

The Case for Envirocare: Prioritizing Stakeholders for Public Relations

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Abstract

In the early 2000s, Envirocare, a company that processes radioactive material, faced a state ballot initiative that threatened its ability to operate. To defeat the initiative, Envirocare needed to perform a stakeholder analysis to formulate an effective campaign. However, existent strategies for prioritizing stakeholder groups were inadequate and failed to consider potential crises and conflicts. This case study examines Envirocare's challenge, provides an overview of a new stakeholder analysis strategy, and evaluates the outcome of the campaign. The outcome was successful as a consequence of more adequately prioritizing stakeholders in that the statewide initiative failed.

Keywords: public relations; stakeholder; stakeholder analysis; stakeholder theory; stakeholder management; publics; situational theory of public behavior

Introduction

Envirocare, a company that processed low-level radioactive waste in Utah, was in the process of receiving and activating its license to process higher levels of waste. However, activists and business competitors opposed the license and organized political movements to legislate against it. Through lobbyists, opinion leaders, and anti-radioactive waste organizations, a petition was submitted to the Utah State Legislature with sufficient signatures to place the action—known as “Initiative One”—on the ballot.

To cite this article

Plowman, K. D., & Rawlins, B. L. (2017). The case for Envirocare: Prioritizing stakeholders for public relations. *Case Studies in Strategic Communication*, 6, 1-30. Available online: <http://cssc.uscannenberg.org/wp-content/uploads/2018/01/v6art1.pdf>



If the majority of Utah voters supported Initiative One, Envirocare would have been forced to eventually file bankruptcy and cease operation. As a result, Envirocare needed to defeat the initiative with an effective campaign, including a thorough stakeholder analysis of all people and organizations concerned or connected with Envirocare's success as a company. These stakeholder groups needed to be identified and prioritized before formulating the campaign.

Traditionally, businesses have almost exclusively focused on the value of stockholders, employees, and customers to help them reach their goals. However, other groups can affect a business' policies and bottom line. How does one identify these groups? Is there a way to know when they will have an impact?

Questions like these are at the heart of stakeholder theory. Inadequate answers have led scholars to criticize the theory and its subsequent artifact, stakeholder management. This study focuses on applying public relations research to stakeholder theory in order to create a more comprehensive process for analyzing stakeholders.

Background

In the 1980s, Vitro Company closed in the Salt Lake City area and left radioactive sludge and uranium waste that urgently needed to be cleaned. Government surveyors searched for and located a waste storage site 60 miles west of Salt Lake City, a practically biologically dead area in Tooele County. After the disposal, the door was open for other firms to capitalize on the reserved storage area identified. Soon after, Envirocare purchased 100 acres of land in the same area and established its waste-processing and storage facilities.

By the time Envirocare began processing Class A, low-level waste in Utah, the Department of Energy's atomic testing in parts of southern Utah and Nevada had created sharp distrust and disapproval of all activities in the state that involved radioactive substances. When Envirocare received a license to process Classes B and C, high-level nuclear waste in Utah—a license that required the approval of the legislature and governor—objectors united to stop the license's activation.

Tim Barney, chief operating officer of Envirocare at the time (personal interview, November 2016), had a strong suspicion that lobbyists and opinion leaders Frank Pignanelli and Doug Foxley enabled an out-of-state and future competitor, the Waste Control Specialists of Texas, to begin a destructive campaign effort in Utah to petition Envirocare's license approval. Other anti-radioactive waste organizations such as The Sierra Club of Utah, Heal Utah, Physicians for Social Responsibility, Southern Utah Wilderness Alliance, Families Against Incinerator Risk, Utah Rivers Council, Citizens Against Chlorine Contamination, Friends of Great Salt Lake, Utah Legislative Watch, and the Downwinders participated in the lobbying efforts. The campaign successfully submitted a petition to the legislature with sufficient signatures to place Initiative One on the ballot. The move for the initiative came at the time of the Winter Olympics in Salt Lake City where public sentiment was against anything, especially an issue associated with nuclear waste, that would affect the positive image of the state of Utah according to Barney (personal interview, November 2016).

The stated purpose of the initiative was to ban hotter levels of radioactive waste in Utah and raise taxes on existing waste levels by 1,000 percent (Unfairtax, 2002). Revenues would go to public programs such as schools and homeless relief, but the initiative would eventually result in the bankruptcy of Envirocare. Since the time of the initiative Barney has gotten to know Pignanelli and Foxley and now believes these lobbyists honestly thought the additional tax on Envirocare was sustainable and who could argue against helping the homeless and local schools. Envirocare turned to Eddie Mahe, a lobbyist and public relations consultant in Washington, D.C. to do surveys and focus groups. He found that the only way Envirocare could defeat the initiative was to reframe the messages in the debate to a referendum on the initiative process itself. They used the rallying cry that the initiative was a "Californication of Utah politics." The primary message was that the initiative was an abuse of the Utah electoral process, and that initiatives like those used in California were not a good way to govern. Envirocare followed the aforementioned message with one that the initiative was actually a tax hike, and that better governing would be to further study the issue and bring it into the normal regulatory process.

Further, leaders of Envirocare knew that they needed an effective campaign to persuade voters to vote against the initiative. To create the campaign, Envirocare needed to form an organization of people and groups who were interested in the company's success. Stakeholder theory postulates strategies of business management that deal with people and organizations connected to the corporation. One strategy, stakeholder management, considers interested parties and the environment for achieving corporate goals, beginning with a stakeholder analysis. However, the method suggested for analyzing stakeholders fails to account for circumstances that applied to Envirocare's situation. Furthermore, some scholars argued that stakeholder theory focuses heavily on the importance of meeting the needs of all stakeholders, but fails to adequately explain how to identify them (Dunham, Freeman, & Leidtka, 2001; Preston & Sapienza, 1990; Jennings, 1999).

Intrigued by the dilemma, the authors investigated the case. Their plan was to research stakeholder theory, analyze its weaknesses, and apply results that have been effective in public relations, thereby creating a new method of stakeholder analysis.

Research

Defining Stakeholders and Publics

As Grunig and Repper (1992) noted, "Often the terms *stakeholder* and *public* are used synonymously" (p. 125). In the business literature, stakeholders are identified according to their relationships to organizations. In the public relations and other mass media literature, publics are often identified according to their relationships to messages.

