.e. the person who provides property and creates a trust) propensity to place trust in the entity to be trusted. There must be a perceived risk that the trustor may be taken advantage of, so that a sense of vulnerability is instilled in the trustor. This risk test will have an outcome in the view of the trustor that either validates trusting or indicates that the trust was misplaced. This becomes a cycle in which the assessment continues until the trustor feels that the experienced perceived vulnerability is unbearable. This represents a kind of trust bank process described by Walker and Hampson (2003a: 199).

Inkpen and Beamish (1997) introduce the idea that stability of the relationship also has some impact, and this makes sense in a PM context with changes in trust strength occurring during different project phases when parties have shifting ability to perform various trust tasks as their influence changes with the importance of their involvement. Rousseau *et al.* (1998) note that there are different types of trust. Institutional trust remains fairly constant as it is perception of the institution's record of trustworthiness and, as discussed in Chapter 4, this is often wrapped up in perceptions based upon ethics and governance. They also describe calculative trust that merges into relational trust as tests of trust yield results that the trustor and trustee adjust their perceptions to.

Figure 3.4 illustrates a model modifying ideas put forward by Rousseau *et al.* (1998) combined with Mayer *et al.* (1995) and Inkpen and Beamish (1997) adapted to a project phase continuum. The interesting point from this is that research by Rousseau *et al.* (1998) indicates that integrity was

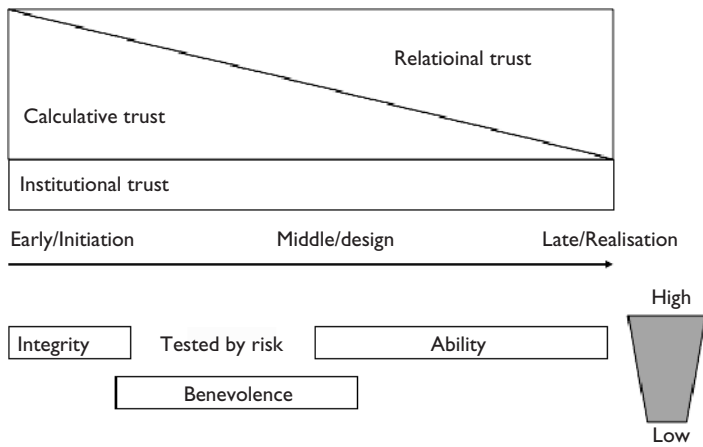


Figure 3.4 Trust in phases.

the prime factor initially determining trust but as testing continues benevolence takes over followed by ability being the dominant driver, all occurring as a project moves through its initial often chaotic initiation phase through more stable times as design leads to production and realisation of the project's objectives.

The final modifier of trust that we wish to discuss, is the presence of both trust and distrust simultaneously. Lewicki *et al.* (1998: 445) developed a model that combines trust with distrust in a two-by-two matrix illustrated in Figure 3.5.

The range of trust and distrust helps explain motivations and perceptions that govern views about trustworthiness of partners in an alliance, a hands-off contract or in a well integrated supply chain.

Figures 3.3–3.6 help explain some of the underlying forces that help shape trust. Figure 3.6 combines Meyer and Allen's (1991) commitment theory with Maslow's (1943) motivation theory. The lowest form of commitment is *compliance* where the minimum possible standard is volunteered, often related to legal or rule-based requirements. *Continuance* commitment shares similarities with compliance in that the motivation is to satisfy basic needs such as an individual's need to make a living, a firm's need to make a profit or provide a service that is its *raison d'être*, and so on. Once that need is substantially met the commitment will dissipate and there may also be easily available substitutes that can replace the object of that need so in this sense that 'can' of commitment is weak or transitory. *Normative* commitment is more reciprocal (ought to) and is motivated by social needs and obligations. This kind of commitment is wrapped up in

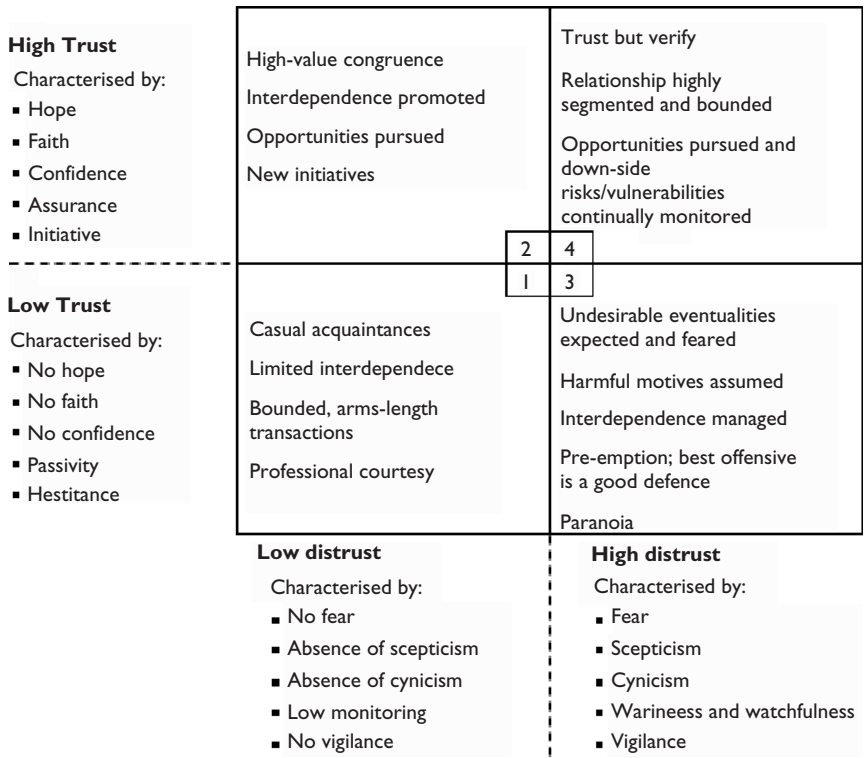


Figure 3.5 Trust and distrust.  
Source: Lewicki et al., 1998: 445.

loyalty and emotional facets of culture that are stronger, can be extremely strong, and are much harder to displace. The strongest form of commitment is *affective* because it is ‘want-to’ commitment based on a motivation of self-actualisation and/or ego needs. The desire, of course, can be illusory and fade and in that sense we could argue that normative commitment is stronger. However, affective commitment can move people to contribute beyond expectations.

