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AN INSTRUMENT FOR STAKEHOLDER IDENTIFICATION: PHASING ROLES OF INVOLVEMENT

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SOM-theme B: Innovation and interaction

Abstract

The starting point of the paper is that stakeholders fulfill an important role to stimulate sustainable innovation. The question is "who are those stakeholders and what should be their role?" This paper describes an instrument, which enables identifying stakeholders and designating specific roles to those stakeholders. The instrument focuses on two key points, i.e. roles of involvement and phasing this involvement within an innovation process.

1 Introduction

The starting point of this paper is the assumption that stakeholders fulfill an important role to stimulate sustainable innovation. There are several reasons that underline this assumption. One reason is that stakeholders can be considered representatives of the organization's social and ecological environment. If the organization, in the light of sustainable innovation, aims to reduce its negative externalities (see Achterkamp and Vos, 2003), stakeholders certainly would have an interest in this. Another reason is that stakeholders might help defining criteria of sustainable innovation. Moreover, stakeholder involvement might lead to more commitment regarding the sustainability of the innovation, within the organization in general, or more particularly within the innovation team and perhaps also of the stakeholders themselves.

These reasons show some of the interests an organization has in involving stakeholders for improving sustainable innovation or for making sustainable innovation more concrete. Obviously, this raises the question of "who are those stakeholders and what should be their role within an innovation process?" However, dealing with this question is not a straightforward matter. Of course, within an organization insights are available about who the stakeholders are or might be. Still, it remains a question whether a possible stakeholder list is complete. Furthermore, other stakeholders might turn up in case of a specific innovation project; when aiming for *sustainable* innovation, particular stakeholders might be relevant or become relevant.

The aim of this paper is to display an instrument, which helps identifying stakeholders in a systematic way. The instrument focuses on identifying stakeholders within a specific (innovation-)project. In describing the instrument, the paper is structured along the following lines. First, some stakeholder categorizations from literature are described; it is analyzed what the contribution of these categorizations is for solving the identification problem. This analysis results in three requirements, the instrument should fulfill. After that, the instrument is described along these requirements. The description focuses on two main points, i.e. 'roles of involvement' and 'phasing this involvement'. When the instrument has been displayed, it is

examined to what extent the instrument contributes to resolving the problem of stakeholder indentification.

Before discussing stakeholder literature, a note on the choice of words needs to be made. Within the instrument we use the, more neutral, term *involved* instead of *stakeholder*. However, the next section on stakeholder literature still uses the, therein common, notion of *stakeholder*.

2 The problem of stakeholder identification

As mentioned before, normally there are, within an organization, various insights on who the stakeholders might be. For an individual organizational member, it is, on request, by no means a problem to write down a list of stakeholders. This seems to be a simple and straightforward way of solving the identification problem. In applying the stakeholder instrument by means of a brainstorm session, which will be discussed in more detail further down, five minutes were allocated for making such an individual stakeholder list. The participants of the brainstorm session began writing immediately and were not yet finished after five minutes. This shows plainly the difficulties of such an exercise. It is a question of when such a list is complete, even when the exercise takes much longer than five minutes. Furthermore, it is not clear what makes an actor a relevant stakeholder. For instance, is the first mentioned stakeholder the most important one and the stakeholder at the end of the list, least important? Possibly, a certain classification of individuals or groups might offer a solution for this problem. Elsewhere, Vos (2003) discusses the effectiveness of various theoretical classifications for the identification problem. This section confines to some of the key points from this discussion.

An - obvious - starting point is the definition of Freeman (1984, p. 46): "...a stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives...". This definition if widely acknowledged because of its 'landmark' position in stakeholder theory (see e.g. Wood, 1991; Clarkson, 1995; Andrioff *et al.*, 2002). In the light of the identification problem, three points are relevant, namely [I] the categorization as used, [ii] the normative implications of this and [iii] the dynamics of the situation for which the categorization is to be used. Regarding the categorization issue, the 'Freeman definition' clearly represents a very broad view on stakeholders, which is, according to Mitchell *et al* (1997, p. 857), based on the "...empirical reality that companies can indeed be vitally affected by, or can vitally affect, almost anyone...".

more narrow view on stakeholders, in which categorizations, different from the distinction between 'can affect' and 'affected' are described. Some examples of these categorizations are primary and secondary stakeholders (Clarkson, 1995), voluntary and involuntary (Clarkson, in Mitchell *et al*, 1997), or fiduciary and non-fiduciary stakeholders (Goodpaster, 1998). However, these classifications, just as Freeman's definition, leave the identification issue unresolved: 'What specific stakeholder fits within what specific category?'.