Stakeholders. Freeman and Reed (2008) assert that "the stakeholder notion is... a simple one. It says that there are other groups to whom the corporation is responsible in addition to stockholders: those groups who have a *stake* in the actions of the corporation" (p. 49). The most quoted definition of a stakeholder in the business literature is that given by Freeman (1984) where he stated that a stakeholder is "any group or individual who is affected by or can affect the achievement of an organization's objectives" (Freeman, 1984, p. 46). In earlier writings, Freeman referred to this definition as the wide sense of a stakeholder;

however, he also spoke of the narrow sense of a stakeholder when he described it as “any identifiable group or individual on which the organization is dependent for its continued survival” (Freeman & Reed, 2008, p. 51).

Donaldson and Preston (1995) agreed with the definitions of Freeman and other scholars but were careful to make an important addition: “Stakeholders are identified by their interests in the corporation” regardless of the corporation’s interest in them (p. 67). Other scholars were specific when they said that the stakeholders of a firm are individuals or groups “that contribute, either voluntarily or involuntarily, to its wealth-creating capacity and activities” (Post, Preston, & Sachs, 2002, p. 8).

Publics. “Publics” is the term most often used for stakeholders in the public relations literature. Because the public relations profession evolved from journalism, the term has frequently been related to the recipients of messages from organizations. These publics or, more accurately, “audiences” become segmented into more homogenous subsets that help communicators choose appropriate channels for reaching them. However, research in public relations has recently turned to the value of the relationships these publics have with organizations. This emphasis has encouraged adaptation of the term “stakeholder” in both practice and scholarship.

Grunig (1992) separated stakeholders from publics by focusing on issues that form different levels of publics. As Grunig and Repper (1992) argued, organizations choose certain stakeholders based on the organizations’ marketing strategies, recruiting, and investment plans, but “publics arise on their own and choose the organization for attention” (p. 128). Publics organize from among the ranks of stakeholders when they recognize a problem and decide to do something to seek redress.

Identifying Stakeholders

Jennings (1999) argued that stakeholder theory did not provide direction as to how the theory should work. She and other scholars criticized the theory, stating that it does not clearly differentiate between those who are and those who are not stakeholders (Dunham et al., 2001; Preston &

Sapienza, 1990). These scholars claimed that stakeholder theory focuses heavily on the importance of meeting the needs of all stakeholders, but does not explain who the stakeholders actually are or how to identify them. It is because of this uncertainty that so many different, yet similar, definitions of who and what a stakeholder is have arisen. Sternberg (1999) also lashed out against the idea by saying, “If the stakeholders include all who can affect or are affected by the organization, the number of groups whose benefits need to be included in the calculation will be infinite” (p. 18). Therefore, “stakeholder theorists and practitioners must move toward a ‘names and faces’ orientation, seeking a highly specific understanding of and communication with each stakeholder” (Dunham et al., 2001, p. 21). Employees, customers, shareholders, communities, and suppliers are those most commonly classified as stakeholders within an organization (Winn, 2001; Dunham et al., 2001).

Several scholars in stakeholder theory, including Freeman, have attempted to identify stakeholders using systematic models and criteria. However, the focus has been on the attributes of the stakeholders in their relation to the organization—for example, whether the stakeholders could influence the organization or were dependent on the organization (Freeman, 1984; Savage, Nix, Whitehead, & Blair, 1991; Harrison & St. John, 1994; Mitchell, Agle, & Wood, 1997).

This categorization of stakeholders fits the second or attribution stage of prioritization according to the model proposed here. Before identifying stakeholder attributes, all stakeholders should be identified according to their relationships to the organization, not according to their attributes.

In the public relations literature, little effort has been made to identify stakeholders according to their relationships with the organization. Some stakeholder segmentations are as simple as internal versus external publics. Perhaps the best effort to identify all stakeholders from the public relations literature is the linkage model developed by Grunig and Hunt (1984). This model, based on the work of Milton Esman (1972), William Evan (1976), and Talcott Parsons (1976), includes four types of linkages that identify stakeholder relationships to an organization: enabling linkages, functional linkages, diffused linkages, and normative linkages.

As Rawlins and Bowen (2005) explained, the enabling linkages identify stakeholders who have some control and authority over the organization, such as stockholders, boards of directors, government legislators and regulators, etc. These stakeholders enable an organization to have resources and autonomy to operate. When enabling relationships falter, the resources can be withdrawn and the autonomy of the organization restricted.

Functional linkages are those that are essential to the function of the organization. This type of linkage is divided between input functions that provide labor and resources to create products or services (such as employees and suppliers) and output functions that consume the products or services (such as consumers and retailers).

Normative linkages are associations or groups with which the organization has a common interest. Stakeholders in the normative linkage share similar values, goals, or problems and often include competitors that belong to industrial or professional associations.

Diffused linkages are the most difficult to identify because they include stakeholders who do not have frequent interaction with the organization, but become involved based on the actions of the organization. These are the publics that often arise in times of crisis and may include the media, community, activists, and other special interest groups.

Prioritizing Stakeholders According to Their Attributes

The first step in the proposed prioritizing model in this case study is to identify all stakeholders using the linkage model. According to Mitchell et al. (1997), stakeholder theory attempts to answer the question, "Which groups are stakeholders deserving or requiring management attention and which are not?" From a strategic point of view, stakeholders are prioritized according to the self-interests of the organization (Berman, Wicks, Kotha, & Jones, 1999). Since it is impossible that all stakeholders will have the same interests in and demands on the firm, one scholar specifies that stakeholder theory is about "managing potential conflict stemming from diverging interests" (Frooman, 1999, p. 193). Once organizations have identified their stakeholders, there is a struggle for attention: who to give it to and how much to give. Sacrificing the needs of

one stakeholder for the needs of another is a realistic yet difficult concept to accomplish. When these conflicts arise it is important that the organization has prioritized the value of the stakeholder relationships. Otherwise, it might spend undue resources on publics that are minimally tied to organizational goals and fail to achieve success.

Much of the literature in stakeholder theory and stakeholder management prioritizes stakeholders based on their attributes. Harrison and St. John (1994) sorted stakeholders according to Freeman's (1984) original classification: stake in the organization and influence on stakeholders' behavior. Stake is broken down into three parts: those stakeholders who have ownership in the organization; those stakeholders who are economically dependent on the organization; and those stakeholders who are not linked directly to an organization but who are interested in seeing the organization act in a socially responsible way. Harrison and St. John also suggested classifying stakeholders by determining the extent to which an organization is dependent on them for survival and prosperity. The stakes are broken down by the organization's potential to influence behavior, that Freeman (1984) identified as formal (contractual or regulatory), economic, and political.

