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Three component stakeholder analysis

Both public and private organizations are increasingly employing stakeholder engagement as an important strategy for improving external stakeholder relations. As shown by stakeholder theory, incorporating stakeholders' opinions is valuable for improving decision-making processes and project implementation (Deelstra et al., 2003). Successful engagement with stakeholders ensures legitimization of issues and facilitates a closer alignment between organizations and society. Currently, the prevailing practice domain for stakeholder engagement is largely characterized by complex and dynamic environments containing a wide range of stakeholders, from hostile to conciliatory, from obstructive to collaborative (Crocker, 2007). This diverse range of stakeholders with different interests and expectations requires flexible and indeed specialized engagement tools (Shandas & Messer, 2008).

Yet the practise of classifying and categorizing stakeholders, a pre-requisite for successful stakeholder engagement (Clarkson, 1995; Reed et al., 2009), has been insufficiently explored. The predominant method for stakeholder classification is based on stakeholder salience, as offered by Mitchell et al. (1997). Salience, however, only represents one component of the complex entity that is a stakeholder. Other components are stakeholders' frames of reference and stakeholder networks. Measuring these other components requires additional methods of investigation. At present, there is no integrated stakeholder analysis method that investigates all of the three mentioned stakeholder components. To arrive at an integrated stakeholder analysis methodology, Reed et al. (2009) have suggested investigating the potential for combining existing methods to derive more useful results in stakeholder analysis. This paper will therefore offer a new integrated stakeholder analysis, covering all components; stakeholder salience, stakeholder frames of reference and stakeholder networks.

Keywords: stakeholder engagement, stakeholder analysis, methodology

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Introduction

Stakeholder engagement is increasingly being employed by both public and private organizations as an important strategy for improving external stakeholder relations. Stakeholder theory shows that incorporating stakeholders' opinions is valuable for improving decision-making processes and project implementation (Deelstra et al., 2003). In addition, successful engagement with stakeholders ensures legitimization of issues and facilitates a closer alignment between organizations and society. While, widely applied, the prevailing practice domain for stakeholder engagement is large infrastructural projects. These projects are characterized by complex and dynamic environments containing a wide range of stakeholders, from hostile to conciliatory, from obstructive to collaborative (Crocker, 2007). This diverse range of stakeholders with different interests and expectations requires flexible and indeed specialized engagement tools (Shandas & Messer, 2008).

Recent examples of this link between stakeholder theory and stakeholder engagement are given by Ashworth and Skelcher (2005), Achterkamp and Vos (2007), Reed et al. (2009), and Beach (2009). Yet the practise of classifying and categorizing stakeholders, a pre-requisite for successful stakeholder engagement (Clarkson, 1995; Reed et al., 2009), has been insufficiently explored. The predominant method for stakeholder classification is based on stakeholder salience, as offered by Mitchell et al. (1997). Salience, however, only represents one component of the complex entity that is a stakeholder. Other components are stakeholders' frames of reference and stakeholder networks. Measuring these other components requires additional methods of investigation.

At present, there is no integrated stakeholder analysis method that investigates all of the three mentioned stakeholder components. To arrive at an integrated stakeholder analysis methodology, Reed et al. (2009) have suggested investigating the potential for combining existing methods to derive more useful results in stakeholder analysis. This paper, after providing a short synthesis of the stakeholder concept, sets out an extensive evaluation of the distinctive components that define a stakeholder. An overview of the existing stakeholder analysis methods is then offered, together with a discussion of which methods match respective components of the stakeholder. At this point, a new integrated stakeholder analysis is formally presented. This framework is innovative as it is the first presented using a combination of different methods, each addressing one of the stakeholder components, together creating a holistic understanding of the stakeholder. This has the potential to result in a more comprehensive insight into, and reflection on, the complexity that characterizes a stakeholder. This model therefore takes an important step forward toward realising the goal of integrating stakeholder analysis with stakeholder engagement. A discussion of the implications and future directions of the research completes the article.