Particularly Mitchell et al. (1997) synthesize stakeholder categories with the managerial problems. They try to answer the question of how managers choose their stakeholders and how they prioritize between competing stakeholder claims. Managers, they argue, perceive various stakeholder groups; these managers give a high priority to a stakeholder if they believe that this stakeholder has a legitimate claim, which calls for immediate action (i.e. urgent), and possesses the power to influence the organization's activities. The stakeholder, who is believed to possess three attributes, (i.e. legitimacy, urgency and power) is called a definitive stakeholder. Likewise, a classification of seven stakeholder groups is developed, depending on the presence of one, two or three attributes in varying combinations. Without discussing the so-called salience classification of Mitchell et al. (1997) in more detail, we argue that even though this classification explains why managers give attention to certain stakeholders, it does not solve the identification problem in a specific situation. Furthermore, they set aside the question of whether the managers' choices are legitimate. This leads to our second point of discussion, namely the normative implications.

Whereas the basic distinction of Freeman between 'can affect and 'affected' is inadequate for identifying stakeholders, it surely is important distinction. Our position should be considered a normative perspective on stakeholder identification, which means that organizations owe obligations to those whose freedom and well-being is affected by their activities. That is precisely the point of the stakeholder group of the 'affected' as defined by Freeman (1984). This group consists of actors who are involuntary involved, they possess interests in aspects of organizational activity and are, for that reason, legitimate stakeholders (Goodpaster, 1998; Vos, 2003).

The third point refers to the dynamics of the situation for which the stakeholders need to be identified. The classifications mentioned before do not take into account the dynamics of the process under consideration, which is relevant particularly in case of an innovation process. Although Mitchell *et al.* (1997) acknowledge that the prioritizations of managers may shift during a process, but as said, their classification model is limited to the explanation of why managers give attention to what stakeholders.

Arguably, a way to deal with this dynamics could be found in a classification that is more closely based on the activity or issue at hand. In case of innovation processes, this means that the different phases of innovation processes should be articulated. What distinguishes innovation processes from day-to-day routines like production or logistics is that innovations are often developed within projects, with a starting-up phase, development phases, and a - clear or fuzzy - end point. Conceivably, stakeholder involvement should differ over these phases.

In conclusion, in order to deal with these problems we have developed an instrument, which not only classifies, but also actually identifies stakeholders involved in an innovation process, and designates specific roles to those stakeholders. In summary, the instrument had to fulfill three demands. First, the instrument should be able to support the identification of stakeholders in a specific case. Second, the instrument should take into account the dynamic circumstances within an innovation process. Third and finally, the instrument should take into account the stakeholder category of 'the affected'.

3 Roles of involvement

3.1 Critical systems thinking

There are two pillars underlying the instrument; this section explains the first pillar, i.e. critical systems thinking (CST). In general, the choice for a systems perspective within the instrument seems rather obvious. After all, identifying stakeholders means that a line should be drawn between the actors involved and un-involved or between stakeholders and non-stakeholders. Therefore, stakeholder identification can be considered a boundary drawing issue (Vos, 2003). Dealing with boundary-drawing issues is typical for a system approach.

There are different perspectives on these boundary-drawing issues within systems thinking. These perspectives represent different strands in system theory. The so-called hard systems approach proceeds from the assumption that boundaries are 'given' and objectively measurable (Schecter, 1991). This assumption has been widely criticized in both the 'soft' and the 'critical' version of system theory (e.g. Willmott, 1989; Midgley, 1996). Particularly Checkland (1981) has been important for the insight, relevant for both soft and critical systems thinking, that boundaries are social or personal constructs (see also Midgley, 2000). Systems thinking can contribute, in various ways, to the analysis and solution of problems in order to improve the system concerned. However, Checkland (1981) argues, problem assessment and surely the solution of a problem, is subjectively biased. An improvement for one person does not have to be an improvement for another person. A different system boundary may result in a different problem analysis and, accordingly, in different solutions.