Attributes. Savage et al. (1991) considered two attributes for identifying stakeholders: a claim and the ability to influence. This introduces the concepts of legitimacy and power as important attributes for recognizing stakeholders. Savage et al. (1991) then used the attributes of cooperation and threat to identify four different types of stakeholders: the supportive, the marginal, the non-supportive and the mixed blessing stakeholder. The supportive stakeholder supports the actions and goals of the organization and is a low threat. The marginal stakeholder has a minimal stake in the organization and is not very threatening. Non-supportive stakeholders are a threat to the organization and are always a concern for managers because they are the least likely to cooperate. The mixed blessing stakeholder has potential for great cooperation as well as threat for the organization.

Building on the Savage et al. (1991) model, Mitchell et al. (1997) identified stakeholders by their possession of power, legitimacy, and urgency. Their model expanded the limited scope by recognizing that legitimacy and power were not either/or variables, but part of a mix that would help

prioritize stakeholders. By combining these attributes, Mitchell et al. were also able to identify the dependent stakeholder, which was missing from the Savage et al. model. Dependency of stakeholders on organizations is just as important as their influence over organizations in the context of social responsibility. The three attributes—power, legitimacy, and urgency—will now be described.

Stakeholders have *power* when they can influence other parties to make decisions the party would not have otherwise made. Mitchell et al. (1997) relied on Etzioni's (1964) categorization of power: coercive power, based on the physical resources of force, violence, or restraint; utilitarian power, based on material or financial resources; and normative power, based on symbolic resources. Power is not a constant attribute and can be lost or gained by stakeholders.

Other stakeholders are attached to the organization by a legal, moral, or presumed claim (*legitimacy*) that can influence the organization's behavior, direction, process, or outcome.

Clarkson (1994) identified stakeholders as risk-bearers who have "invested some form of capital, human or financial, something of value, in a firm" (p. 5). Mitchell et al. (1997) used the notion of risk to narrow stakeholders with a legitimate claim. These stakeholders are often dependent on the organization. The combination of the attributes of power and legitimacy equals the attribute of authority.

The next attribute, *urgency* exists under two conditions: "(1) when a relationship or claim is of a time-sensitive nature and (2) when that relationship or claim is important or critical to the stakeholder" (Mitchell et al., 1997). Urgency, then, requires organizations to respond to stakeholder claims in a timely fashion. Urgency alone may not predict the priority of a stakeholder, especially if the other two attributes (power and legitimacy) are missing. However, this attribute does add a dimension that is particularly salient to the practice of public relations, because it is the urgent public that often attracts the attention of the media and other stakeholders. Ingenbleek and Immink (2010) noted that an increase in urgency can lead to an increase in that stakeholder's power, as well as raise "the salience of the stakeholder's claim over other claims (and, thus,

its ability to get other actors to do things that they otherwise would not have done)" (p. 54).

Prioritization. Mitchell et al. (1997) used the combination of these three attributes to develop a prioritization strategy. Accordingly, latent stakeholders possess only one of the attributes, expectant stakeholders possess two attributes, and definitive stakeholders possess all three attributes. Research by Parent and Deephouse (2007) suggested that "power has a bigger impact on salience than urgency" or legitimacy (p. 17). If individuals or groups do not possess any of the attributes, they are not considered stakeholders (Mitchell et al., 1997).

As mentioned, the stakeholders who carry all three attributes are definitive stakeholders and should be the most salient to an organization's management. An important tenet of the Mitchell et al.'s (1997) model is that each attribute is variable and not constant. In other words, any group can acquire power, legitimacy, or urgency depending on the situation. Therefore, an expectant stakeholder group can become a definitive stakeholder if it acquires the third attribute. A dangerous stakeholder group can acquire legitimacy, as has been the case with many nongovernmental organizations (NGOs) over the last few years. In fact, according to a recent study on trust, NGOs are more trusted in many countries, including the United States, than are corporations and government (Edelman, 2005). A dependent stakeholder group can acquire power, such as a community affected by irresponsible corporate behavior, by appealing to governmental agencies. As Savage et al. (1991) noted, each of these groups could be supportive or threatening, and stakeholder strategies are dependent on the level of support.

After synthesizing the linkage model with other stakeholder attribute models, a priority hierarchy becomes apparent. The enabling and functional linkages are the most important for an organization to maintain long-term success, or what systems theory calls homeostasis. The enabling linkages, such as stockholders and regulatory agencies, have power over the organization, and their interests are usually legitimate, thereby defining them as dominant stakeholders. If the issue affecting enabling stakeholders is urgent, then they become definitive stakeholders and are given highest priority. Enabling stakeholders can also have ownership of the organization and economic and formal (regulatory) influence on the

organization, according to the model developed by Harrison and St. John (1994).

Functional linkages providing the input necessary to create a product or service include employees, suppliers, and unions, and are also given a high priority. These stakeholders have constant contact with the organization and high levels of involvement. They are economically dependent on the organization, and, as such, the power resides primarily with the organization. In this case, the organization has a moral and legal responsibility to those stakeholders, which also increases their priority. The relationship of employees is also critical to the effectiveness and efficiency of the organization. As such, these publics have legitimate interests in the operations of the organization. Employees would fall under the necessary compatible relationship identified by Friedman and Miles (2002), whereas unions would probably fall under the necessary incompatible relationship classification. Savage et al. (1991) identified unions under the non-supportive stakeholder category, suggesting that they can be a threat to organizational goals.

Functional output stakeholders consume what the organization produces and include consumers, distributors, and retailers. Scholars have noted the recent shift in power from the producers to the retailers, citing large chains such as Wal-Mart and Costco as primarily responsible for this shift. Companies know that long-term customer relations are necessary for financial success. Because these stakeholders have power, legitimacy, and economic influence, any issue that imminently affects their relationship gives them high priority. Savage et al. (1991) considered consumers and employees as mixed blessing stakeholders because they can be supportive or non-supportive depending on the actions of the organization. They suggested a collaborative strategy with these stakeholders.

Normative linkages, such as competitors, have little direct power over the organization but are considered a non-supportive threat by Savage et al. (1991). They fall under the contingent incompatible relationship much of the time, and most organizations devise ways to eliminate them rather than foster positive relations. The only time they become important for cooperative purposes is when the industry is facing an issue with economic or regulatory impact and the peer organizations develop a contingency compatible relationship until the issue is resolved. For

example, chemical manufacturers may rally together to fight increased environmental standards that would damage their profitability.