The stakeholder paradigm

Interest in stakeholder theory has grown considerably since Freeman (1984) articulated the stakeholder framework in his seminal work *Strategic Management: A Stakeholder Approach*. Freeman drew on various literatures to develop his stakeholder approach. Using corporate planning, systems theory, and corporate social responsibility (CSR), he argued that existing management theories were not suitable to address "the quantity and kinds of change... occurring in the business environment" (Freeman, 1984, p. 5). Freeman defined a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p. 46). Freeman's original definition was framed from an organizational perspective and was intended to improve strategic management of firms. In the wake of these initial forays, the notion of 'stakeholding' has gained increasing presence in academic texts, media and government publications

(Friedman & Miles, 2002). According to Laplume et al., (2008) stakeholder theory has now reached a mature stage, with a significant increase in attention to the theory, especially with regard to social issues in management and business circles (Noland & Phillips, 2010).

There is little disagreement among stakeholder theory academics regarding what kind of entities can be regarded as a stakeholder (Heath & Norman, 2004). A wide range of entities such as persons, groups, neighbourhoods, organizations, institutions, societies and even natural environments can all qualify as stakeholders (Laplume et al., 2008). In general, four main groups of stakeholders are identified, these being communities, NGOs, government and the private sector (Amaeshi & Crane, 2006; de Haan, 2007). The defining difference among stakeholders is in the existence and nature of their *stake*. A potential stakeholder will need to make a 'claim' to having a 'stake' in the issue under consideration, i.e., the potential stakeholder will be able to affect, or will (potentially) be affected, by the issue (Agle et al., 1999). The fundamental question thus becomes whose claims will be accepted and whose claims will be denied. The substantial debate in the literature regarding the definitions of stakeholders is therefore partly due to the problem of defining what constitutes a legitimate stake (Reed et al., 2009). This points debate away from the diverse body of potential stakeholders to a more defined acceptance of who has most legitimate right to have a say. Freeman's (1984, p. 46) original definition of a stakeholder as any group or individual that can affect or is affected by the achievement of the organization's objectives is very broad. This is closely associated with the descriptive stakeholder identification, which is the broadest identification possible and describes in general how stakeholders behave. Descriptive stakeholder identification gives almost every entity the legitimacy of being regarded as a stakeholder (van Huijstee & Glasbergen, 2008), for it encompasses everyone even remotely connected to the issue (Agle et al., 2008; Laplume et al., 2008; Parent & Deephouse, 2007), thus making it impractical for stakeholder analysis. As a result, numerous refinements have been made in an attempt to make the definition more practical and relevant to stakeholder studies.

As an extreme opposite, Ring (1994) argues, based on Friedman (1962), that as the goal, and obligation, of an organization is to produce profit for the shareholder, no other legitimate stakeholders exist (Ring, 1994). This normative approach focuses heavily on shareholders having legal relationships with the organization, thereby emphasizing the legitimacy of stakeholder involvement and empowerment in decision-making processes (Reed et al., 2009). Most stakeholder theorists depart from this narrow perspective by arguing that the involvement of entities is based on (national) capital investment (Schlossberger, 1994), externalities (Freeman, 1994), and property rights (Donaldson & Preston, 1995). Others theorists give legitimacy to entities based on organizational relations (Mitchell et al., 1997) and stakeholder-network perspectives (Rowley, 1997). In contrast to the notion of legitimacy, Frooman (1999) and Friedman and Miles (2006) propose dismissing legitimacy entirely. They contend that, as soon as an actor has the actual ability to influence the decision-making process, they become a stakeholder, whether the actor's claim is theoretically valid or not. However, this notion does not necessarily need to dismiss legitimacy, since it simply broadens the original concept and suggests that *any* actor that can influence the process one way or another constitutes a legitimate stakeholder.

If it is accepted that any actor that can influence the process constitutes a legitimate stakeholder, stakeholder identification becomes instrumental. Instrumental stakeholder analysis is considered more pragmatic since it is concerned with explaining reality and describing what *should* happen (Jones, 1995). Instrumental stakeholder analysis in practice, besides including stakeholders with contractual or institutional claims, also includes those parties directly or indirectly affected by the organizations' objectives, yet with moral and legal stakes outside the institutional framework (Friedman & Miles, 2004; Mitchell et al., 1997; Rowley, 1997). Instrumental stakeholder analysis thus aims to provide an identification and understanding of stakeholders, which leads to the possibility of managing the behaviour of stakeholders in such a way that objectives are achieved as efficiently as possible (Reed et al., 2009) i.e., on-time and within budget.