As said, also critical systems thinking underlines this subjectivity. However, in this line of approach, the normative aspect of system improvement, along with the boundary issue, is crucial. The basic assumption that drawing boundaries of a system is a matter of subjectivity, makes it, simultaneously, an ethical issue. In other words, drawing boundaries along with the resulting problem analysis and –solution, raises

normative questions (Churchman, 1971; Ulrich, 1983; Midgley, 1996). After all, it is debatable whether a system change can be considered an improvement and whether this can be justified.

As said before, stakeholder identification can be viewed a boundary drawing issue: who is acknowledged as 'involved' and who is not? We follow the critical systems thinking by considering this a normative matter. What is important for the identification of stakeholders is that pushing out boundaries of analysis or improvement likely results in pushing out boundaries of who may legitimately be considered a stakeholder.

Particularly the ideas of Ulrich (1983; 1991) have been important for the development of the instrument. Ulrich not only deals with drawing boundaries in a critical way, but also introduces a role perspective on stakeholders. The latter matches our demand that the classification model within the instrument should be based on the activities in the project. Although a role perspective on stakeholders does not resolve the identification on its own, nevertheless it clearly facilitates the identification because the search for stakeholders can be accomplished in a more directed way. This role perspective means that stakeholders can be classified on the basis of the role(s) they are playing within an innovation project; a role has to be specified in a concrete case in order to decide what individuals or groups of individuals stand for what roles. This is precisely what the instrument has been developed for, namely to support this aspect of decision-making.

Ulrich (1983, p. 248) acknowledges two reasons anyone can claim belonging to a system, that is to say being a stakeholder. The first reason is that they have some kind of resource (expertise, political or financial, etc.) to contribute to the system. The second reason is that they are actually or potentially affected by the outcome of the system. Although we use this distinction within the instrument, the labels of these two primary categories are slightly different, i.e. *actively involved* and *passively involved*. This distinction leads to two types of circumscriptions of an innovation project. Within a narrow circumscription those actors are situated who *actively* contribute to the outcome of the innovation project. Within the broader circumscription the actors

are situated, in addition to the *actively involved*, who are affected by its outcome, i.e. the *passively involved* (see figure 1).

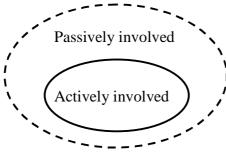


Figure 1: two types of involvement

Let us consider the two basic groups in more detail and begin with the actively involved. On the basis of three sources of influence Ulrich distinguishes three roles - in our terms - *an actively involved* can play: [1] client (whose purposes are being served), [2] decision maker (who has the power to decide) and [3] designer (who contributes necessary expertise). Further below the more precise role definitions are given, which - again - differ from those of Ulrich (see 1983, p. 252). At this point it is relevant that the circumscription of the *actively involved* is unambiguous, that is not to say that the actual identification of e.g. all of the the clients is an easy matter. For that reason, the line around the actively involved in figure 1 is a solid line.

Regarding the identification of the second basic group on the other hand - *the passively involved* - there is a more fundamental problem. It remains a question whether this group has been identified completely. For that reason, Ulrich (1983) states that this group, in his terms the affected, can only be bounded by means of a representation. Furthermore, he argues that only the *affected* themselves should determine who is to represent them. Although our instrument does support the identification of this particular group of involved, the representation notion is also important. In any case, the circumscription of the *passively involved* is more ambiguous compared to the *actively involved*, which is, for that reason, reflected by

the broken line in figure 1. As said, the question of who is considered a member of the *passively involved* it is a normative question.

3.2 Definitions of the roles

The main point of the instrument is, that it not only classifies the actors involved in an innovation project, but also actually identifies these actors; designates roles to these actors and, as will be discussed further below, deals with the question of 'when the identified actors should play their role'. As discussed before, the instrument uses two primary types of roles. The first type consists of three sub-roles, i.e. the client, the decision maker and the designer. The actors who play these roles can affect the outcomes of an innovation project. In addition to these actively involved, there are actors who are affected by the outcomes of an innovation project, but who are, at the same time, not able to influence the outcomes themselves; this is labeled the role of the *passively involved*. Possibly, these *passively involved* cannot be addressed directly (see also Ulrich, 1983). In that case the notion of representation becomes relevant; a certain actor might act on behalf of a certain passively involved. Examples are a union that represents future employees, or a local council that represents a group of neighboring citizens. It needs to be pointed out that in identifying the involved – actively and passively - we take the perspective of the organization concerned. However, it can be expected that particularly the passively involved, or their representatives, take the first step in starting a dialogue with the organization. Precisely for that reason, it is important that the organization is aware of this type of actors involved. Table 1 gives an overview of the roles and its definitions that are used in the instrument.