Diffused stakeholders are the most problematic because they do not have direct relationships with the organizations. Because these stakeholders are reactive to organizational actions, they are harder to predict and recognize. These are contingency publics, or what Savage et al. (1991) called a marginal stakeholder group. Diffused publics are usually situational and their relationships to the organization are often temporary. These publics do not have a lot of power over the organization, and their legitimacy is sometimes suspect. Their urgency gives them priority because the issue is usually something that may imminently affect the organization. Because they lack the power and direct influence of other stakeholders, diffused stakeholders will attempt to affect the organization by working through members of the enabling or functional linkages, according to Rawlins and Bowen (2005). In this sense, the diffused stakeholders shift from marginal stakeholders to non-supportive stakeholders, which Savage et al. (1991) identified as likely to form coalitions with other stakeholders to damage the competitiveness of the organization. Therefore, the diffused stakeholders attack the organization through those who have more power and influence on the organization, namely the enabling and functional linkages. For example, activist groups ask consumers to boycott products, or NGOs ask the government to increase regulations to prevent certain activities. Because of the appeal process of the diffused stakeholders, these groups cannot be ignored and to do so can lead to serious financial losses and damaged reputations.

To sum, the enabling and functional linkages have the greatest priority as stakeholders because their power/dependency/influence relationship is frequent and critical to the regular operations of the organization. Normative linkages, as competitors, are constantly on the mind of the organization, but not as groups that have a stake in the operations of the organization. This only changes when the industry or profession is faced with a crisis that requires cooperative effort. The diffused linkages do not require as much attention and have a lesser priority, except when they react to an organization's action or policy. Urgency is the variable that increases the priority of any of these stakeholders. However, this method of prioritizing does not answer the question of who will become the active groups in urgent situations. The next step will address that problem.

Prioritizing Stakeholders According to Their Relationship to the Situation

As noted above, Grunig and Repper (1992) made a distinction between publics and stakeholders: “Stakeholders are people who are linked to an organization because they and the organization have consequences on each other—they cause problems for each other” (p. 125). Examples of this include employees or residents of a community, which Grunig and Repper suggested are often passive. On the other hand, “the stakeholders who are or become more aware and active can be described as publics” (p. 125).

Building on the Dewey (1927) definition of a public—a group of people who face a similar problem, recognize the problem, and organize themselves to do something about it—J. Grunig (1984) segmented publics based on active or passive communication behavior. He stated that those who do not face a problem are *non-publics*, those who face the problem but do not recognize it as problematic are *latent publics*, those who recognize the problem are *aware publics*, and those who do something about the problem are *active publics*. Grunig (1989) identified three variables that explain why certain people become active in certain situations. These variables—level of involvement, problem recognition, and constraint recognition—led to the development of the situational theory of public behavior. Grunig and other researchers have used situational theory to explain communication behavior and “the effect that communicating has on cognitions, attitudes, and other behaviors” (Grunig & Repper, 1992, p. 135).

Level of involvement is measured by the extent to which people connect themselves personally with the situation. However, people do not seek or process information unless they recognize the connection between them and a problem, which is the level of *problem recognition*. Whether people move beyond information processing to the information seeking behavior of active publics often depends on whether they think they can do something about the problem. Those who think that nothing can be done have high *constraint recognition* and are less compelled to become active in the resolution of the problem. Another consideration, *referent criteria*,

is the guideline that people apply to new situations based on previous experiences with the issue or the organization involved.

Grunig and Repper (1992) concluded, "Publics consist of people with similar levels of problem recognition, constraint recognition, and involvement for the same issues or problems" (p. 139). Grunig (1983) tested the theory using problems that would create active and passive publics and found four kinds of publics: *all-issue publics* that are active on all issues, *apathetic publics* that are inattentive to all issues, *single-issue publics* that are active on a small subset of the issues that concern them, and *hot-issue publics* that are active on a single issue that involves nearly everyone and that has received a lot of media attention.

To summarize this step, active publics will hold higher priority than aware and latent publics. Whether stakeholders will become active publics can be predicted by whether the problem involves them, whether they recognize the problem, and whether they think they can do anything about it. Publics in the diffused linkage are more likely to be single-issue publics or hot-issue publics, and their priority will diminish once the problem is resolved. Enabling and functional linkages are also likely to only become active on issues that involve them, but because the behavior of the organization has more of an impact on their power/dependency/influence relationship, they are also more likely to be multiple-issue publics.

Referring back to the section on attributes, latent publics have lower salience to an organization because they only possess one of the three attributes of power, legitimacy, and urgency. These stakeholders are further identified as dormant, discretionary, or demanding. The *dormant* stakeholder has power but no legitimacy or urgency in its claim. Therefore, its power remains unused. *Discretionary* stakeholders possess legitimacy, but no power to influence and no urgency in the claim, and therefore are reliant on the good will of the organization rather than through any other pressure. This group most likely falls under what Carroll (1991) called discretionary social responsibility, a reliance on corporate philanthropy according to Mitchell et al. (1997). The *demanding* stakeholder has urgency, but no legitimacy or power. These groups could be bothersome, but not dangerous.

Expectant stakeholders are a mix of what Grunig and Repper (1992) defined as active and aware publics. They possess two attributes and thereby increase their salience, but that saliency may only be an awareness of an issue rather than active involvement. These stakeholders are organized into dominant, dependent, and dangerous stakeholders. *Dominant* stakeholders have power and legitimacy and may be only aware publics, but because they can easily become active, they receive much of management's attention. *Dependent* stakeholders have legitimacy and urgency and can be active publics. The inclusion of a dependent relationship in the prioritization scheme is important because it recognizes that stakeholder priority is not limited to influence over the organization. Organizations should be socially and morally responsible to stakeholders that have a legitimate and urgent claim and who depend on the organization to address and resolve the claim. *Dangerous* stakeholders are definitely active publics and have urgency and power, but lack legitimacy. These stakeholders may become violent or coercive to achieve their claims. Social activist groups sometimes engage in forms of protests, boycotts, and (in extreme cases) damage to property and lives.

In order for a firm to effectively manage its stakeholders' self-interests the interests of key stakeholders must be integrated into the purpose of the organization as well stakeholder relationships managed in a strategic manner (Freeman & McVea, 2001). These self-interests can be defined as those underlying, broader, and more abstract values that individuals and organizations may have in common (Fisher, Ury, & Patton, 1990). Self-interests, according to the public relations literature, are not necessarily selfish interests but those interests that have intrinsic value for the survival of an entity, e.g. quality of life, needs of family and friends, and even economic well-being (Wilson, 2005). These self-interests motivate individuals and organizations to act and to change behavior.

Taken one step further, *enlightened self-interests* assist relationships in becoming mutually satisfactory in the long-term among related stakeholders. This is inherently two-way symmetrical—as in the models in the public relations literature—because stakeholders have a constraining effect and have consequences for each other. The basic survival of an organization in the long-term depends on the relationship of self-interests and enlightened self-interests between it and its stakeholders (Plowman, 2005). L. Grunig, J. Grunig, and Dozier (2002)

suggested that “using the two-way symmetrical model or... the *mixed-motive model* could almost always increase the contribution of public relations to organizational effectiveness” (p. 309).