The stakeholder

Having accepted who can be a stakeholder, the question of how to classify and categorise these stakeholders arises. Large infrastructural projects are in general located in a complex social, economic and environmental setting and attract large numbers of stakeholders from all four main stakeholder groups, each with different backgrounds, perspectives, and objectives. This leads to a complex set of stakeholders holding many different positions with respect to the principal problem owner, the problem itself, and other stakeholders. A simple polarized dichotomy of *for vs. against* does not, as a consequence, exist in these environments. This complicates the analysis and, subsequently, the classification and categorisation of the stakeholders (Achterkamp & Vos, 2007; Ashworth & Skelcher, 2005; Greenwood, 2007). According to the available literature on the topic, there are three main components that define a stakeholder. Identifying these components can greatly assist a stakeholder analysis in classifying and categorizing the wide range of stakeholders.

Stakeholder salience

The *first component*, which is widely recognized within literature and practice, is the differentiation of stakeholders based on salience. Stakeholder salience is the degree to which managers give priority to competing stakeholder claims (Mitchell et al., 1997). Mitchell et al. (1997) were the first to identify salience as a differing component determined by three aspects. Before this classification, only normative and descriptive arguments were given, with no real attempts to translate these arguments into instrumental concepts. Mitchell et al. are now widely cited on this topic, especially given the dearth of alternatives (Agle et al., 2008; Laplume et al., 2008; Reed, 2002). Stakeholder's salience according to Mitchell et al. (1997) is a combination of three factors, these being *power*, *legitimacy* and *urgency*. When a stakeholder has access to coercive, utilitarian or normative means of power, it can impose its principles onto the relationship. Access to power, or the means to exert power, are often variable and are not in a steady state (Parent & Deephouse, 2007). Power may be gained, as well as lost, over time. Within the stakeholder relationship, it is therefore important to be aware of the power relationships between stakeholders and how these relationships might change over time.

The notion of legitimacy, as originally used by Mitchell et al. (1997), is based on what society 'accepts' and/or 'expects'. These societal structures of acceptance and behaviour can be very important with regard to whether we accept a person or a group as a stakeholder. Suchman (1995, p. 574) defines legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions". Though Suchman's definition is very broad and difficult to instrumentalize, it is representative of sociologically based definitions of legitimacy (Preble, 2005). Legitimacy is more than a mere self-perception; rather, it has to be socially desired and accepted. At the same time, however, it may be redefined and negotiated depending on the different levels of society and organization.

Urgency is introduced by Jones (1993) as a two-dimensional view consisting of i) the degree to which managerial delay in attending to the claim or relationship is unacceptable to the stakeholder, and ii) the importance of the claim or the relationship to the stakeholder. Mitchell et al. (1997) call these two dimensions 'temporality' (or 'time sensitivity') and 'criticality'. They argue that temporality and criticality by themselves are not sufficient enough to become important variables, since the power of distinction would be low. Together, they create a sense of urgency. Urgency determines the degree of importance attached to paying attention to stakeholders' claims.

As an actor claims to be a stakeholder, the issue at hand will be measured using these factors, power of the stakeholder and the legitimacy and urgency of the issue, combined, the salience of the stakeholder. Analysing a stakeholder's salience gives a clear insight into which stakeholders are regarded as more important relative to other stakeholders. At the same time, it gives an indication

of what possible actions each stakeholder could undertake. An organization can therefore decide how it chooses to deal with each stakeholder.