Commitment levels can also relate to the sources of power deployed during the relationship. Greene and Elfrers (1999: 178) outline seven forms of power that follow from the power literature reported in a number of leadership texts (Hersey et al., 1996; Yukl, 2002).

- 1 Coercive – based on fear. Failure to comply results in punishment (*position power*);

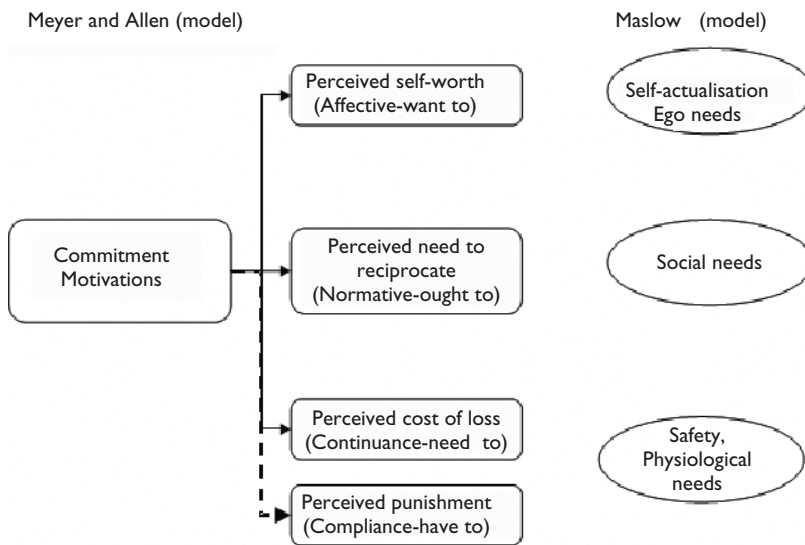


Figure 3.6 Compliance and commitment.

Source: Adapted from Meyer and Allen, 1991 and Maslow, 1943.

- 2 Connection – based on ‘connections’ to networks or people with influential or important persons inside or outside organisations (*personal + political power*);
- 3 Reward – based on ability to provide rewards through incentives to comply. It is expected that suggestions be followed (*position power*);
- 4 Legitimate – based on organisational or hierarchical position (*position + political power*);
- 5 Referent – based on personality traits such as being likeable, admired, and thus able to influence (*personal power*);
- 6 Information – based on possession of or access to information perceived as valuable (*position, personal + political power*); and
- 7 Expert – based on expertise, skill and knowledge, which through respect influences others (*personal power*).

The nature of power and influence, the sources of this power, and the way in which it is used to contribute to or manipulate cooperative relationships underpin all procurement strategies and the relationships that develop from these. It is interesting that a number of books have appeared providing advice on the use of power to undermine the competitor and to win against a perceived enemy. The works of Machiavelli and Sun-Tzu are among the most prominent. A recent book on power and its use – which features ideas

from the Machiavelli, Sun-Tzu and others – relates to winning power and holding power for personal gain, and not to achieve a goal that is shared by others (Greene and Elfrers, 1999). Positional power, however, is the least effective of the three outlined in building commitment to shared objectives, win-win outcomes and constructive dialogue, whether in resolving differences or building shared understanding. Project managers need to be aware of the types of power that people can wield to influence the opinions and actions of others. Power, trust/distrust, and commitment are closely linked with project phases that impact on this project delivery dynamic as criticality of supply chain partners shifts with their contribution level.

### **Stakeholder management – the stakeholder circle™ tool**

While Table 3.1 provides a useful visual representation of stakeholder interest intensity it can be made more informative by employing a greater degree of graphical imagery such as an influence map or social network map based on an organisation's formal structure and showing who has strong or weak influence in the project environment. Project stakeholders may have deep (extensive) or shallow (limited) influence in terms of their network of others that may be proxies for their interest. For example, an individual with weak influence on the project driving power force may have very deep and strong influence on another individual or group that may in turn have a very strong influence on the project power source. Information about relationships may come through interviews, formal and informal documentation, or the 'grapevine'. Astute project managers keep their antennae active constantly, and know when and how to use such influence maps to achieve success through others who may be able to influence the outcomes.

Figure 3.7 illustrates how project managers view various stakeholders, those they deal with through looking upwards, downwards, sideways and inwards. This model was developed to describe the skills set needed by a project manager (Bourne and Walker, 2004). Dimension 1 relates to knowledge of how to look forwards and backwards to apply correct PM techniques – in the case of this chapter, this would include the appropriate strategy to draw upon when making decisions with stakeholders. Dimension 2 relates to knowledge of relationships of how to look inwards, outwards and downwards, which is also relevant to the power school of strategy as it includes the ability to manage relationships with key influencing stakeholders. Dimension 3 skills relate to considering and ensuring that political influence and lobbying is addressed by looking sideways and upwards. This is what Bourne (Bourne, 2005), and Bourne and Walker (2004: 228) refer to as 'tapping into the power lines' of project stakeholder influence.

Following from techniques previously discussed that map stakeholders and their influence patterns, a visualisation of stakeholder power and impact can now be constructed.