To complete this discussion of publics, there is another critical step. According to Wilson (2005), there are three types of publics to consider when developing communication strategies: priority publics, intervening publics, and influentials.

Priority publics are those whose participation and cooperation are required to accomplish organizational goals. They are the stakeholders who have the highest priority according to their power/dependency/influence relationship, the urgency of the issue, and their level of active involvement in the issue. To communicate effectively with these stakeholders, an organization must understand them as well as possible. Priority publics can be profiled by their demographics, lifestyles and values, media preferences, and self-interests. Effective strategies appeal to the self-interests of the priority publics and reach them through the most appropriate channels. Knowing publics according to these characteristics will also help an organization plan goals consistent with its publics’ needs and interests.

The *intervening publics* pass information on to the priority publics and act as opinion leaders. Sometimes these publics, such as the media, are erroneously identified as priority publics. If an organization is satisfied when the message stops at a public, then it is a priority public. If the expectation is that the message will be disseminated to others, it is an intervening public. In most cases the media are intervening publics. Other influentials can be important intervening publics, such as doctors who pass information on to patients and teachers who pass information on to students. The success of many campaigns is determined by the strength of relationships with intervening publics.

Influentials can be intervening publics, but they also affect the success of public relations efforts in other ways. Influentials can either support an organization’s efforts or work against them. Members of some publics will turn to opinion leaders to verify or refute messages coming from organizations. The opinions of these personal sources are much more influential than the public relations messages themselves. Therefore,

successful campaigns must also consider how messages will be interpreted by influentials who act as either intervening or supporting publics. Spicer (2007) added stakeholders and influentials in terms of risk: "Stakeholders with claims incur risk, [while] influencers do not" (p. 30).

In summary, stakeholders that become active publics and that can influence the success of an organization, or can appeal to the other stakeholders who have that influence, should become priority publics for communication strategies. Publics that are critical to getting the information to the priority publics, such as the media, need to be recognized as intervening publics who are critical to the success of the communication strategy. Influential groups or individuals may not be stakeholders in the organization but may be important in shaping or framing the way the message is interpreted by the priority public, and therefore must be a part of the communication strategy.

Summary

The first three steps to stakeholder analysis, according to Harrison and St. John (1994), are to identify stakeholders, classify them into meaningful groups, and prioritize them. By combining the stakeholder relations and public relations literature, a more comprehensive process for prioritizing the stakeholder groups, particularly those that become active publics, has been provided.

Developing positive relationships with stakeholders is a necessity for organizations. Traditional management usually responds to the stakeholder that makes the most noise (Savage et al., 1991), but if the organization has not properly prioritized its stakeholders and their relationships, the squeaky wheel stakeholder may receive more attention than it needs or deserves.

Too often the squeaky wheel is attributed to the stockholders. One of the reasons there is so much confusion and conflict over stakeholder theory is that too many managers and scholars see stakeholder management as the enemy of stockholder management. Some managers feel that the only way to effectively manage stakeholders is to put the interests of stockholders somewhere other than first on the list. This leads to a stakeholder versus stockholder perspective, which eventually leads to conflict.

Freeman & McVea (2001) believed that stakeholder theory should never be viewed in a stakeholder versus stockholder perspective. The days of always putting the stockholders at the top of the list, no matter what, are gone. “‘Stockholder theory’ is an idea whose time has come and gone... I believe we can safely say that the stockholder theory is or at least should be intellectually dead” (Freeman, 1994, p. 413). Certainly shareholders will consistently be one of the key stakeholders in a firm, but there needs to be a balance; there will be times when shareholder interests should not come first.

Ogden and Watson (1999) conducted a study in the United Kingdom on the recently privatized water industry. By observing different companies that sell the same good (water), Ogden and Watson learned what effective organizations did well. The researchers observed that there were times when managers put the interests of customers in front of the interests of the organization’s shareholders, not knowing what the reaction would be. Ogden and Watson (1999) concluded, “It is possible, to some extent, to align the apparently conflicting concerns of different stakeholder groups” (Ogden & Watson, 1999, p. 536).

Similarly, Preston and Sapienza (1990) evaluated 108 companies’ stakeholder relationships. The authors concluded, “There is no indication in this data that managers have pursued growth objectives... at the expense of major stakeholder interests. Instead, the higher the growth and profit indicators, the more favorable the performance ratings for most major stakeholders” (Preston & Sapienza, 1990, p. 373).

This research provides evidence that the squeaky wheel may not be the stakeholder with the greatest priority. Knowledge from this study was used to create a more systematic and comprehensive approach to prioritizing stakeholders.

Strategy

The new model of stakeholder analysis begins by using the linkage model to identify stakeholders. These groups are identified according to a broader category of internal and external stakeholders who have consequences for Envirocare with regard to Initiative One. Next,

stakeholders are examined according to their attributes, including power, legitimacy, and urgency—all of which also fall under enabling, functional, normative, and diffused linkages. Attributes mean nothing without the context of the situation. Therefore, as stakeholders are being examined, careful consideration should be made for active, aware, and latent publics as well as the support relationship involved in the single-issue regulatory environment of the normative and diffused linkages. Attributes are listed in a chart that organizes the information. Attributes and situation considerations are then used to prioritize stakeholders.

Proper measures need to be taken in determining which stakeholders are most important. The most influential stakeholders must be prioritized first in order to maximize use of all resources. For example, Envirocare has a number of stakeholders who have a direct, enabling effect on the company. Some that have a greater effect are the state legislature and other government regulatory agencies. If Envirocare does not focus on its key stakeholders and recognize their importance, then Initiative One will pass and Envirocare will eventually have to file for bankruptcy.

Using this new model (see Figure 1), a qualitative case study of Envirocare and Initiative One was planned, beginning with stakeholder identification. Nine direct observations of Envirocare's headquarters and plant site were scheduled. Documents on Initiative One were collected from proponents and opponents of the initiative. Interviews with many of the stakeholder groups were scheduled in order to gain more information about those groups.

Data from the direct observations, documents, and interviews were triangulated (Yin, 2009) so that Envirocare could specifically target its most influential stakeholders to create an effective campaign against Initiative One.