Stakeholders' frames of reference

The *second component* to a stakeholder is the frame of reference from which the stakeholder views the world (de Bruijn & ten Heuvelhof, 2000; Ryan et al., 2006; van de Riet, 2003). A person's internal frame of reference, or policy frame, is unique and is shaped over the years by a person's experiences, education, culture and familial relationships (Butts, 2008). Though unique for each person, a single topic person's policy frame can overlap with those of others. Within a community, multiple groups of persons can exist that share similar policy frames (Barry & Proops, 1999; Gasper & Apthorpe, 1996). This overlapping part of the policy frames will henceforth be called the policy discourse. A policy discourse describes the way a group of people looks at a topic and how they will consequently behave towards that topic, in addition to how they will interact with other persons on that same topic (Kroesen & Broer, 2009; Skelcher et al., 2005). These policy discourses are therefore highly context specific. When uncovered, these policy discourses allow for the identification of different sub-groups, or stakeholder groups, within a community. Stakeholder groups that do not share policy discourses are also more likely to use different vocabularies and jargon (van Eeten et al., 2002). This can result in stakeholders using the same language, but attaching different meanings to it, thereby resulting in confusion and miscommunication. Policy discourses also expose the underlying reasons for, or backgrounds to, stakeholder's objectives, i.e., different stakeholders can have similar goals, yet are driven by different motives. Conversely stakeholders might share similar motives, yet aim for different objectives. It follows that understanding these stakeholder groups in this way and classifying them accordingly can significantly enhance the effectiveness of engagement practices and, as a consequence, project implementation (Gasper & Apthorpe, 1996; McLaughlin, 2005).

Stakeholder networks

The *third component* to a stakeholder is the complicated interrelatedness of stakeholders. Rowley (1997) was the first to discuss stakeholder interrelationships. In his view, all stakeholders surrounding a particular issue are intrinsically linked to each other through a social network, which in this case represents a stakeholder network. Social networks are more or less stable patterns of relationships between mutually dependent actors that form themselves around policy problems or clusters of resources and are formed, maintained and changed by interaction (Klijn et al., 1995). Since each stakeholder claims to have a stake in a particular issue, they are most likely to be connected to the principal problem owner. According to this rationale, most stakeholders are interconnected with the principal problem owner, which can be represented as the main node, as exemplified in figure 1. This proves Rowley's point that each stakeholder will be part of a stakeholder network.

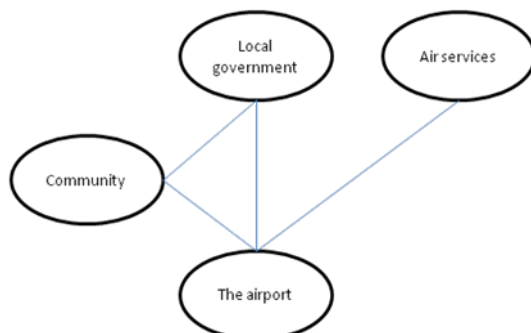


Figure 1: Example of a simplified network diagram

The examination of the way in which social ties link stakeholders together may clarify the social context in which stakeholder analysis occurs (Prell et al., 2007). This consideration of social context can lead to more informed decisions regarding how to approach particular stakeholders, and how to involve these stakeholders in meaningful dialogue (Cameron et al., 2008). As a consequence, an analysis of social networks looks beyond attributes of individuals to examine i) the relationships among stakeholders, ii) how stakeholders are positioned within a network, and iii) how the relationships are structured into overall network patterns. The three main variables used to define a social network are therefore strength, density and centralization (Borgatti et al., 2002).

If one takes into consideration these three components, a stakeholder is thus defined by the sum of these components. Since a full understanding of a stakeholder is a prerequisite for efficient and successful stakeholder engagement, all three components should be analysed and identified. In the following section, an overview will be given of the existing methods for stakeholder analysis. This overview will show that existing methods only specialize in component each, yet none covers the complete spectrum of what constitutes a stakeholder. After this groundwork, a new integrated stakeholder analysis can be presented, using a combination of methods, each addressing one of the stakeholder components identified above, creating a holistic understanding of the stakeholder

Current stakeholder analysis methods

Much of the stakeholder analysis literature, which has presumed that stakeholders are self-evident and self-constructed, has focused on methods of categorizing pre-identified stakeholders (Reed et al., 2009). These methods tend to follow two broad approaches: i) top-down “analytical categorisations”, and ii) bottom-up “reconstructive methods” (Dryzek & Berejikian, 1993).

