Managing Mental Standards with Corporate Citizenship Profiles

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Abstract

Stakeholder expectations of corporate responsibility are growing and thus understanding the dynamics of expectations is becoming important for companies. Stakeholder expectations that are met open doors for stakeholder favor, whereas unmet expectations may hinder or even prevent collaboration. While all companies are expected to be responsible enough to keep away from causing harm to others, a competitive edge can only be achieved if the minimum expectations are exceeded. The paper suggests that companies can both exceed and manage stakeholder expectations in practice by building up a corporate citizenship profile that gives direction to their specialization in responsibility. This niche can be labeled for example environmental, cultural or technological corporate citizenship. The value of such labeling is that it can make the corporate responsibility of an individual company easier to communicate. This is important, as creating competitive edge with responsibility sets high standards for communication, since stakeholders view messages concerning responsibility with a great deal of criticism, or even cynicism. As good deeds of today tend to turn into expectations of tomorrow, meeting stakeholder expectations can become crucial for company success. Thus, expectations need to be both understood and managed.

Keywords

Stakeholders, expectations, corporate citizenship

Introduction

As societies become more diverse and fragmented, expectations of how business should be run are becoming more complex as well. The recent buzz around the responsibilities of business mirrors the current societal values and changes (Matten & Moon, 2008). Some have argued the society to have turned into a Risk Society (Beck, 1992) where principles for operating are questioned and criticized openly (Beck, 1992; Jones, 2002). As a result, companies need to find ways to answer to increasing expectations that might whittle away stakeholder trust, and through it erode their legitimacy (Deephouse & Carter, 2005). Stakeholder expectations of responsibility have been on the rise (De Man, 2005) and as they are changing they transform also the way responsibility is perceived. However choosing what to emphasize and what to communicate is not easy for business, as cultural aspects cause variation in the notion of responsibility (see e.g. the Edelman Trust Barometer, 2009; Williams & Zinkin, 2008) and what responsibility is considered to be may change over time (Matten & Moon, 2008).

Companies and their stakeholders affect each other directly and indirectly, as the theory of stakeholder thinking depicts (Carroll, 1993; Freeman, 1984). When talking about corporate responsibility and stakeholder thinking, companies need to find ways to combine two profound needs to function; the society’s need for production and companies’ need for societal consent. Problems arise, as expectations for responsibility are sometimes higher than companies are willing to meet (Blowfeld, 2005; de Man, 2005). This gap poses a risk for business, and requires attention. The size of the risk depends on how large a gap the stakeholders are willing to accept.

When risks become more visible, stakeholders take more interest in how business operates. Communication becomes a critical asset, as stakeholders need more information on how companies are conducting their responsibility. Stakeholders want to be able to assess if their expectations match reality. The paper proposes the different stakeholder expectations to form dynamic ‘mental standards’, that are sometimes congruent and sometimes very different from the standards used elsewhere (e.g. in reporting). Aligning these (mental & other standards) is of vital importance for companies wanting to succeed with corporate responsibility. As such, the underlying assumption of this paper is that corporate responsibility can only be effective if the different expectations toward it are managed. The paper suggests that one way to effectively manage expectations in practice could be through a corporate citizenship profile. But to manage expectations, they first need to be defined and understood.

To maintain basic legitimacy, companies need to achieve at least the minimum level of responsibility by causing no harm to others. However, this paper suggests that gaining competitive edge from responsibility requires not only answering to the minimum expectations, but exceeding them. What is more, responsibility does not end once a certain level of responsibility is demonstrated, but instead stakeholder demands may even rise (Dean, 2004). In fact, it is extremely challenging to get stakeholders to settle for less once a certain level of responsibility has been established (Morsing, 2003). That said, the management of stakeholder expectations can turn out to be crucial for successful corporate responsibility. Despite this, little research has focused on the dynamics of stakeholder expectations.