Execution

Identification

Enabling linkage. In relation to Envirocare, the stakeholders most responsible for allowing the organization to exist are those related to

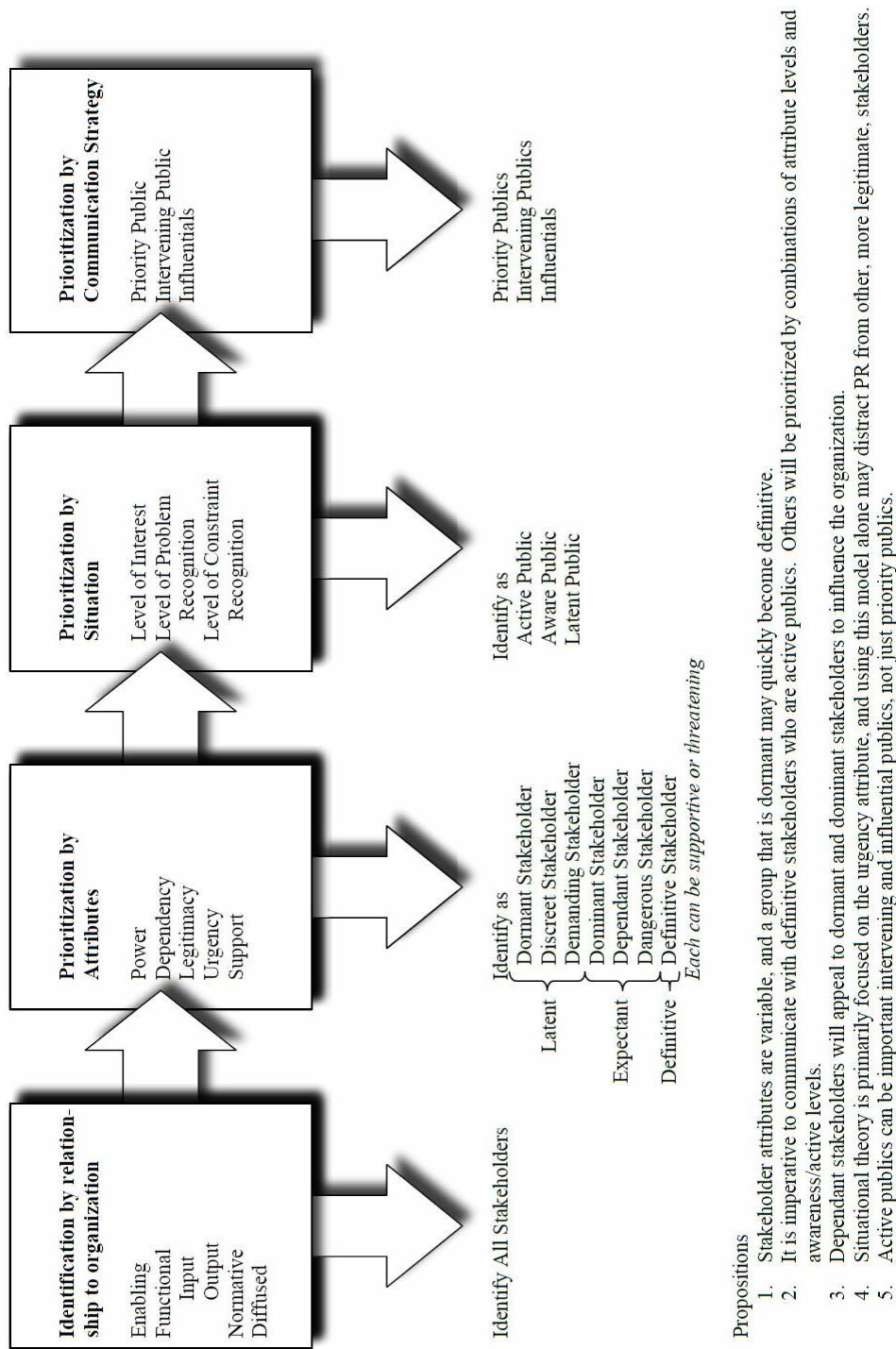


Figure 1. Stakeholder Prioritization Model.

government bodies, both national and state. As a waste disposal facility, the actions of Envirocare fall under a variety of governmental regulatory agencies ranging from the Environmental Protection Agency to the Department of Defense. If any of these agencies opposed Envirocare on any matter and imposed sanctions or fines on the company, Envirocare would not be able to function and would eventually shut down. Therefore, Envirocare depends on the continual support of these enabling publics to be able to continue operations. The main enabling stakeholders for Envirocare are:

- Regulatory government bodies—state, local, and federal (e.g. Utah Department of Transportation, Utah Division of Radiation Control, Utah Health and Water, Utah Division of Water Quality, Utah Department of Health, Tooele County Government, U.S. Environmental Protection Agency, U.S. Nuclear Regulatory Commission, U.S. Department of Energy, U.S. Department of Defense, etc.) [Note: All of these agencies are led by an elected official who wishes reappointment. Their application of policy and their stance on Initiative One directly affects their potential for re-election. The authority vested in each organization mentioned above enables them to shut down or perpetuate Envirocare's operations.]
- Tooele County Government (e.g. Tooele Mayor Charlie Roberts, County Commissioner Dennis Rockwell, Chamber of Commerce Director Jack Howard, school board)
- Clientele (e.g. U.S. Department of Defense, state governments, defense contractors dealing with nuclear technology)
- Utah government (e.g. governor, senator, legislature)

Functional linkage. The group most responsible for allowing Envirocare to function in its day-to-day operations is its employees. Transportation and emergency management are also vital to the company because without them the company would not be able to effectively function. The main functional stakeholders for Envirocare are:

- Employees (e.g. on-site medical, clean-up crews)

- Emergency management (e.g. State Department of Highway Patrol, Tooele Valley Regional Medical Center and Fire District, Wendover emergency response units, Utah Division of Radiation Control)
- Owner of Envirocare

Diffused linkage. Groups that were trying to lobby against Envirocare or to disrupt its operations in some other way became stakeholders because of the perceived threat on the company. These include:

- Tooele County citizens

Normative linkage. Although they do not have a direct link to Envirocare, the following stakeholders have been identified because they share common interests—such as safety, contamination, and property value—with some other group involved with Envirocare. These include:

- Families of Envirocare employees
- Tooele County citizens (including homeowners)
- Opposition groups
- Competitors (WCS of T, Int. Uranium)

Internal and external stakeholders. When analyzing the effects of these stakeholders on Envirocare, each group's position of influence and potential for threat were examined. This was done by organizing the stakeholders into a chart that listed the self-interests and relationships of each. For the sake of brevity, only the first portion of the chart is displayed (see Table 1).

Prioritization and Evaluation of Stakeholders for Envirocare

Based on the stakeholder analysis and chart, the following prioritization was determined.