Analytical categorisations are a set of methods in which classification of stakeholders is carried out by those conducting the analysis based on their observations of the phenomenon in question. As a result, they are ‘embedded in some theoretical perspective on how a system functions’ (Hare & Pahl-Wostl, 2002, p. 50). Examples of analytical categorisations include: cooperation and competition (Freeman, 1984); cooperation and threat (Savage et al., 1991); and power, urgency and legitimacy (Mitchell et al., 1997), with the last one being the most popular method (Reed et al., 2009).

Reconstructive methods for categorization allow parameters to be defined by the stakeholders themselves, so that the analysis reflects their concerns more closely (Reed et al., 2009). For example, Hare and Pahl-Wostl (2002) asked participants to sort cards listing all the stakeholders into groups according to their own criteria. This was used as a way of identifying the structure of groupings and interactions between stakeholders from the stakeholders’ perspectives. This enabled the models developed during the research to reflect the understanding of the stakeholders themselves (Hare & Pahl-Wostl, 2002). Strategic Perspectives Analysis (Dale & Lane, 1994), on the other hand, uses interviews or workshops with stakeholders to identify and compare the goals of different groups, and the perceived opportunities and constraints that they have with respect to reaching their goals. In this way, categories of stakeholders sharing similar goals can be identified. The information collected during this process may also be useful for negotiations between conflicting groups. Policy discourse analysis (de Bruijn & ten Heuvelhof, 2004), another method, identifies the ways in which people think and talk about an issue and, in particular, the shared perceptions and common ground between individuals. Q methodology is then employed to group individuals into ‘social discourses’ based on these shared perceptions and commonalities (van Eeten, 2001). Q methodology uses a card sorting approach, asking participants to rank statements on a specific topic according to a forced distribution. Factor analysis is then applied to extract social discourses. Through this method, the categorization of stakeholders is based on an empirical analysis of stakeholder perceptions rather than on theoretical perspectives (Barry & Proops, 1999). None of these methods, however, is widely applied to stakeholder analysis (Reed et al., 2009).

Besides the top-down and bottom-up approaches based on the stakeholders' individual attributes, methods have been developed to investigate stakeholder relationships. The most simplistic method to visualize relationships is to develop actor-linkage matrices (Biggs & Matsuert, 1999). Actor-linkage matrices require stakeholders to be listed in the rows and columns of a table, thereby creating a grid. Within this grid, the relationships between stakeholders can be described, using key words such as; in conflict, complementary or cooperation. Social network analysis (SNA) is a more advanced version of actor-linkage matrices based on quantitative data representing i) the presence/absence of a tie, ii) the relative strength of the tie, iii) the density of the network, and iv) the centrality of the network (Borgatti et al., 2002). Analysis of these matrices uncovers the structure of the stakeholder network. This allows the researcher to identify which stakeholders are more central, which are marginal, and how stakeholders cluster together (Marsden, 1990).

Most notable is the specialization of each method. Indeed, they focus on only one of the three components identified. Though each separate method might excel in its analysis on that particular component, a stakeholder analysis based on just a single component of the stakeholder is vulnerable to misinterpretation and can potentially lead to misalignment and misunderstanding among stakeholders. It is not the intention of this paper, however, to establish which single stakeholder analysis tool is best, but to offer a path that combines methods. This has the potential to result in a more comprehensive insight into, and reflection on, the complexity that characterizes a stakeholder. For a combination of methods to work together, their qualities will have to be assessed on a number of factors. Table 1 below provides an overview of the presented methods, delineated by the component on which they are focussed. The methods are assessed based on the classification that they offer, the relative level of detail that can be reached, and the main research tools used to arrive at the analysis. As a result of this assessment, three methods will be selected for the integrated framework for stakeholder analysis.