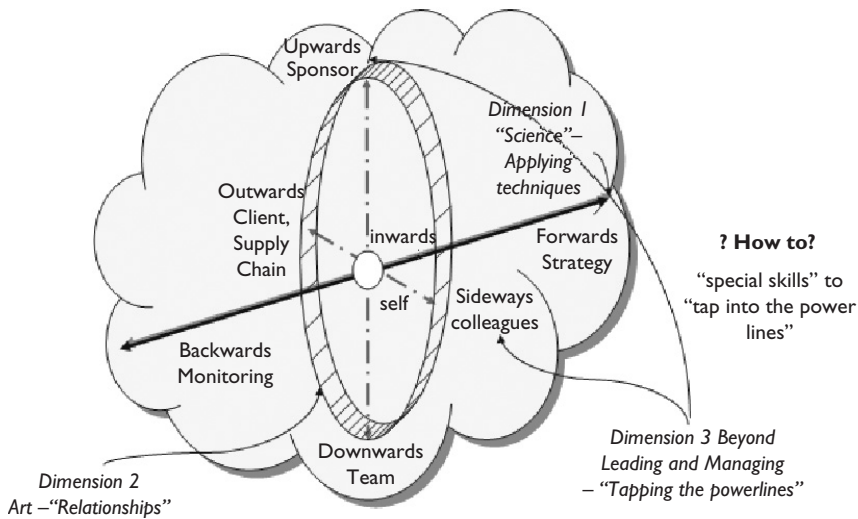


Figure 3.7 Tapping into the power lines.

The *Stakeholder Circle*<sup>TM</sup> is both a methodology for stakeholder management and a software tool. The methodology will be described in detail later in this section. The software tool is a relational database that guides the team through steps for data input and prioritisation assessment and then calculates each stakeholder's relative importance. The *Stakeholder Circle*<sup>TM</sup> tool develops a 'map' of the project's stakeholder community to facilitate decisions about the amount of effort the project team should allocate to managing the relationship with any given stakeholder (see Figure 3.8).

Figure 3.8 illustrates the concept (referred to as the *Stakeholder Circle*<sup>TM</sup>) that one of the authors developed, based on the idea that a project can really only exist with the full consent of its stakeholders (Weaver and Bourne, 2002). The methodology and tool were developed as part of a doctoral thesis (Bourne, 2005) and recently outlined in the PMI journal (Bourne and Walker, 2006). The tool has since become commercialised (see URL <http://www.stakeholder-management.com> for more details). Key elements of the *Stakeholder Circle*<sup>TM</sup> are: concentric circle lines that indicate distance of stakeholders from the project or project delivery entity; the size of the block, its relative area, indicates the scale and scope of influence; and the radial depth can indicate the degree of impact (Bourne, 2005; Bourne and Walker, 2005).

Patterns and colours of stakeholder entities indicate their influence on the project – for example, orange indicates an *upwards* direction – these stakeholders are senior managers within the performing organisation that are

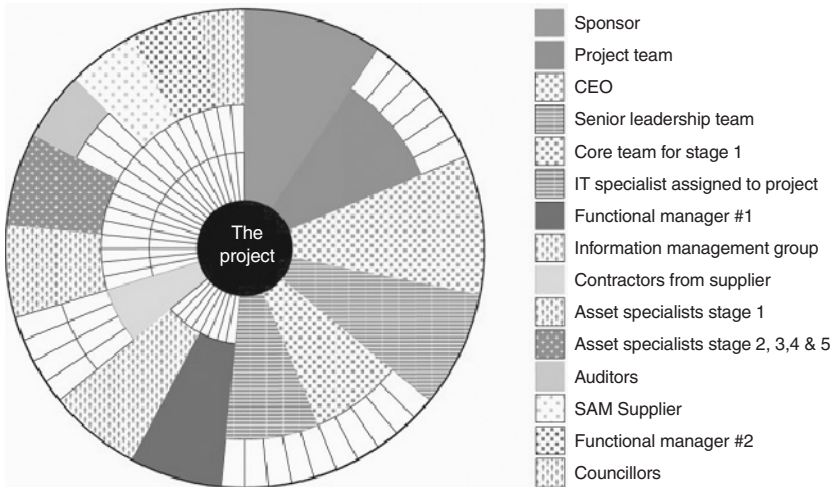


Figure 3.8 The stakeholder circle™ tool.

necessary for ongoing organisational commitment to the project; green indicates a *downwards* direction – these stakeholders are members of the project team; purple indicates a *sideways* direction – peers of the project manager, essential as collaborators or competitors; and blue indicates *outwards* – these stakeholders represent those outside the project such as end users, Government, ‘the public’, shareholders. The final colour coding is dark hues and patterns for stakeholders internal to the organisation and light hues and patterns for those external to the organisation.

This depiction of the stakeholder community represents the project’s key stakeholders as assessed by the project team. In the *Stakeholder Circle*™ for the Asset Management Project below, the most important stakeholder has been assessed as the Sponsor: this stakeholder appears at the 12 O’clock position; followed by the project team as the second most important and the CEO as third most important.

This tool can be very useful for project managers trying to understand and remain alert to the nature of stakeholder impact. The model has been tested through research conducted by one of the authors, and presented at Project Management Institute (PMI) chapter meetings and conferences on several continents – in each case the feedback indicated its resonance with practicing project managers as a useful tool, so we illustrate it here.

The *Stakeholder Circle*™ methodology consists of five parts: step 1 – identify; step 2 – prioritise; step 3 – visualise; step 4 – engage; step 5 – monitor.



### Step 1 – Identify stakeholders

First, the project stakeholders are identified and then categorised into groups indicating how they may influence the outcomes of the project: upwards for senior managers; downwards for members of the project team; sideways for peers of the project manager and outwards for other stakeholders outside the project – such as government, users, unions. The definition of what each individual or group *requires from the project* as well as a definition of the *significance to the project* of these individuals or groups must be agreed and documented at this stage. This concept is based on the idea of mutuality as discussed earlier in this chapter. This exercise is conducted by workshops with individuals who are familiar with the project deliverables and constraints, and with the organisational structure (and the organisational politics). It may be useful to use a metaphor to visualise stakeholder characteristics. Shelly (2007) uses the concept of an organisational zoo in which individuals are described in terms of a series of attributes that links them to particular animal behaviours – this can be both an amusing and highly enlightening exercise in considering not only stakeholder characteristics but their influences, power bases and habits and behaviours.

### Step 2 – Prioritise stakeholders

Next, prioritisation of these stakeholders is undertaken by considering three factors that can assess the relative importance of stakeholders.

- Power – is their power to influence significant or relatively limited?
- Proximity – are they closely associated or relatively remote from the project?
- Urgency – what is their stake? Are they prepared to go to any lengths to achieve their outcomes?

