

THE GAMBLE OF OPEN ORGANIZING

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Abstract

Recognized today as a viable and highly effective form of developing software products, "open source" refers to the volunteer efforts of a vast, open community of individuals who are contributing, without formal administration, to a demanding public-interest project. We examine the grassroots campaign of presidential candidate Howard Dean to evaluate how open-source ideas can be transferred into an arena outside the software development context. We explain how "open source" organizing in the Dean campaign is inherently a gamble as we look at how and why it works, its payoff, and its internal risks.

Open source development (OSD) has become recognized as a viable and highly effective form of organizing the development of computer software. It consists of a large, open community of end users contributing to the evolution of a complex software product, one which is freely available to others to use, modify, and distribute (von Hippel, 2001). Open source development has shown how the Internet can facilitate geographically-distributed collaborations, including innovation efforts that extend beyond one firm's boundaries (e.g., Kogut and Metiu, 2001). Contributors to the thousands of open-source project communities that exist today are principally volunteers who coordinate themselves using online collaboration tools without central direction or a formal division of labor. Frequently, individuals participate in a number of activities without an expectation of financial returns, but rather for entertainment, self-fulfillment, or an escape from boredom. Open-source development calls attention to these intrinsic motives, in addition to pragmatic and instrumental motives such as receiving feedback from peers to enhance programming skills or helping improve a software product that is vital to one's work responsibilities (Lerner & Tirole, 2002, von Krogh, 2003).

Increasingly, the open source concept is being invoked as a new and innovative form of management practice with broad applicability. However, scholarly consensus has yet to form on whether, and to what extent, this mode of organizing can translate from the software domain to other endeavors. Several questions need to be addressed before the open-source concept can be judged suitable for other types of endeavors. How does technology play an enabling role in persons contributing to a large, geographically-dispersed public project? What is a viable model of "open source" organizing outside the software domain? In this open organizing, what kinds of dynamics can emerge at the system level? What are the potential organizational hazards?

We delve into these issues by examining the grassroots campaign of U.S. presidential candidate Howard Dean, a political campaign that has used the Internet to raise money and mobilize volunteers. Like an open source development project, the Dean for America campaign relies on the Internet to lower the scale and scope barriers of organizing, enabling a large number of geographically-dispersed volunteers to communicate and act autonomously without administration from the formal campaign. This form of organizing is credited with Howard Dean's unexpected elevation from relative obscurity in January 2003 to a leading figure in January 2004, among a field of candidates who earlier had a more prominent national profile than Dean.

This paper is a first level mapping of significant issues that emerge for organizational theory when addressing open organizing outside the software domain. Hence, our methodology is less data-driven and more reflective, based on participant observation and the ample amounts of publicly available information (e.g., the online exchanges between the campaign and its supporters on its regularly-updated web log). Organizational scholars have addressed markets, hierarchies, and networks as forms of organizations (e.g., Powell, 1987; Powell, 1990; Williamson, 1975). We are reflecting to what extent open organizing is a new form of organization. We will outline the potential organizational hazards of the campaign's open organizing in addition to its main features and dynamics, using conceptions of social networks, transaction costs, and other organizational theories. The Internet-enabled, grassroots campaign of Howard Dean is a network in many respects, but it also exhibits the fluidity of a market and the goal-oriented discipline of a formal organization.

We propose that open organizing is inherently a gamble. In many instances, open communities (physical and virtual) are unable to fulfill their missions because they are unable to

achieve a critical mass of participants. Examples abound in software development where insufficient numbers of people contribute to open projects, such as Netscape's effort to make its Internet browser open source. In addition, specific organized activities normally have particular strengths and vulnerabilities based on their history. The Dean for America campaign's use of the Internet was a partial consequence of idiosyncratic factors and the campaign's early financial and human resource constraints; the campaign's architects did not choose open organizing a priori and are now guiding an emergent system that has unexpectedly been viable and effective. Since the campaign has demonstrated unexpected success in fundraising and mobilization of volunteers, there may be a perceptual bias that focuses on the campaign's open-organizing strengths rather than its open-organizing vulnerabilities. We suggest that open organizing provides a context for the campaign's supporters to build connections with each other, which enhances the engagement, commitment, and organizing capabilities of individual participants. It also provides a system for developing community beliefs and relationships that serve the campaign's mission of electing Howard Dean president of the United States. Yet, we also suggest that open organizing has internal factors that continually threaten to dissipate the relationships that bind the campaign together.

The next section of the paper expands on the open organizing that the Dean for America campaign performs, the role that Internet technologies play in this organizing, and how the campaign varies from both typical political campaigns and typical open organizing efforts. Then we address the dynamics of open organizing, specifically the significant issues that the campaign presents for organizational theorists who might conduct research on this topic in the future. Following that, we address the organizational hazards that are inherent to this kind of organizing.