Table 1: Existing stakeholder analysis methods

Focus	<i>Categorization by:</i>	<i>Relative level of analysis detail:</i>	<i>Main research tools:</i>
<i>Salience</i>			
Cooperation and competition (Freeman, 1984; Savage et al., 1991)	Cooperation vs. obstruction	Low	Document analysis / workshops
Power, urgency and legitimacy (Mitchell et al., 1997)	Power, urgency & legitimacy	High	Document analysis / workshops / interviews / surveys
Reconstructive card sorting (Hare & Pahl-Wostl, 2002)	Groups according to stakeholders' own criteria	High	interviews / workshops / card sorting substantial personal interaction required
<i>Frame of reference</i>			
Strategic Perspectives Analysis (Dale & Lane, 1994)	Goals, opportunities & constraints	High	Interviews / workshops substantial personal interaction required
Policy discourse analysis (de Bruijn & ten Heuvelhof, 2004)	Policy frames	High	Document analysis / interviews / survey
<i>Network</i>			
Actor-linkage matrices (Biggs & Matsuert, 1999)	Descriptive relationships	Low	Interviews / document analysis / observation
Social network analysis (Borgatti et al., 2002)	Quantitative relationships	High	Document analysis / observation / interviews / survey

One of the key criteria for the integrated stakeholder framework is that it should be practically applicable, well integrated and still delivers a high level of analysis detail in the stakeholder analysis. For this reason, the two techniques that require a substantial personal interaction, viz., reconstructive card sorting and strategic perspectives analysis, are discarded since alternative options exist that allow for a similar level of detail. After striking these two options, each component has one method left that can achieve a high level of analysis detail. These three are power, urgency and legitimacy (Mitchell et al., 1997), discourse analysis (de Bruijn & ten Heuvelhof, 2004), and social network analysis (Borgatti et al., 2002). An additional advantage of the combination of these three methods is that each of them allows for data collection through the use of surveys. This could potentially increase the integration of the data collection, thereby resulting in less time being required from the participants. In the following section, these three methods will be discussed in more detail in order to provide a framework for an integrated stakeholder analysis.

Integrated stakeholder analysis

The first part of the integrated framework covers the salience component of the stakeholder. The combination of power, urgency and legitimacy, as proposed by Mitchell et al. (1997), is generally regarded as the best method to analyse stakeholder salience. With the combination of the three aspects of salience, viz., *power*, *legitimacy* and *urgency*, eight different subsets of salience are identified, as shown in figure 2 below. According to Mitchell et al. (1997), the most powerful subset is 7 since it combines all the three aspects. Next are 4, 5 and 6, each consisting of a combination of two aspects. Finally, subsets 1, 2 and 3 are the least powerful stakeholders. Subset 8 is regarded as a non-stakeholder since it has neither power, legitimacy, nor urgency assigned to it. Analysing stakeholder through salience therefore gives a clear insight into which stakeholders are most important to deal with. A full description of each subset is provided by Mitchell et al. (2007) and need not be repeated here.

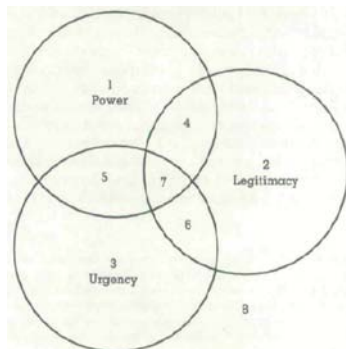


Figure 2: Classes of stakeholder salience (Mitchell et al., 1997)

Stakeholder salience is often determined by a top-down approach and uses insider knowledge from the principal problem owner, in addition to document analysis. A pre-determined set of stakeholders can be categorized without the involvement of the actual stakeholders. The weakness of this top-down approach is the possible exclusion of essential information known only by the stakeholders. Two basic solutions are available to overcome this limitation. First, stakeholders can be involved in the final stage of the analysis. This could include asking them to confirm or comment on a pre-created stakeholder salience analysis. However, stakeholders who have been uninvolved in the first stages of the analysis may feel disengaged from the process for various reasons and may therefore prove unresponsive. In addition, they may provide new information, which could require a complete overview of the original analysis, thereby leading to a possibly lengthy iteration process. Alternatively, a bottom-up approach can be applied whereby the stakeholders become involved

from the beginning and are asked to actively participate in generating a stakeholder salience analysis. The major drawback for this approach is the possible lack of interaction from the stakeholders. In this case, the principal problem owner may fall back to the top-down approach.