To address the issue of diverse and dynamic expectations, the paper proposes that companies can both exceed and manage stakeholder expectations by building corporate citizenship profiles that match the industry or the field of the company. By using such profiles stakeholder expectations can be given direction and kept realistic. The concept of corporate citizenship (CC) is used here, as it provides an analytical lens that locates companies into a societal context (Crane, Matten & Moon, 2008). The notion of “citizenship profiles” is derived from Gardberg & Fombrun (2006), but weighted for this paper’s purposes with more profound communicative angles. In fact, the paper suggests communication to play a critical role for responsibility: first, communication can be of value when profiling the type of re-
sponsibility suitable for the company. Second, communication is the key to managing expectations through reputation.

As no communication can be successful without genuine actions behind it, companies need to know their stakeholders and listen to their expectations and demands. In addition, a company needs to know where it wants to focus and find a way to meet expectations with that focus. If a company fails to focus, responsibility can become a "slippery slope" (Frederiksen, 2010) with endless expectations. Thus, companies are not only required to know what the stakeholders are expecting, but also to know how the expectations can be filled while conducting everyday operations. This is challenging as stakeholders constitute an ecosystem that reforms itself whenever stakeholders' attitudes, values or expectations change.

The paper is organized as follows. To begin with, the paper sets out the scene for stakeholder expectations and their relevance for corporate responsibility. Next, attention is directed towards how company responses affect stakeholder expectations and why expectations need to be managed. Towards the concluding part, the paper discusses how companies can both exceed and manage stakeholder expectations in practice by specializing, and moreover, by building up a corporate citizenship profile.

Why expectations matter?

Companies are growingly interested in stakeholder expectations, since maintaining a good rapport with stakeholders is believed to strengthen organizational legitimacy and long-term performance (Donaldson & Preston, 1995; Suchman, 1995). In fact, the relative importance of stakeholder expectations seems to be growing (Sinaceur, Heath & Cole, 2005). Expectations can be defined as mental standards on what is considered important or as heavily invested beliefs and anticipations about what will occur in the future, or how others behave. What makes these mental standards tricky is that they are subject to change and affected by emotions. Expectations can be positive (trusting) or negative (distrusting) (Lewicki, McAllister & Bies, 1998) and they may derive from personal or mediated experiences. However, often the origins of expectations are hard to define clearly, as both weak signals and individual clues are combined to form a scenario of what is likely to happen. Thus, stakeholder expectations are more subtle than stakeholder demands; expectations might not lead to visible outcomes such as boycotts, but instead result in silent manifests of satisfaction or dissatisfaction. These are often demonstrated through choices in consuming, identification, and the willingness to cooperate.

What makes expectations worth understanding are the benefits they provide: fulfilled expectations are rewarded with the generation of trust, which in turn has a positive effect on reputation (Eisenegger & Imhof, 2008). Reputation is a record of trustworthy or untrustworthy past behavior (Andressen, 1994; Szrompka, 2000; Webley, 2003), forming as a cyclical process: past experiences create a reputation based on which future expectations are matched (Luoma-aho, 2005). From the organization's point of view managing stakeholder expectations is important because suitable expectations among stakeholders open doors for stakeholder favor, whereas false expectations may hinder or even prevent collaboration.

As stakeholder expectations belong to the area of relationship management on the organizational agenda, they highlight the need to know and understand stakeholders that surround organizations. Communication becomes a central function, as relationships are maintained to a large part with the help of communication (Ledingham & Brunning, 2000). Furthermore, communication is essential in creating meanings and making sense (Schultz & Wehmeyer, 2010) and in seeking support for actions (Hooghiemstra, 2000). From the point of view of communication the central questions relating to stakeholder expectations are what is communicated to the stakeholders, how the stakeholders react and how the stakeholders are placed in importance (Luoma-aho, 2008). Expectations are formed through experience and time (Vos & Schoemaker, 1999), but communication is what maintains, increases or diminishes them.

Stakeholders constitute the ecosystem for business operations – an ecosystem that reforms itself whenever stakeholders' attitudes, values or expectations change. It has been suggested that companies with strong brands face higher stakeholder expectations and through them more criticism than those with more decentralized trademarks (Halstonen, Kourula & Salmi, 2009). Also companies with operations close to natural resources are considered prone to criticism (Peloza, 2006; De Villiers & Staden, 2006). Thus the expectations that companies face vary both in their content and intensity. Especially when corporate responsibility is monitored with intensity, honest communication and recognition of stakeholder expectations can provide room for organizational coping.