A simple definition of *power* used in the prioritisation workshops: it is based on the stakeholder's relative power to terminate the project. It is rated by the workshop participants on a scale of 1–4, where 4 is 'high capacity to formally instruct change (can have the project stopped)'; and 1 is 'relatively low levels of power (cannot generally cause much change)'.

*Proximity* as used in this methodology is self-explanatory. The team must rate the stakeholders on a scale of 1–4, where 4 is 'directly working in the project (team members working on the project most of the time)'; and 1 is 'relatively remote from the project (does not have direct involvement with the project processes)'.

*Urgency* can be viewed as having two attributes: time sensitivity and criticality. Based on these conditions, the methodology requires workshop participants to rate stakeholders on a scale of 1–5, where 5 is 'immediate

action is warranted, irrespective of other work commitments' and 1 is 'there is little need for action outside of routine communications' (Mitchell *et al.*, 1997: 867). In projects where these ratings cannot be simply applied, the methodology supports a breakdown of the process into two subsidiary sets: 'vested stake' (how much 'stake' does the person have in the project's outcome?); and 'perceived importance' (likelihood to take action, *positive or negative*, to influence the outcome of the project). The ratings can then be combined in the software to give the overall *urgency* rating.

### Step 3 – Visualise stakeholders

The data from the previous steps is transformed into the *Stakeholder Circle*: one example has been described in Figure 3.8. The *Stakeholder Circle*<sup>TM</sup> will be different for each project and for each phase of the project – the relationships that visualisation shows will reflect the project's unique relationships.

### Step 4 – Engage stakeholders

The fourth part of the *Stakeholder Circle*<sup>TM</sup> tool methodology is centred on identifying engagement approaches tailored to the expectations and needs of these individuals or groups. The top 15 stakeholders, defined as being the most important and influential for the project, should receive special attention, but engagement strategies for all stakeholders must be developed. Their value proposition (what they require from the project) will often include intangible outcomes such as enhancement of personal or organisational reputation, and satisfaction of a measure in an individual's key performance indicator (KPI) set, that is, for delivery of project benefits.

The first set of this analysis involves identifying the level of interest of the stakeholder(s) at five levels: from committed (5), through ambivalent (3), to antagonistic (1). Next step is to analyse the receptiveness of each stakeholder to messages about the project: on a scale of 1–5, where 5 is – direct personal contacts encouraged, through 3 – ambivalent, to 1 – completely uninterested. If an important stakeholder is both actively opposed and will not receive messages about the project, he or she will need to have a different engagement approach from stakeholder(s) who are highly supportive and encourage personal delivery of messages. The 5 by 5 matrix (see Figure 3.9) thus developed will become the engagement baseline that is the starting point for measuring the effectiveness of the communication activities of the project.

Based on each stakeholder's engagement strategy, a communication plan will be developed, consisting of: specific messages or message forms (reports); how messages will be delivered; by whom; whether formal or informal, written or oral; at what frequency. The frequency and regularity

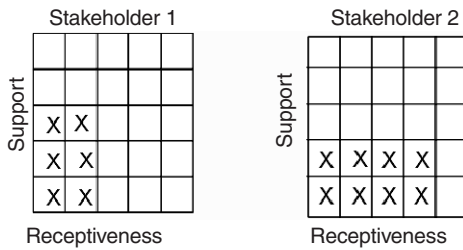


Figure 3.9 Stakeholder engagement profiles.

of delivery of these messages will vary with the level of support and receptiveness of the stakeholder as well as the stage of the project. The messenger need not just be the project manager; other members of the project team may be more appropriate to deliver the message.

#### Step 5 – Monitor effectiveness of communication

Once the Communication Plan has been developed and team communication responsibilities allocated, the principal communication points must be included in the project schedule. Including communication in the project schedule means that team communication activities will be reported regularly at project team meetings. Regular Stakeholder Review meetings, similar to Risk Review meetings will maintain the currency of the project's stakeholder community, or provide information about changes in that community that will cause the project's stakeholders to be re-assessed, re-prioritised and re-developed as a new *Stakeholder Circle*<sup>TM</sup> (community).

Re-assessment of the engagement matrix of project stakeholders is an essential part of the project review processes, whether by regular team meetings, reviews or in response to other unplanned events around the project. In the case of a stakeholder that was first assessed as actively opposed and uninterested in receiving project messages, an engagement strategy and communication plan should be developed to change the engagement matrix to (say) neutral for both support and receptiveness. If on re-assessment, the engagement profile has not improved, this lack of change will provide the evidence that the current communication is not effective: a different approach must be taken. This is illustrated in Figure 3.10. On the other hand, achievement of the expected improvement as shown on the new matrix is evidence that the engagement strategy is effective and the communication is achieving its intended objectives.

Figure 3.9 shows the levels of support and receptiveness of two stakeholders. The engagement strategy must adapt to this profile and be

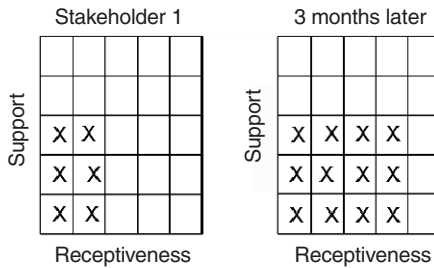


Figure 3.10 Monitoring communication effectiveness.

reflected in the communication plan. If at a later re-assessment the profiles have not changed as expected, a new communication plan must be developed and implemented.

Figure 3.10 shows the effects of comparing a stakeholder's engagement profile over time. The comparison of the new profile with the baseline shows that while the stakeholder is more receptive to messages about the project, the level of support for the project is unchanged. This result should trigger a re-assessment of the communication plan for this stakeholder.

For further details of two case studies on the use of the tool refer to (Bourne and Walker, 2006) and for substantial detail refer to Dr Bourne's doctoral thesis (2005).