Table 1. Chart of stakeholders, self-interests, and relationships (excerpt).

Level of Stakeholder	Stakeholder	Self-interests	Relationship to Situation and Opinion Leaders
Active	Owner	<ul style="list-style-type: none"> • Make money • Grow the corporation • Stability • Prestige • Portfolio 	<ul style="list-style-type: none"> • Internal public of Envirocare • Against Initiative One • Supporting all work against Initiative One
Active	Envirocare Employees • <i>Emergency Response Team</i>	<ul style="list-style-type: none"> • Make money • Be safe • Job security • Stability of family • Healthcare benefits • Good work environment • Rewards and incentives • Satisfaction 	<ul style="list-style-type: none"> • Internal public of Envirocare • Responsible for taking care of the waste • Very important in stopping Initiative One as they went door to door and took signatures off the ballot

1. Utah Farm Bureau: The farmers' bureau was prioritized as the number one stakeholder. This is because the Utah Farm Bureau had come out very strongly in support of Envirocare—so much so that they have provided the manpower necessary to go door to door and fight the initiative by officially removing names from the petition.
2. Utah State Legislature: The number two stakeholder was the Utah State Legislature because they actually had the power to give Envirocare permission to process and carry the higher-level waste. Also, because the public eye was so closely scrutinizing the legislature's position and statements regarding Initiative One, they became powerful media magnets. By persuading them to oppose Initiative One, Envirocare would have access to enormous amounts of

media coverage that would hopefully affect the voters in a positive way.

3. **Congressional delegates:** The next stakeholder was the congressional delegates for the key voters' specific area. These opinion leaders were very important to target because of their significant influence over their constituents. If Envirocare could persuade the delegates to side with the company, it was very likely that many of their constituents would do the same. In addition, the delegates became powerful media magnets because the public eye was so closely scrutinizing their positions and statements regarding Initiative One.
4. **Media outlets:** Media outlets were next in importance on the list of stakeholders because they had such a large influence over the public at large. Thus far, the media had been generally negative toward Envirocare, but if it were possible to bring them to Envirocare's side—or at least to a more neutral position—the company would see a jump in support because of more fair and favorable coverage of the issues behind Initiative One.
5. **Envirocare employees:** The employees of Envirocare and their families were the next stakeholders because, like the farmers' bureau, they had provided the manpower necessary to take the names off of the ballot supporting Initiative One. Also, these people were key opinion leaders in the Tooele County area. Because the media sought their discourse on the topic of Initiative One, they would have a positive effect on media coverage regarding the initiative. Also, they could initiate a grassroots movement through word-of-mouth efforts. Because these types of movements are more personal in nature, they tend to create a much longer-lasting effect upon voters' decisions.
6. **Government of Utah:** Utah's state government came next on the list because of its power to sway opinion as well as its ability to grant Envirocare permission to handle the higher-level waste. Also, because the public eye was so closely scrutinizing the state government's position and statements regarding Initiative One, it became a powerful media magnet. By persuading the state government to oppose Initiative One, Envirocare would gain access to enormous amounts of media coverage to positive affect the voters.

7. National regulatory authorities: These groups came next because they had huge potential to harm Envirocare's operations. If the federal government decided that Envirocare was doing something wrong with the waste, the company could be shut down with sanctions and fines. On the other hand, if these regulatory authorities decided that there was a greater need for the higher-level waste to be disposed of, they could strong-arm their way into letting Envirocare handle it. They were also major opinion leaders, and their public discourse regarding Initiative One would be covered closely and read by Utah voters.
8. Voters: Voters in the entire state of Utah were next on the list because they were the people who would actually be deciding in favor of or against Initiative One. For this reason, Envirocare needed to pay particular attention to gaining the support of voters in key districts. Voters were not listed higher on the list because it would have required ridiculous amounts of money and time to attempt to contact each Utah voter. However, through the use of intervening publics, and then by implementing symmetrical communication research efforts to evaluate what measures Envirocare should take to meet the self-interests of Utah voters, the company would be able to effectively influence voting behavior.
9. Tooele County government: The local government in Tooele came next on the list because of its position as a key opinion leader. They would be contacted regularly by media outlets for comment; therefore, it was essential to have their support.
10. Industry associations: Industry associations followed the Tooele government on the list because they came out strongly against Initiative One. This provided Envirocare with a possible base for forming a coalition to oppose the initiative. Such a financial and political base would empower Envirocare in its lobbying efforts.
11. Envirocare owner: The owner was next on the list because he provided the funding for many of the anti-Initiative One activities. Without his support, many of the stakeholders never could have been reached.

12. Competitors of Envirocare: The competitors of Envirocare followed because, like industry associations, they also could provide a base for a coalition. They were not as important as industry associations, however, because they were not in favor of Envirocare. In fact, it was suspected that one of these companies provided the money for Initiative One. But if these companies could see that Initiative One would eventually affect them as well if it was passed, they may have been a viable option for a coalition against the initiative.
13. Opposition groups: These groups came next on the list even though it was basically impossible to change their negative opinions about Envirocare. Their claims could not be left unanswered. They were the biggest advocates of Initiative One; therefore, Envirocare needed to address their claims if it was to bring key opinion leaders to oppose the initiative.
14. Tooele County citizens: Citizens of Tooele were the next group because they were some of the most adamant critics of Initiative One.
15. Transportation companies: These companies came next because if key opinion leaders understood that the people who moved the waste were not worried about the increase in level of waste, then it would diffuse much of the fear about the nature of the waste. Also, the Wagoneers—one of the larger lobbyist groups in the U.S. for trucking and a potential political ally—could allow for more funding and political sway in efforts to defeat Initiative One.
16. Emergency management associations: These groups were listed as the last stakeholder for the same reason as the transportation companies. If key opinion leaders knew that the people who dealt with the waste were not worried about the increased level, then it would diffuse a lot of the fear surrounding the nature of the waste. Also, following 9/11, such public employees experienced a tremendous increase in public discourse and opinion formulation because of how the public venerates them.

Analysis and Discussion

Stakeholders play a crucial role in the success or failure of a company. Thus, conducting a stakeholder analysis was essential in helping Envirocare defeat Initiative One. Initial polling showed a 75% to 25% favorable rating for the initiative. After a six month campaign, final election results were 68% opposed and 32% in favor of the initiative. As Envirocare performed its stakeholder analysis, it had the distinct advantage of gaining insight on the various individuals, companies, and organizations that have relationships with it and who had an effect upon whether or not Initiative One was passed. Envirocare was able to discover pertinent self-interests and gain common ground with those stakeholders involved with Initiative One. Through determining which stakeholders had a positive effect and which carried a negative effect, the company was in a position to take steps toward launching a particular campaign to meet specific goals. Furthermore, Envirocare had the assurance that the message would be clear to each key stakeholder because of the efforts made to understand them. This reflects a more symmetrical model of communication, which promotes lasting relationships with the aforementioned stakeholders.