3.3 Definitions of the various roles of involvement	
General definition:	An actor involved is any group or individual who can affect [1] the
actively and	achievement of the innovation's objectives or [2] who is affected by
passively involved	the achievement of these objectives. The first category is labelled the
	actively involved; the second category is labelled the passively
	involved.
Client	A client is the actor whose purposes are being served through the
	innovation
Decision Maker	A decision maker sets requirements regarding the innovation and
	evaluates whether the innovation meets these requirements.
Designer	A designer contributes expertise to the innovation process and is responsible for the (interim) deliverables.
Passively involved;	A passively involved is affected by the outcomes of the innovation
Representative	project without being able to influence these outcomes.
	A representative is a person who has been chose to act on behalf of
	another, i.e. the passively involved.

Table 1: roles of involvement

4 Phasing involvement within an innovation process

Now the various roles of involvement are defined, the question arises when these roles ought to be played. This takes us to the second pillar of the instrument, the different phases of an innovation project.

Dividing innovation projects in different phases is not a new idea. As early as in the fifties of last century, Johnson and Jones (1957) describe product innovation as a stage-gate process. They consider product innovation as a process with stages and gates. The stages are phases in which the evolution of "new things" takes place. The gates can be considered decision points, where the results of the preceding stage are evaluated, and where it is decided how to go further in the following stage(s). Several authors use this idea of product development as a sequential step-by-step process - although the steps themselves might be iterated - thus coming to a discursive approach (e.g. Cooper and Kleinschmidt, 1990, Pahl and Beitz 1995). More recently, the non-linearity of innovation is underlined (e.g. Van der Ven *et al.* 1999, Janszen 2000). Van de Ven *et al.* (1999) state that the innovation process is neither sequential nor orderly, nor is it a matter of random trial-and-error, rather it is best characterized as a non-linear dynamic system. But still, they too recognize three major phases in the innovation cycle, i.e. *initiation phase, development phase*, and *implementation or termination phase*.

This notion of different, distinguishable phases within innovation processes has been used in developing the identification instrument. Not only the question of 'which actors should be involved' should be tackled, but also the question of 'in which phase of the innovation process should this involvement take place' is incorporated. Table 2 gives an overview of the phases and their definitions that are used in the instrument.

Definitions of the various phases in an innovation project		
Initiation phase	This phase focuses on generating ideas.	
Development phase	This phase focuses on developing the innovation based on	
	these ideas.	
Implementation /	This phase focuses on implementing the innovation (or	
termination phase	terminating the project).	
Maintenance phase	This phase focuses on applying and evaluating the innovation.	
maintenance phase	This phase focuses on upprying and evaluating the fillovation.	

Table 2: four phases in an innovation project

As table 2 shows, we added a fourth phase in the instrument, i.e. the *maintenance phase*. The maintenance phase is not distinguished in most innovation models, although there are models, like the curriculum innovation models of Mennin and Kalishman (1998) and Mowat en Mowat (2001) that explicitly mention a maintenance phase. There are two reasons for adding this fourth phase in our instrument. First, in testing the model the significance of this phase for certain organizations, and for certain innovation projects became clear. Furthermore, paying attention to this phase pre-eminently suits the concept of 'sustainable innovation'. Including this phase, in which focus is on applying and evaluating the innovation, can lead to further sustaining the innovation, but also to preserving the sustainable features of the innovation.

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5 Displaying the identification instrument

The identification instrument consists of four steps (see figure 1), which, together, facilitate a brainstorm session aiming for identifying the actors involved in a specific innovation project. The four steps will be discussed successively. It needs to be pointed out that each of these steps involves two individuals who chair the discussion and a number of participants. These participants need to understand the innovation project at hand, preferably from different angles.

Step 1 concerns defining and delimiting the project. As said before, the instrument is based on the idea that identifying the actors involved is only useful if it is clearly stated *what* the actors are involved in. This means that stakeholder involvement should always – that is to say: not only in case of an innovation process - relate to a certain activity, a project, or an item on the agenda.

Step 2. Individual brainstorm: identification of the involved.