#### *Maintenance of the stakeholder community*

The process of identifying, prioritising, and engaging project stakeholders cannot be a once-only event. Stakeholders change as they move within the organisation or leave it, or as their relative importance to the project and their power and influence within the organisation changes. As the project moves through the project life cycle or implementation stages, different stakeholders may have more or less impact on the project. The process may have to be repeated in whole or in part many times. An essential part of the methodology is the repetition of the process of the methodology and building of the *Stakeholder Circle*<sup>TM</sup> when any of these events occur.

Strategy relating to the 'who, what, when and how' of delivering the tailored messages defined for the important stakeholders must be converted into action. The communication plan should be part of the project schedule and thus reported on through team meetings and regular reports.

#### *Value of the methodology*

The benefit of this methodology and tool is derived from the analysis process itself as participants of the workshops discuss potential project

stakeholders and their needs and potential contributions. These discussions and related negotiations about agreements on ratings of stakeholders enables all project team members to share their knowledge of the individuals and groups being assessed, as well as knowledge of the organisation and its politics. Additional benefits come from the ease with which key stakeholders' influence on the project can be judged once the diagram is complete. To be most effective, the assessment should be updated regularly as the project progresses through the phases of the life cycle or as the stakeholder community changes to reflect the dynamic nature of project relationships.

A methodology that provides a simple, relatively time-efficient process for the identification of key stakeholders is a useful adjunct to the project planning processes. The methodology also supports a logical process to allow the project manager to decide which of the project's stakeholders to focus effort on, since it would be impossible to attend to the needs and expectations of all stakeholders. The use of a process that steps the project team through analysis of the expectations of the project stakeholders, and the best means to ensure their support of the project provides another benefit to the project manager. Managing the perceptions and understanding the exceptions of key stakeholders build robust project relationships and improves the chances of project success; application of a methodology and visualisation tool such as the *Stakeholder Circle*<sup>TM</sup> will contribute to the perception of these key stakeholders that the project is being well-managed. Finally, because a system such as this gathers data relating to stakeholder characteristics, beliefs and behaviours, it becomes a very valuable information-mining source to be used in ways similar to that of a CRM system.

### **Downstream stakeholder supply chain management value**

We have discussed how project and (whole of project) team stakeholders can define and articulate their perception of what value the project represents to them and how they can contribute to that value generation. We also discussed how stakeholders can be engaged and their influence sought and managed as part of the procurement process. We also indicated that value propositions vary between stakeholders and, as is elaborated further in Chapters 4 and 6, project outcomes that lead to a sustainable economy add social value as well as potential economic advantage. This section focuses upon the downstream supply chain comprising sub-contractors and suppliers that are often small- or medium-sized enterprises (SMEs) that form a vital part of any economy.

A most interesting recent development in the management of procurement systems is the attempt to incorporate the supply chain into the system in order to ensure sustainability. In general, worldwide, this approach has been championed and led by the public sector. As indicated by Cheung (2006) public

sector clients have the opportunity to create managerial, organisational and structural improvements and develop economic, social and environmental sustainability in various market sectors which support their asset portfolio. Supply chain sustainability (SCS) also supports the public sector's organisational, political industry development objectives through proactive supply chain management. This section reviews recent initiatives in both Australia and the United Kingdom.

Recent work in Australia by Rowlinson and Cheung in the pre-cast concrete and recycling sectors and reported in (London, 2005; Cheung, 2006) has investigated SCS in SMEs and (*inter alia*) sought to

- improve economic sustainability;
- stabilise employment levels and reduce high staff turnover;
- improve skill levels, occupational health and safety (OHS) performance and thus productivity as a result of a state-wide smoothing of market investment strategies;
- improve product quality;
- reduce remedial work; and
- reduce waste in government resources in having to monitor poor performing sectors.

These issues have also been addressed in the UK, through framework agreements and other mechanisms, and this will be discussed later. As a general rule, the long-term goals of all such approaches is to improve competitive behaviour, improve market sector performance and thus improve both business process efficiency and effectiveness of public sector procurement systems. This is undertaken by influencing policy development, changing organisational behaviour and culture and by implementing only those developments which lead to sustainability in the economic, social and environmental markets of the region. In order for such approaches to be successful a strategy is needed whereby regional and countrywide smoothing of demand in the various markets takes place through deliberate, planned government policy. Thus, investment strategy is driven with a view to long-term benefits accruing through stabilisation of employment levels, a commensurate reduction in employee turnover and the development and improvement of the industry wide skills base. This will also have a knock-on effect in terms of OHS performance and the expectation is that there will be improved product quality as well as reductions in rework. All of these objectives, if achieved, should lead to a reduction in the resources needed by government to monitor performance, in that an assurance system is in place. Although improvements in OHS performance might be seen as something of a by-product of SCS such improvements do add to competitiveness in an increasingly global market.

### **Competitiveness**

Attitudes to OHS, quality and human resource development play a major part in how an organisation is judged by its shareholders, stakeholders and hosts. Whilst maintaining high levels of OHS performance, companies may bear heavy transaction costs in order to maintain this standard. Thus, there is a dilemma between competitiveness and safety performance. However, given the global nature of the markets and the need to be seen to be acting responsibly, in terms of corporate governance, safety and health should be seen as essential elements in the goals and policies of companies. Thus, it is becoming increasingly difficult to separate the approach to safety and health and human resource development from other technical and financial issues without jeopardising a company's competitiveness. A strong safety and health management system and a clear policy on maintaining the highest standards of OHS is essential nowadays for the company's continued existence. Indeed, many companies derive competitive advantage from their impeccable safety and health records and this is an issue which can be enhanced through proactive supply chain management.

### **Key issues in SCS**

A major issue to be addressed in maintaining a sustainable supply chain is the move towards more direct and long-term employment with commensurate skills and educational improvements within the work force. Outsourcing has been seen to attract a substantial transaction costs in terms of setting up, maintaining and auditing the outsourcing system. It is also seen to be a social cost in the way that its implementation often leads to a downgrading in training and skill development, and so impoverishes the work force and puts at risk OHS performance. The objectives of SCS require some degree of stability of market demand and so its implementation is an area on which the public sector client has the opportunity, through management of demand, to have a significant impact. There are various mechanisms used to develop such an approach and two novel methods were reported by Khalfan and McDermott (2006) and Khalfan *et al.* (2006) in respect of framework agreements and a novel partnership undertaken in England.