The second part of the framework investigates the different frames of reference that can exist around a single topic. Policy discourse analysis was identified as the best method since it effectively analyses the shared perceptions and common ground between individuals. Policy discourses are not easily identified. It is important for researchers not to influence subjects with pre-defined definitions or opinions (REF*). In order to identify stakeholders' policy discourses, standard techniques such as interviews and questionnaires are therefore insufficient (Brown, 1993). Q methodology, on the other hand, is especially well suited for this task (Brown, 1980; van Eeten, 2001). Q methodology offers a well-established technique for identifying subjectivities and establishing inter-subjectivities (Brown, 1993; Jeffares & Skelcher, 2008) and allows the researcher to identify individual policy frames (Combes et al., 2004). It is also a rigorous research methodology that is congruent with the philosophical principles of person-centred approaches (Eden et al., 2005). In general, many qualitative techniques require that people have relatively sophisticated verbal skills to express their opinions. If the subjects are not able to express their feelings or opinions clearly, it is usually up to the researcher to interpret what the subject meant. Q methodology takes away the researcher bias at this important stage of the research (Barry & Proops, 1999).

In brief, Q methodology involves each participant in the sample (the P sample) sorting a series of 'statements' (a Q sample) representative of the breadth of debate on an issue (the concurrence) into a distribution of preference (a Q sort) from which statistically significant factors are derived (Jeffares & Skelcher, 2008). Participants can be approached in two ways to perform the sort. The researcher can assist the participant in sorting the statements face to face, or the sort can be done remotely by the use of computer software such as FlashQ. A face-to-face approach, of course, is more likely to achieve a high percentage of returns since participants can be more easily persuaded to finish the exercise. By way of contrast, online surveying is more likely to result in unfinished sorts. The benefit of online surveying, however, is quite apparent, for it takes less of the researcher's time, and a larger number of participants can be contacted simultaneously.

Through an inverted factor analysis, this quantitative technique establishes the patterns of subjective perspective held within a group of respondents (Jeffares & Skelcher, 2008), which is precisely the goal of stakeholder analysis. Q methodology is not yet widely used in stakeholder analysis. However, in the few instances where Q methodology has been used as part of the stakeholder analysis to extract stakeholders' policy frames, it has each time added valuable information to the research (Kroesen & Broer, 2009; van Eeten, 2001). It might be concluded that stakeholder analysis through policy frames has the potential to give researchers a powerful insight into the context of the problem and the underlying reasons why stakeholders operate in specific ways.

Finally, the third part of the framework deals with the stakeholder network. Two different methods were identified that are capable of investigating social networks. Actor-linkage matrices, besides identifying the existence of a relationship, are not used beyond qualitatively describing the link, giving only limited information to the analyst. Social network analysis, on the other hand, uses a tested and proven methodology of quantitatively representing the network. Through tools such as surveys, questionnaires or observation, the researcher quantifies several variables such as frequency of interaction and the length of the relationship. By means of these variables, the three main defining factors of the network can be calculated.

The strength of network ties relates to the intensity or value of a network relationship (Borgatti et al., 2002) and can include the frequency or duration (Marsden, 1990). Strong ties are ties where actors share an intense relationship with one another and/or communicate frequently with one another (Granovetter, 1982). Actors sharing strong ties tend to i) influence one another more than those sharing a weak tie (Prell et al., 2007), ii) share similar views (Rowley, 1997), iii) communicate effectively regarding complex information and tasks (Cameron et al., 2008), and iv) are more likely to

trust one another (Leach & Sabatier, 2005; Reed et al., 2009). The advantages of strong ties for stakeholder management are obvious: stakeholders with strong ties are more likely to influence, trust and support one another (Klijn et al., 2007; Leach & Sabatier, 2005). Creating strong ties among diverse stakeholders can enhance mutual learning and the sharing of resources and advice. Identifying clusters of stakeholders with strong ties can also indicate where large gains can be made with respect to the sharing of resources and knowledge. Weak ties, however, have different advantages. According to Sobel (2002), weakly-linked actors seem to be more efficient for accessing new information, innovative ideas or diverse actors.