Step 3. Group brainstorm: identification of the involved based on roles.

Step 4. Group brainstorm: phasing the

involvement

Figure 1: the four-step identification method

In step 2, the participants are asked to write down all of the possible involved actors (people, groups of people, organizations) in the project. This exercise partly serves as a 'warming-up', but also offers the possibility to compare these results with the results of the group brainstorm.

In step 3, the participants are then asked to, as a group, come up with all the actors who can, will, or ought to fulfill the various roles in the project (i.e. client, decision maker, designer, and passively involved). In this, it holds that an actor may play different roles. The chairing persons try to obtain an overview that is as complete as possible by posing specifically selected guiding questions (see table 3). These questions have been designed for opening up new directions in the discussion.

In step 4, the participants are asked to indicate - for all of the identified actors from step 3; in each phase in the project (i.e. initiation, development, implementation/termination, and maintenance) - whether this actor should be involved in this phase. In doing so, a distinction is made between [I] the actor should be involved *for certain*, [ii] the actor should *possibly* be involved, or [iii] the actor should *not* be involved in this phase of the project.

Guiding questions for the various roles		
Role	Guiding question	
Client	 What are the benefits of the innovation for the clients mentioned so far? Are there any others who also benefit from these effects? Are there any other benefits leading to different clients? 	
Decision Maker	 What are the power resources of the decision makers mentioned so far? Are there other decision makers with similar power resources? Are there any other relevant resources; which decision makers use these? What are the topics these decision makers can decide on? What are the topics these decision makers cannot decide on; what decision makers do have this ability? 	
Designer	 What is the relevant knowledge or expertise of the designers mentioned so far? Are there any other designers with similar knowledge or expertise? What are relevant problem areas and topics? What designers might contribute to these problem areas and topics? 	
Passively involved; Representative	• What are the effects of the innovation project on the passively involved mentioned so far?	
representative	 Are there any other (negative) effects, and who are affected? Are the interests of passively affected taken into account in the innovation project? Why (not)? 	

Table 3: identifying questions

6 Conclusion and discussion

This concluding section presents a reflection on the instrument in the light of the demands the instrument should fulfill (see before). It needs to be pointed out that part of the conclusions are based on four brainstorm sessions in four different organizations (a firm of consulting engineers, an academic hospital, a knowledge institute for mental health care, and a soil-cleaning firm).

First, the instrument should be able to support the identification of stakeholders in a specific case. The brainstorm sessions showed that the instrument is indeed able to facilitate identification. However, it remains an open question whether the resulting lists of involved actors are, or even can be, complete.

Second, the instrument should take into account the stakeholder category of the affected, or as we defined, the passively involved. The brainstorm sessions showed that a number of participants regarded it very difficult to identify this category. Some of them considered it hard to let go of the improvement perspective they had on the innovation. To some extent, they expected that the outcome of the innovation project would lead to improvements for everybody, if necessary after some adaptations. However, after thinking it through, it became clear that in case of conflicting interests, improvements for some can or will mean deterioration for others. During the brainstorm sessions, it appeared that the role of the *passively involved* could be a temporary or a transitional role. When an actor has been identified as *passively involved*, management can chose to involve this actor in the innovation process; this way allowing him to promote his interests. In fact, the actor is then designated a new role: that of a client if his wishes are now taken into account, or that of a decision maker if he is given a kind of veto-right on (parts of) the project design, or that of a designer if his knowledge and expertise actually contributes to the innovation project.

Third and finally, the instrument should take into account the dynamic circumstances within an innovation process. To give these dynamics a place in the method, the role classification is connected to a four-phase model of innovation projects. A few observations can be made on this. In some of the brainstorm sessions,

phasing the roles over the project proved to be a test of the preceding identification. Some of the identified actors were shifted to another role, or added to a second role. Furthermore, phasing the roles lead to an ordering of the identified involved. Actors who should, according to the participants, play a role in all four phases, apparently seem to be of more importance than actors who are assigned no, or only a possible role in most of the phases. This way, the identification method provides a set-up to the next step: managing stakeholder involvement, or in terms of this method, managing stakeholder roles. This leads to several management questions, such as: "What will be the actual activities of the *actively involved*?", and especially, "Which of the identified *passively involved* should indeed become involved in the project, when should this involvement take place, and how should this involvement look like?".

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