### **Aggregation**

They report that in the northwest of England a group of local authorities and, as described in English legislation, Registered Social Landlords (RSLs), formed an alliance to manage procurement for those involved in social housing renewal in their region. The innovative element of this approach was to bundle or aggregate present and future demand of different client

organisations and put this bundle into the market to ensure a balanced pattern of demand, and also to negotiate with subcontractors and suppliers in return for resulting workflow certainty. This alliance undertook separate agreements with the contractors and installers to supply labour only and initiated another agreement with suppliers and manufacturers to supply products and materials only. In addition, the social agenda was addressed by ensuring skill development amongst the local labour force in order to improve economic and social sustainability as well as achieving hard environmental targets.

### **Benefits of aggregation**

In discussing the benefits of aggregation the authors indicate that bundling of demand by local governments, social landlords and facilitation by initiatives of central government departments has enabled more companies, particularly SMEs, to collaborate and offer their own services as a package to these alliances. Thus there are both economic and social benefits accruing in the region from this particular type of initiative. Indeed, the authors go on to highlight some of the benefits of aggregation which are:

- Direct and continuous employment, and subcontracting opportunities offered by the contractors to the local labour because of continuous work load for both their own employees and other subcontractors;
- Skills development within the local community through apprenticeship and training schemes. Contractors have to take on board trainees and give them both on-the-job training and flexibility for attending training and education courses.

### **Community benefit**

Platten *et al.* (2006) discuss the concept of community benefit in relation to regional alliances and procurement and elaborate community benefit as including:

- local employment;
- training provision;
- a commitment to diversity and representation in the workforce;
- a commitment to using the local supply chain;
- health and safety;
- sustainable construction; and
- community awareness, consultation and profiling.

These are seen as being delivered through a project alliance which is encouraged to address these issues in the pre-qualification questionnaire (PQQ)



and invitation to negotiate (ITN) thus indicating a shift in both procurement practice and key performance indicators. This change has, to a large extent, been facilitated by the Office of the Deputy Prime minister but implemented autonomously in the regions. These principles are incorporated in Framework Agreements, and these are described as having core values which are based on the partnering /alliancing concept which is agreed by the client body and all other participants, including the supply chain. These core values include trust, honesty, openness, commitment, cooperation and respect. In their case study, Khalfan *et al.* (2006) describe the Council's vision as a framework agreement that will deliver good quality school buildings which will give

- better educational results;
- greater inclusion within the community;
- better safety and environmental performance; and
- reduced demand on future school budgets by addressing whole life cycle costing at the inception of the projects.

#### **Benefits of framework agreements**

The major benefits that the researchers found to be achieved by such agreements were, in general

- improved design;
- less waste and duplication;
- improved delivery;
- greater quality;
- greater certainty of cost;
- better whole life cycle costing;
- building of trusting relationships; and
- bringing of all 'project knowledge' together at the inception of a project.

Thus, it can be seen that society based agreements for construction works are both possible and beneficial. This sea change in the paradigm of procurement systems in the UK has led to a situation where both community benefits and SCS go hand in hand. It shared some similarities with the concept of on-call contracting described in Walker and Hampson ((2003b: 21–22) and by Jensen and Hall (1995) in relation to medical practitioners and others undertaking locum work in the medical system. Shing-Tao and Ibbs (1998) describe its use in a PM context where projects are split into a series of main contracts with use of small enterprise practitioners undertaking phased small chunks of work under work packages as min-contracts on an on-call basis. They tender on a services agreement basis for an overall bulk of likely work with the on-call contracts

providing the mechanism to formalise the contractual arrangements for each individual package.

Currently, the UK is probably the most advanced in adopting such approaches to new procurement paradigms but it should be borne in mind that this has been a politically driven agenda which has been in many ways forced upon the construction industry as a mechanism for restructuring and developing both communities and supply chains. Indeed benefits, as gleaned from the case studies, for the supply chain can be enumerated as follows:

- 1 Benefits are derived even for subcontractors (self employed people hired for labour only by main contractor);
- 2 Continuity of work is given with additional attractions that include prompt payment (one week);
- 3 Pay as You Earn (PAYE) paper work is done by the contractors;
- 4 Participating organisations do not have to incur tender costs because they get to know upcoming work around 12 months in advance;
- 5 People working on site (both direct employees and subcontractors) are trained in the underpinning concepts of the working arrangements. This includes the understanding about the partnership among the local authorities and RSLs and their initiatives to encourage apprenticeships. One of the supply chain partners describes the relationship in the following terms – ‘The relationship of suppliers and contractors is changed because there is no money involved between them!’ This is because the whole procurement is open book. Another supply chain partner sheds light on the benefits as; ‘Since RSLs are working together in one area, therefore, there are no conflicts and no problems in getting the material. If they were working against each other, then contractors would be fighting among and with suppliers for material supplies’;
- 6 Work-force smoothing is facilitated – a simple management concept is now being practised within the supply chains associated with the framework, for upcoming years; and
- 7 The power to select the product and allocate the profit margin is shifted from contractors and moved to clients. But on the other hand, there is also a guaranteed profit to all the involved supply chain partners for a longer period of time.

### Chapter summary

In this chapter we have used stakeholder theory and applied this to concepts of trust and commitment to describe and illustrate the vital role that stakeholders can take in making a contribution to adding value to the procurement process. This is dependent upon the views and perceptions of value gained from stakeholders and how their potential contribution can be recognised. We described how a recent cutting edge tool the Stakeholder

Circle™ can be applied and used to engage key identified stakeholders. This led us to one of the often neglected stakeholder groups, the downstream supply chain. We discussed how their contribution to value adding could be built into a procurement process. We also introduced an emerging approach which has benefits that include developing the potential for local industry SMEs to participate in an alliance type arrangement (Framework Agreement) that allows them to more fully participate in projects rather than being closed out of a relationship based procurement system. This latter aspect not only potentially provides cost benefits but also facilitates building social capital and delivering value through other social benefits.