Expectations of responsibility

Previous research has suggested that there is an ideal level for conducting corporate responsibility that is related to attributes such as company size and industry (McWilliams & Siegel, 2001). As corporate responsibility is often defined with the help of the "Triple Bottom Line" (TBL) that acknowledges three different responsibilities businesses today have (economic, environmental and social) (Elkington, 1994), stakeholder expectations of responsibility can refer to different areas on the organizational agenda. In fact, as the Triple Bottom Line suggests, an organization's responsibility is towards all different stakeholders that are connected to the company with either formal or informal bonds. A stakeholder can hence be anyone who is influenced by or aims to influence, either directly or indirectly, the actions of the organization (Carroll, 1993; Freeman, 1984). These stakeholders constitute the audience for corporate responsibility and seek various arenas to voice their own opinions on responsibility.

Balancing corporate responsibility with stakeholder expectations is a challenging task, as a good deed done today can turn into a prevailing expectation for tomorrow (Luoma-aho, 2008). In fact, how responsibility is perceived can change over time. According to several studies (Blowfield & Googins, 2006; Boston College Center for Corporate Citizenship, 2009; De Man, 2005; Waddock, Bodwell & Graves, 2002) the direction of change has been constant for already some time: towards tackling ever more complex issues with corporate responsibility. Scholars have argued that responsibility has become a prerequisite for attracting investments (Matten & Moon, 2008, p. 16), a central tool to secure business in the long run (Fombrun, Gardberg & Barnett, 2000; Vanhamme & Grobben, 2009), and even an all-pervasive business imperative (Waddock, Bodwell & Graves, 2002). In accordance to this development, responsibility will soon become a condition sine qua non for conducting business no matter where the operations take place.

When talking about responsibility, stakeholders expect many things. To maintain basic legibility, companies need to achieve at least a minimum level of responsibility of causing no harm to others with their business (Elkington, 1994; Waddock, Bodwell & Graves, 2002). This can relate to different spheres of respon-
sibility, starting from environmental considerations such as pollution control to social considerations such as fair treatment of employees and safety of production. In addition to keeping away from harm, stakeholder expectations address rather complex issues, such as human equality, education, and tackling social problems. (Boston College Center for Corporate Citizenship, 2010.) Thus, business today is not faced only with demands on the minimum level (no harm done), but they are also expected to take part in promoting societal goals on a general level. To add to the complexity of stakeholder expectations, different stakeholders can expect different things, and what is more, the differing expectations might even contradict each other. This, if anything, makes it even more difficult to find the right responses to expectations from the perspective of an individual organization.

As companies cooperate with each other, they also have expectations for each other. To be able to ensure that expectations of responsibility are met throughout the supply chain and cooperation network, the business life has built self-regulatory systems to guide how much responsibility is considered as sufficient (Matten & Moon, 2008; Schultz & Wehmeier, 2010). For example, companies with operations abroad are usually expected to follow the laws and standards at least on the level of their country of origin. To prevent differing practices, international standardization systems have been established that oblige the certificate holders to follow them wherever they operate (Matten & Moon, 2008). Standards are a way to guarantee a uniform behavior that goes beyond national regulations, and as such, standards represent one to define how much responsibility can be expected.

Fulfilling minimum level of responsibility is especially vital for the formation of stakeholder assessments, and neglecting the minimums can cause permanent harm. If the minimums are not met, it is most often the stakeholders that bear the consequences, e.g., in terms of health problems, contaminated living environment or economical loss. When companies gain in power they are also able to touch the lives of even more stakeholders. This, in turn, means bigger risks and bigger crises if the risks actualize. Especially in the wake of the 21st century, irresponsibility has been confronted with not only changes in attitudes (increased skepticism), but also with changes in regulation and legislation (Matten & Moon, 2008, p. 414-415; Rockness & Rockness, 2005). In fact, tolerance for violations on the Triple Bottom Line is getting ever lower, and support is given increasingly to those willing to exceed the minimum level. Unfulfilled expectations may not always be displayed flamboyantly, but by simply turning to the competitor who can deliver the product with satisfactory social and environmental level.