Identifying clusters of stakeholders leads to the measure of density, which can be defined as the “mean strength of connections among units in a network” (Marsden, 1990, p. 453). Density can be measured statistically as the proportion of network ties compared to the total number of possible ties (Scott, 1991). A higher density implies that the level of network cohesion is high and that members are more involved or committed to the process. Network members will have easier access to a relative larger set of connections (Keast, 2003). Networks characterized by dense links are associated with high levels of trust and a common sense of identity and facilitate collective action within the group (Sobel, 2002), but they may have lower propensity to cooperate with other groups (Ansell, 2003). Dense networks, furthermore, offer individual actors easy access to information about actors and activity within the group (Olsson, 2009). This is valuable to the extent that it offers strategic information about the preferences and reliability of other actors, but it is potentially risky since it also gives other actors access to information about them (Olsson, 2009).

Network centralization is the measure that shows to what degree a network is shaped around single actors (Prell et al., 2007). A highly centralized network is one characterized by one or a few individuals holding the majority of ties with others in the network (Olsson et al., 2004). Centralized networks are helpful for the initial phase of forming groups and building support for collective action (Martinez-Moyano et al., 2008). Other research, however, suggests that such centralized networks are disadvantageous for long-term planning and problem solution. These more long-term goals require a more decentralized structure, i.e., one holding more ties, both weak and strong, among more actors and stakeholder categories (Prell et al., 2007).

Similar to discourse analysis, data gathering for social network analysis can be approached both face-to-face and remotely using internet surveys. The same advantages and disadvantages hold for both approaches. For social network analysis, however, a substantially larger data set could be required, depending on the size of the network. As participants are asked to answer several questions, such as the length of the relationship or the type of relationship for each stakeholder within the network, the size of the survey can quickly become overwhelming for the participant. In such instances, the presence of the surveyor can enforce the decision of the participant to still complete the survey. It is therefore up to the researcher to determine whether the size of the survey warrants the use of personal data gathering, or the possibility of online data gathering.

As each of the three methods presented herein rely on similar data gathering tools, they will fit well together within the framework. Document analysis and explorative interviews, possibly combined with workshops with the key stakeholders, will allow the analyst to gather enough background information to inform the more detailed data gathering phase for each of the methods. This shows that the presented integrated stakeholder analysis does not only fit together on a theoretical level, but also on a practical level.

Conclusion

The topic of stakeholder engagement has, for good reason, received greater attention in recent years. Stakeholder engagement requires a solid stakeholder analysis. Several stakeholder analysis tools have been identified, each with its own strengths and weaknesses. The greatest weakness of all the methods surveyed is the narrow orientation of each tool towards a single component of what constitutes a stakeholder. As has been argued here, stakeholder engagement based on a single

component is unlikely to provide the best possible results. For this reason, an integrated framework for stakeholder analysis has been presented. Saliency, frames of reference and social network analysis are supplementary to each other, together covering the three components that comprise a stakeholder. By combining these three methods, a more rigorous and robust stakeholder analysis will result.

Together, these three methods have the potential to provide a comprehensive overview of 'who is a stakeholder'. By arriving at a truly informed understanding of the saliency of any stakeholder, i.e., their power and the urgency and legitimacy of their claim, and knowing what a stakeholder's interest are, and (more importantly) why it has those interests, combined with the knowledge of a stakeholder's location within the stakeholder network, can answer the question of how a stakeholder is most likely to respond and what the effect of the stakeholder's response will be. More importantly, it will not only predict the response and its effect on the principal stakeholder, but also its impact on the other stakeholders within the network. Stakeholder engagement based on this knowledge will be better able to appropriately fit engagement strategies to stakeholders, thus leading to the management of the behaviour of stakeholders in such a way that objectives are achieved as efficiently as possible, i.e. on-time and within budget.

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