### Vignette

ChangeByDesign Plc is a consultancy that specialises in helping organisations to restructure their organisations in a holistic way that incorporates brand and image changes, together with cultural change programs and training and development. It has been contracted to assist AutoCustomeyes, a company that has grown to 500 employees operating through its Oakville, Ontario, North America Regional centre, its European-based centre at Stuttgart, as well as its Melbourne Australia Asia-Pacific centre, to change focus from customising automotive cars to a new range of leisure water craft and light aircraft. It also has recently had a growing business (from a small base) with the US, Australian and NATO military commands for their 'badging' and identification tracking 'cradle-to-grave' system. ChangeByDesign Plc sees its automotive market sector in terminal decline whereas the leisure water craft sector is showing strong growth, particularly in the Asia-Pacific area. Its identification tracking systems that it developed as an 'expensive hobby' of one of the directors has been targeted as a key future market segment for strong future sales growth. Recent European legislation requires originators of consumer goods such as boats, marine leisure water craft and light aircraft, for example, to trace and demonstrate a recycling of at least 80% of the product's contents. Additionally, as valuable military assets are being seen to need unique identification, embedded technologies that allow these goods to be tracked by location and ownership, military facilities management groups have been searching for systems that track their assets on a 24/7 basis.

AutoCustomeyes realised, after undertaking a set of soul-searching strategic workshops, that it needs to transform its business from an auto-centric organisation to one that focuses on the dual business opportunities of the marine and air leisure craft business, and being

part of the military supply chain for its badging and identification device business. ChangeByDesign Plc has the task of preparing a project plan for a five-year organisational transformation that will include shifting and consolidating its regional headquarters. The military business will be located closer to its military client base in Washington DC and the Supreme Headquarters, Allied Powers Europe (*SHAPE*), at Casteau, north of the Belgian city of Mons. Its consumer badging business will be based in Chicago and London, with the Asia Pacific offices in Brisbane. The first deliverable for the transformation plan is the stakeholder management plan.

### Issues to ponder

- 1 What key five elements of this plan would you expect to see?
- 2 Identify five key stakeholder groups and explain some of the issues that they would be concerned about.
- 3 This business strategy envisages two quite separate business streams that could spawn a spin-off; if that were true, identify five stakeholder issues that this could introduce.
- 4 To what extent do you think that existing supply chain partners should be involved in the planning process?
- 5 With new market segments, and each segment's supply chain stakeholder group being largely unidentified at present, how do you think that ChangeByDesign Plc and AutoCustomeyes might identify and persuade these groups to gain their trust, support and commitment to engage with them – what might be their value proposition?

### Web resources

See URL <http://www.stakeholder-management.com> for more details about the Stakeholder Circle tool.

### References

- Bessant, J., Kaplinski, R. and Lamming, R. (2003). 'Putting Supply Chain Learning into Practice'. *International Journal of Operations and Production Management*. 23(2): 167–184.
- Bourne, L. (2005). Project Relationship Management and the Stakeholder Circle. Doctoral thesis. Doctor of Project Management, Graduate School of Business. Melbourne: RMIT University.
- Bourne, L. and Walker, D. H. T. (2004). 'Advancing Project Management in Learning Organizations'. *The Learning Organization*, MCB University Press. 11(3): 226–243.

- Bourne, L. and Walker, D. H. T. (2005). 'Visualising and Mapping Stakeholder Influence'. *Management Decision*. 43(5): 649–660.
- Bourne, L. and Walker, D. H. T. (2006). 'Using a Visualising Tool to Study Stakeholder Influence – Two Australian Examples'. *Journal of Project Management*. 37(1): 5–21.
- Briner, W., Hastings, C. and Geddes, M. (1996). *Project Leadership*. 2nd edn. Aldershot, UK: Gower.
- Carroll, A. B. and Buchholtz, A. K. (2000). *Business and Society: Ethics and Stakeholder Management*. Cincinnati, OH: South-Western College Publishing.
- Cavaleri, S. (2004). 'Principles for Designing Pragmatic Knowledge Management Systems'. *The Learning Organization*, MCB University Press. 11(4/5): 312–321.
- Cavaleri, S. and Seivert, S. (2005). *Knowledge Leadership: The Art and Science of the Knowledge-Based Organization*. Oxford: Elsevier Butterworth Heinemann.
- Cheung, F. Y. K. (2006). *Supply Chain Sustainability: The Role of Trust and Relationship*. CIBW112, Sustainable Development Through Innovation and Culture, Dubai, UAE, 26–29 November, Dulaimi M.
- Cleland, D. I. (1995). 'Leadership and the Project Management Body of Knowledge'. *International Journal of Project Management*. 13(2): 82–88.
- Cleland, D. I. (1999). *Project Management Strategic Design and Implementation*. 3rd edn. Singapore: McGraw-Hill.
- DETR (1998). *Rethinking Construction*, Report. London: Department of the Environment, Transport and the Regions.
- Dinsmore, P. C. (1999). *Winning in Business with Enterprise Project Management*. New York: American Management Association.
- Donaldson, T. and Preston, L. E. (1995). 'The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications'. *Academy of Management Review*. 20(1): 65–91.
- Elkington, J. (1997). *Cannibals with Forks*. London: Capstone Publishing.
- French, W. A. and Granrose, J. (1995). *Practical Business Ethics*. Englewood Cliffs, NJ: Prentice Hall.
- Gibson, K. (2000). 'The Moral Basis of Stakeholder Theory'. *Journal of Business Ethics*. 26: 245–257.
- Greene, R. and Elfrers, J. (1999). *Power the 48 Laws*. London: Profile Books.
- Hersey, P., Blanchard, K. and Johnson, D. E. (1996). *Management of Organizational Behaviour*. 7th edn. London: Prentice Hall International.
- Inkpen, A. C. and Beamish, P. W. (1997). 'Knowledge, Bargaining Power, and the Instability of International Joint Ventures'. *The Academy of Management Review*. 22(1): 177–203.
- Jensen, P. and Hall, C. (1995). 'New Arrangements for Radiology at Sydney Hospital'. In *The Contracting Casebook – Competitive Tendering in Action*. Domberger S. and C. Hall (Eds). Canberra: Australian Government Publishing Service: 87–97.
- Jones, T. M. and Wicks, A. C. (1999). 'Convergent Stakeholder Theory'. *Academy of Management Review*. 24(2): 206–221.
- Khalfan, M. M. A. and McDermott, P. (2006). 'Innovating for Supply Chain Integration within Construction'. *Construction Innovation: Information, Process, Management*. 6(3): 143–157.
- Khalfan, M. M. A., McDermott, P. and Kyng, E. (2006). *Procurement Impacts on Construction Supply Chains: UK Experiences*. Symposium on Sustainability