Managing expectations

To manage expectations they need to be understood and known. In particular, companies need to understand that different stakeholders can have different expectations. Thus, creating uniform standards is not always sufficient for expectations management, as all stakeholder expectations are not necessary in congruence with the prevailing standards. To find a way to operate in a legitimate way, both what is expected of the company and what the company is willing to deliver needs to be constantly negotiated between companies and their stakeholders.

To maintain stakeholder support, expectations should be met – to gain a competitive edge, expectations should be exceeded. Whether a company strives to meet or exceed expectations of responsibility is a strategic question. Some companies might be pleased just to stay on the minimum level and not to invest in proactive monitoring of expectations that concern responsibility. However, those companies wanting to exceed expectations need a have a plan in order to succeed.

Managing expectations is related to managing relationships

![Figure 1: Company response to stakeholder expectations of responsibility and effects](http://ejbo.jyu.fi/)
(Ledingham, 2003). What makes relationship management important is that an established and known relationship offers opportunities for predicting and following how expectations develop and change. In order to know and understand both relationships and expectations, communication is needed to be able to exchange information and to make sense of it. Furthermore, managing expectations is important as a company cannot only adjust itself to the demands of the surrounding society, but rather needs to find ways to balance company needs with stakeholder needs and to find common ground and mutual benefit between them (Frederiksen, 2010; Ledingham, 2003).

How a company behaves and acts affects stakeholder expectations whether a company is aware of expectations or not. Company responses contribute to whether expectations are on the positive or the negative side (Lewicki, Mccallister & Bies, 1998), which in turn can affect organizational reputation and legitimacy, as well as stakeholder trust. Basically, companies can either fail, meet, or exceed stakeholder expectations. Communication has a role here, as it can maintain, increase or diminish expectations and stakeholders’ perceptions of the organization as a whole. Figure 1 offers (a simplified) framework for stakeholder expectations and company response, as well as presents the most important perspectives for communication.

As figure 1 suggests, failing stakeholder expectations is connected with denying or insufficient communication, or communication that is somehow conflicting with actions (see for example Bradford & Garrett, 1995; Luoma-aho & Paloviita, 2010). Thus, a company can fail in meeting stakeholder expectations of responsibility not only by refusing to take up responsibility, but by taking it and not communicating about it, or by telling about it but not actually doing it. This level of not meeting the minimum expectations of responsibility has the potential to cause harm for both organizational reputation and legitimacy.

On the level of meeting the minimum expectations it is generally sufficient to keep an average level of disclosure and not to oversell responsibility if nothing extra is done (Morsing & Schultz, 2006; Schultz & Wehmeier, 2010). However, exceeding expectations does set higher standards for communication, as stakeholders need to be able to judge for themselves if what is claimed matches what they consider to be responsible (Dawkins & Lewis, 2003; Lewis, 2003). Expectations can be exceeded with an extension (or several extensions) of responsibility, i.e. taking voluntary actions on some level(s) of responsibility, or with a more detailed niche or a clearly defined area of specialization. Either way, exceeding expectations offers a chance to create competitive edge. However, compared to an extension a clearly communicated niche could offer a package that can be easier to manage. Next, the paper turns to suggest that in practice this niche could be a corporate citizenship profile that utilizes the many variants of citizenship, among them environmental and cultural citizenship.

Specialization and focusing: finding a niche in responsibility

As a certain amount of responsibility is expected from all, fulfilling the minimum expectations (no harm done) does not provide competitive edge, but still has the potential to cause harm when left neglected. Thus, those companies wanting to gain extra benefits from their responsibility efforts need to find areas where to outperform the competition. These extra benefits are found somewhere beyond maintaining the basic legitimacy, in areas such as reputational capital, social capital and competitive edge (Gardberg & Fombrun, 2006; Jenkins, 2009; Porter & Kramer, 2002; White, 2006). These benefits, also referred to as intangible assets, are the most difficult characters for competitors to copy, which is why companies are increasingly interested in finding ways to acquire them (Kaplan & Norton, 2004; Wernerfelt, 1984). However, exceeding expectations is no easy business: it requires both resources and time. As the gap between the perceived performance in responsibility and expectations on it continues to widen (de Man, 2005), companies need to work ever harder to be able to top the increasing expectations.