Discussion Questions

1. Stakeholder theory focuses on the attributes of stakeholders. Theories in public relations include situational and relationship characteristics. Identify a different company and situation (real or hypothetical) that may require considerations for other characteristics of stakeholders. Why should these characteristics be considered? In your opinion, why are they not mentioned in stakeholder theory?
2. In this study, the process of analyzing stakeholders involved nine direct observations of Envirocare's headquarters and plant site. Why were these observations included in the analysis? Would just one observation have been sufficient? Why or why not?
3. Tooele County citizens were one of Envirocare's stakeholder groups that actively fought against the company. Why were they considered stakeholders? Was it wise to include them in a meeting that discusses a

campaign that fights against their cause? When should diffused linkage stakeholders be prioritized toward the top of the hierarchy?

4. Do you agree or disagree with the hierarchy of stakeholders listed in the Execution section of this study? Why? If you were to change the order, what would you change? What would be your reasoning?
5. Name a theory that you feel is inadequate. Suggest ideas or research studies that may fill in the gaps, or otherwise improve the theory you have chosen.

References

- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal*, 42(5), 488–506.
- Clarkson, M. (1994). *A risk-based model of stakeholder theory*. Paper presented at the Second Toronto Conference on Stakeholder Theory, Centre for Corporate Social Performance & Ethics, University of Toronto.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.
- Dunham, L., Freeman, R. E., & Liedtka, J. (2001). The soft underbelly of stakeholder theory: The role of community. *Darden School Working Paper No. 01-22*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=284973
- Etzioni, A. (1964). *Modern organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Families Against Incinerator Risk. Retrieved from <http://www.volunteermatch.org/orgs/org7480.html>
- Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Cambridge, U.K.: Cambridge University Press.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, 4(4), 409–421.
- Freeman, R. E., & McVea, J. (2001). A stakeholder approach to strategic management. *Darden Business School Working Paper No. 01-02*. Retrieved from http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=263511
- Freeman, R. E., & Reed, D. L. (2008). Stockholders and stakeholders: A new perspective on corporate governance. In A. J. Zakhem, D. E. Palmer, & M. L. Stoll (Eds.), *Stakeholder theory* (pp. 48–55). Amherst, NY: Prometheus Books.
- Friedman, A. L., & Miles, S. (2002). Developing stakeholder theory. *Journal of Management Studies*, 39(1), 1–21.
- Frooman, J. (1999). Stakeholder influence strategies. *Academy of Management Review*, 24(2), 191–205.

- Grunig, J. E., & Hunt, T. (1984). *Managing public relations*. New York, NY: Holt, Rinehart, and Winston.
- Grunig, J.E. (1989). Symmetrical presuppositions as a framework for public relations theory. In C. H. Botan & V. Hazelton (Eds.), *Public relations theory* (pp. 17–44). Hillsdale, NJ: Erlbaum.
- Grunig, J. E. (Ed.). (1992). *Excellence in public relations and communication management*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Grunig, L. A., Grunig, J. E., & Dozier, D. M. (2002). *Excellent public relations and effective organizations: A study of communication management in three countries*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Grunig, J. E., & Repper, F. C. (1992). Strategic management, publics, and issues. In J. Grunig (Ed.), *Excellence in public relations and communication management* (pp. 117–158). Hillsdale, NJ: Erlbaum.
- Harrison, J. S., & St. John, C. H. (1994). *Strategic management of organizations and stakeholders*. St. Paul, MN: West Publishing Co.
- Ingenbleek, P. T. M., & Immink, V. M. (2010). Managing conflicting stakeholder interests: An exploratory case analysis of the formulation of corporate social responsibility standards in the Netherlands. *Journal of Public Policy and Marketing*, 29(1), 52–65.
- Jennings, M. M. (1999, April). *Stakeholder theory: Letting anyone who's interested run the business—no investment required*. Paper presented at Corporate Governance: Ethics Across the Board, Houston, TX. Retrieved from http://www.stthom.edu/cbes/marianne_jennings.html
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Ogden, S., & Watson, R. (1999). Corporate performance and stakeholder management: Balancing shareholder and customer interests in the U.K. privatized water industry. *Academy of Management Journal*, 42(5), 526–538.
- Parent, M. M., & Deephouse, D. L. (2007). A case study of stakeholder identification and prioritization by managers. *Journal of Business Ethics*, 75(1), 1–23.
- Plowman, K. D. (2005). Systems theory. In R. L. Heath (Ed.), *Encyclopedia of public relations* (pp.). Thousand Oaks, CA: Sage.
- Post, J. E., Preston, L. E., & Sachs, S. (2002). Managing the extended enterprise: The new stakeholder view. *California Management Review*, 45(1), 6–28.
- Preston, L. E., & Sapienza, H. J. (1990). Stakeholder management and corporate performance. *The Journal of Behavioral Economics*, 19(4), 361–375.
- Rawlins, B., & Bowen, S. (2005). Publics. In R. L. Heath (Ed.), *Encyclopedia of public relations* (pp.). Thousand Oaks, CA: Sage.
- Savage, G. T., Nix, T. H., Whitehead, C. J., & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Executive*, 19, 453–473.
- Southern Utah Wildfire Alliance. Retrieved from <http://www.suwa.org>
- Spicer, C. H. (2007). Collaborative advocacy and the creation of trust: Toward an understanding of stakeholder claims and risks. In E. L. Toth (Ed.), *The future of*

- excellence in public relations and communication management* (pp. 27–40). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sternberg, E. (1999, November). The stakeholder concept: A mistaken doctrine. *Foundation for Business Responsibilities, Issue Paper No. 4*. Retrieved from http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=263144
- The Sierra Club of Utah. Retrieved from <http://www.sierraclub.org/ut>
- Utah Legislative Watch and Families Against Incinerator Risk. Retrieved from http://www.healutah.org/Alerts/HB145_release.html
- Utah Rivers Council. Retrieved from <http://www.aros.net/~urc/>
- Winn, M. I. (2001). Building stakeholder theory with a decision modeling methodology. *Business & Society, 40*(2), 133–166.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.
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Editorial history

Received September 24, 2014

Revised November 25, 2016

Accepted December 3, 2016

Published December 31, 2017

Handled by editor; no conflicts of interest