- and Value Through Construction Procurement, CIB W092 – Procurement Systems, CIB Revaluing Construction Theme, The Digital World Centre, Salford, UK, 29 November–2 December, Peter McDermott P. and M. M. A. Khalfan: 449–458.
- Latham, M. (1994). *Constructing the Team*. Final Report of the Government/ Industry Review of Procurement and Contractual Arrangements in the UK Construction Industry. London: HMSO.
- Leonard-Barton, D. (1992). 'The Factory as a Learning Laboratory'. *Sloan Management Review*. 34(1): 23–38.
- Leonard-Barton, D. (1995). *Wellsprings of Knowledge – Building and Sustaining the Sources of Innovation*. Boston, MA: Harvard Business School Press.
- Lewicki, R. J., McAllister, D. J. and Bies, R. J. (1998). 'Trust and Distrust: New Relationships and Realities'. *Academy of Management Review*. 23(3): 438–459.
- London, K. (2005). *Supply Chain Sustainability*. CRC CI Report. Brisbane, 2004-016-A: 33.
- Maqsood, T., Walker, D. H. T. and Finegan, A. D. (2007). 'Facilitating Knowledge Pull to Deliver Innovation through Knowledge Management: A Case Study'. *Engineering Construction and Architectural Management*. 14(1): 94–109.
- Maslow, A. H. (1943). 'A Theory of Human Motivation'. *Psychology Review*. 50: 370–396.
- Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995). 'An Integrated Model of Organizational Trust'. *Academy of Management Review*. 20(3): 709–735.
- McAllister, D. J. (1995). 'Affect- and Cognition-based Trust as Foundations for Interpersonal Cooperation in Organizations'. *Academy of Management Journal*. 38(1): 24–59.
- Meyer, J. P. and Allen, N. J. (1991). 'A Three-Component Conceptualization of Organizational Commitment'. *Human Resource Management Review*. 1(1): 61–89.
- Mitchell, R. K., Agle, B. R. and Wood, D. J. (1997). 'Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts'. *Academy of Management Review*. 22(4): 853–886.
- Morris, P. W. G. and Hough, G. H. (1993). *The Anatomy of Major Projects – A Study of the Reality of Project Management*. London: Wiley.
- Platten, A., Dobrashian, T. and Dickenson, M. (2006). *Innovative Approaches to Developer Selection and Procurement for Housing Market Renewal*. Symposium on Sustainability and Value Through Construction Procurement, CIB W092 – Procurement Systems, CIB Revaluing Construction Theme, The Digital World Centre, Salford, UK, 29 November–2 December, Peter McDermott and M. M. A. Khalfan: 449–458.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S. and Camerer, C. (1998). 'Not So Different After All: A Cross-Discipline View of Trust'. *Academy of Management Review*. 23(3): 393–405.
- Shelley, A. (2007). *The Organizational Zoo: A Survival Guide to Work Place*. Fairfield, CT: Aslan Publishing.
- Sherer, S. A. (2005). 'From Supply-chain Management to Value Network Advocacy: Implications for e-Supply Chains'. *Supply Chain Management*. 10(2): 77–83.
- Shing-Tao, A. and Ibbs, C. W. (1998). 'On-call Contracting Strategy and Management'. *Journal of Management in Engineering, ASCE*. 14(4): 35–44.

- Spekman, R. E., Spear, J. and Kamauff, J. (2002). 'Supply Chain Competency: Learning as a Key Component'. *Supply Chain Management*. 7(1): 41–55.
- Von Hippel, E. (1988). *The Sources of Innovation*. New York: Oxford University Press.
- Walker, D. H. T. (2003). 'Implications of Human Capital Issues'. In *Procurement Strategies: A Relationship Based Approach*. Walker D. H. T. and K. D. Hampson, (Eds). Oxford: Blackwell Publishing: 258–295.
- Walker, D. H. T. and Hampson, K. D. (2003a). 'Developing Cross-Team Relationships'. In *Procurement Strategies: A Relationship Based Approach*. Walker D. H. T. and K. D. Hampson. Oxford: Blackwell Publishing: chapter 7, 169–203.
- Walker, D. H. T. and Hampson, K. D. (2003b). 'Procurement Choices'. In *Procurement Strategies: A Relationship Based Approach*. Walker D. H. T. and K. D. Hampson, (Eds). Oxford: Blackwell Publishing: chapter 2, 13–29.
- Ward, S. C. (1999). 'Assessing and Managing Important Risks'. *International Journal of Project Management*. 17(6): 331–336.
- Ward, S. C. and Chapman, C. (2003). 'Transforming Project Risk Management into Project Uncertainty Management'. *International Journal of Project Management*. 21(2): 97–105.
- Weaver, P. and Bourne, L. (2002). *Project Fact or Fiction – Will the Real Project Please Stand Up*. Maximising Project Value, Melbourne, 21 October, PMI Melbourne Chapter: On CD-Rom: 234.
- Wenger, E. C., McDermott, R. and Snyder, W. M. (2002). *Cultivating Communities of Practice*. Boston, MA: Harvard Business School Press.
- Yukl, G. A. (2002). *Leadership in Organizations*. 5th edn. International edn. Upper Saddle River, NJ: Prentice Hall.