Companies have different methods when trying to exceed the minimums of responsibility. In the U.S., corporate philanthropy has been a popular approach, whereas many European countries have preferred responsibility functions more closely tied to their everyday operations, such as enhanced product quality, environmental considerations and employee health & safety (Maigian & Ralston, 2002). The latest literature on corporate responsibility emphasizes that the area where companies should exceed the minimum expectations should ideally be somehow linked to the company’s core business (Gardberg & Fombrun 2006; Lozano, 2008; McManus, 2008; Schultz & Wehmeier, 2010; Timonen & Luoma-aho, 2010). Schultz & Wehmeier (2010) call this translation of responsibility to the organizational context, others call it integration (Boston College Center for Corporate Citizenship, 2009; Stephenson, 2009), or specialization (Timonen & Luoma-aho, 2010).

Linking responsibility into core business is recommended especially because it has the potential to create benefit for both the company doing it as well as to the surrounding society. When there is something for the company to gain and not just to give, companies might find more motivation to take up extra responsibility and actually commit to it. Moreover, an integrated approach might also become more believable from the stakeholders’ view since faked or artificial responsibility is one of the most common reasons for criticism (Fombrun, Gardberg & Barnett, 2000; Vanhamme & Grobben, 2009). Thus, the integration of responsibility requires not only knowing what the stakeholders are expecting, but knowing how these expectations could be filled while conducting everyday operations.

From communications point of view, creating competitive edge with responsibility sets high standards for communication in particular, as stakeholders view messages concerning responsibility with a great deal of criticism, or even cynicism (Morsing & Schultz, 2006; Ortiz Martinez & Crowther, 2008; Pomerling & Dolnicar, 2008). However, with successful communication based on genuine actions, stakeholders can be turned into supportive faith-holders (Luoma-aho, 2005) whose trust form the basis for organizational legitimacy. Thus, communication can be a powerful tool for both managing expectations and profiling the type of responsibility suitable for the company.

In sum, building competitive edge with the help of corporate responsibility means that a company needs to figure out how stakeholder expectations can be exceeded without compromising business. This is where strategically aligned corporate citizenship can help, since it provides a framework for both framing and naming the specialization of voluntary responsibility. Here, corporate citizenship does not stay on a general level of acting in the society as responsible citizens would do (Carroll, 1991), but recognizes that citizenship can take different forms. While scholars have remained in disagreement about the relations of corporate citizenship to other concepts of business responsibility (Matten & Crane, 2005; Mirvis & Googins, 2006; Thompson, 2005; Timonen & Luoma-aho, 2010), the definitions of corporate citizenship usually give added emphasis to voluntarism and especially activism (Mirvis & Googins, 2006; Moon, 2010).
were identified and named from existing corporate reports (Ti-

monen & Luoma-aho, 2010). An important aspect is that all the
examples profiled here rest on the minimums of responsibility,
e.g. a level of minimum responsibility that is expected from all
companies. While the profiles are based on the very minimums
that often refer to rules that reduce the harm done, voluntary re-

responsibilities lie in actions that aim to produce something good
with responsibility not only by keeping away from harm but by
having societal or environmental goals. Thus, a company with
a corporate citizenship profile strives to have a positive (rather

than a neutral) outcome from the area it has chosen to specialize
in. Though companies can take voluntary responsibilities even
without such profiles in more or less focused or strategic ways,
the most important benefit of a profile is that it is clearly defined
and structured – and easier to manage.

As companies continue to integrate corporate responsibility
to their core business (Boston College Center for Corporate
Citizenship, 2009), more communicative responsibility profiles
are needed. This is needed especially because corporate respon-
sibility remains to be an ambiguous and multifaceted field. The
profiles could help especially with finding the most suitable area
of specialization for individual companies, and with finding tools
for communicating where expectations are intended to be
exceeded. Without a responsibility profile, or as suggested here,
a citizenship profile (explanation of where minimum expecta-
tions are exceeded), the field of responsibility might be difficult
to manage and communicate.

Especially environmental forerunners could benefit from a
responsibility profile of environmental corporate citizen, as it is
the hardest to intuitively connect to the term of corporate social
responsibility (CSR) due to CSR's emphasis on social issues.
In addition to the profiles suggested here, citizenship profiling
might open also many other interesting doors to companies that
find their area of specialization, their niche in responsibility,
from untraditional fields.

Discussion

In the paper it was suggested that expectations create ‘mental
standards’ that affect not only consuming, but also partnering,
cooperating and identification. Furthermore, it was proposed
that the creation of specific corporate citizenship profiles that
match the industry or field of the company could ease the man-
agement of stakeholder expectations in practice by giving expec-

nent
tations direction and keeping them realistic. The paper suggested communication to play a critical role in responsibility as it provides tools to profiling the type of responsibility suitable for the company and as it can assist managing expectations through reputation. As stakeholders need to know what to expect, inconsistent communication can make the whole corporate responsibility function seem fuzzy. To solve this, corporate citizenship profiles were presented to help align expectations and give clarity to responsibility actions.

The value of corporate citizenship profiles reveals itself especially to companies wanting to gain competitive edge from their responsibility functions. If exceeding expectations and reinforcing intangible assets is something a company wants to accomplish, a niche in the form of a corporate citizenship profile could help to direct efforts. As Frederiksen (2010) has noted, listening to expectations and demands of responsibility can become a "slippery slope" for companies if they do not know where to focus. A niche that is easy to communicate, integrate and to define, could help to give suitable direction to stakeholder expectations and help to avoid the emergence of unrealistic expectations.

One very relevant question is whether the profiles presented here need to be named corporate citizenship profiles and if for example CSR profiles would be as suitable or even more fitting. No doubt both corporate citizenship and CSR profiles could be used to describe the specialization and niche that the paper has discussed. The benefits of corporate citizenship lie, however, in the active doer that it implies – responsibility is not just happening, but an actor (the corporate citizen) is taking responsibility of doing it. As such, corporate citizenship places companies into a societal context as citizens among citizens. What is more, citizenship theory offers tools for companies wanting to profile themselves as specialized citizens – citizens whose citizenship actualizes in the form of different practices and identities and not so much as an uniform package of duties and right (see Isin & Wood, 1999).

One of the paper’s central points was that the profiling suggested could be used as a practical tool for clearer communication about companies’ responsibilities. However, communication does not offer an instant fix as disclosure on responsibility can also open doors for criticism (Schultz & Wehmeier, 2010; Vanhamme & Grobben 2009). Despite the challenges, communication can be a powerful tool for both managing expectation and profiling the type of responsibility suitable for the company. Fredriksson (2009) has suggested that communication’s centrality to responsibility lies in its ability to serve organizational expressivity, and reduce both uncertainty and complexity. In other words, communication helps to interpret the society and place organizations in it. The key for succeeding in this is to match communication with both expectations and actions; even the best communicative tools cannot help if they are not based on genuine action. Yet, if what is said is matched and profiled with what is done, communication can make or break the success of responsibility actions.

This attempt to better understand the link between expectations and corporate responsibility relates to an area that has not so far been researched extensively. Thus, it is an area where future research should shed more light on. For example where companies land in meeting stakeholder expectations could prove to be a useful area for future research.

In reality the expectations of different stakeholder groups can be very different from each other, which is also something future studies should address. In addition to this, more studies are needed on how stakeholder expectations affect corporate responsibility together with other factors such as isomorphism, peer pressure, institutionalization and cultural environments. While more work is needed to be able to understand the full dynamics of stakeholder expectations, this paper can be considered as a move towards tying stakeholder expectations more profoundly to the field of corporate responsibility, and especially to corporate citizenship.

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References


Boston College Center for Corporate Citizenship (2009), Weathering the storm. The state of Corporate Citizenship in the United States 2009, Boston College Carroll School of Management, Boston, MA.


Eisenegger M. & Imhof K. (2008), “The True, the Good and the


Vanhamme, J. & Grobben, B. (2009), "Too good to be true! The effectiveness of CSR history in countering negative publicity", Journal

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