THE OPEN CAMPAIGN

Dean for America, the presidential campaign of Howard Dean, is one of the first known political campaigns to use the Internet for both extensive fundraising and extensive mobilization of its supporters and volunteers. The campaign's use of the Internet is credited for helping transform the competitive stature of Howard Dean in the race to become the Democratic Party's presidential nominee, elevating him from a relatively unknown candidate who had very limited financial and human resources to a candidate who in 2003 dominated the field of candidates in fundraising, volunteer mobilization, and media attention.¹

Dean for America and the Internet

The Dean campaign supports a number of Internet-based activities: periodic fundraising campaigns; electronic distribution of flyers that can be personalized; regular postings of campaign-related information and election news; a continually-operating comment board for visitors to post remarks, observations, or links to other web sources. None of these activities is a breakthrough technological innovation, and they can be (and have been) replicated by one or more of Dean's competitors in the race to become the Democratic Party's presidential nominee. Some campaign activities, such as receiving financial contributions online, are becoming increasingly mainstream due to dot com companies such as Amazon and the many established organizations that have installed online payment systems. While the campaign's fundamental technology applications are not radically innovative, they have enabled the formation of an open community that resembles an open source community in many ways.

¹ Dean for America reports that during the 2003 calendar year its staff grew from 7 to 400, and its number of identified supporters grew from approximately 400 to over 500,000. (www.blogforamerica.com 1/1/04).

The Dean for America campaign is like an island of formal organization in a sea of autonomous volunteers. Despite the formal organization at its core, many campaign activities are performed by an informal community of volunteers who direct themselves through peer-oriented interaction, without a formal hierarchy imposed on them (Tuomi, 2002). The Internet facilitates geographically-distributed communications and enables volunteers to offer each other information, feedback, encouragement, and campaign-related projects on which they can collaborate. In recent months, the collaborations within this community have included open source development projects. For example, volunteer programmers have developed Deanspace (www.deanspace.org), a software application that makes it easier for Dean supporters to create their own online spaces and connect these spaces to other Dean online spaces. Like many other open-source software packages, Deanspace is free, public (i.e., owned by no one), has no central development coordinator, and is directed by volunteers. Another example of a Dean open development activity is ProjectDeanLight (www.projectdeanlight.com), a public forum for volunteers to share Howard Dean ads that they have filmed and produced. Deanspace and Project Deanlight are neither funded nor directed by the Dean for America campaign. The campaign, however, employs programmers who develop specific online connectivity tools. For instance, an online tool called Get Local helps supporters locate a Dean event based on zip code. Many of these programmers first became involved in the campaign as volunteers.

Two Internet-enabled activities provide the nexus of the Dean for America community: Meetup.com (www.meetup.com) and Blog for America (www.blogforamerica.com). Meetup.com is independent of the Dean campaign, and it is an Internet service that helps people who have similar interests get together in groups at a physical meeting place. The Dean campaign began formally relying on Meetup.com to coordinate monthly meetings of its

supporters in early 2003, after the Dean campaign's staff discovered that supporters were using the online service on their own to find each other in their local physical communities. Today, over 160,000 people are registered for Howard Dean meetups, which take place the first Wednesday of every month. BlogforAmerica is the official, regularly-updated web log of Dean campaign-related information, events, and commentary. The existence of web logs ("blogs") can be traced back to 1999. The origins of the Dean campaign's blog can be traced to a supporter named Mathew Gross, who early in 2003 drove from Utah to the campaign's Burlington Vermont headquarters unannounced. He suggested to Joe Trippi, the Dean campaign manager, that the campaign needed a blog. Trippi hired Gross to implement the idea. Currently, Gross is the campaign's Director of Internet Communications and manages the operations of BlogforAmerica.

BlogforAmerica started as a message board that disseminated information immediately from the campaign to supporters, but it became an interactive forum within a couple of months, once the campaign staff added the ability to post public comments. On this forum, public comments sometimes address the headline and topics posted by staff, but frequently the comments are two-way communications between visitors. Most visitors are supporters who use the site as a public commons. They share what they are doing to support their candidate and record their perspectives of the current political climate and events in the country. They also exchange information, including excerpts from articles published online plus links to their sources. Supporters also use the site to give immediate feedback to the campaign. When Dean is giving a live scheduled speech or participating in a live political debate, supporters will offer their feedback to each other and to campaign headquarters in real-time, as well as in the hours and days that follow. Since the site does not require registration and is entirely public,

BlogforAmerica visitors include undecided voters as well as voters who oppose the candidate. Those who oppose the candidate and post comments frequently offer negative information and perspectives about the candidate and discouraging remarks. Sometimes they name another candidate and appeal to supporters to switch. Many of these visitors are referred to by supporters as “trolls.” The dialogue among supporters and between supporters and trolls characterize most of BlogforAmerica’s running commentary. The site is open at all hours, and receives thousands of comments per day.

Dynamism in a Political Campaign

A typical political campaign is organized around the voting decision which campaign staff members generally assume happens close to Election Day. In contrast, the Dean campaign organizes for continuing engagement and multiple forms of participation and demonstrations of support far in advance of any election. The campaign life of a Dean supporter is divided into a continuing series of episodic and overlapping fundraisers and mobilization drives. For instance, the end of August began with the campaign’s Sleepless Summer Tour, which coincided with a running public marker “The [baseball] bat” which indicated the rising number of contributors and fundraising totals several times per day, at times as frequently as every half-hour as the campaign’s self-imposed fundraising deadline approached. That series of events was followed by the campaign’s September to Remember, a series of recommended volunteer activities intended to further support candidate Dean. This drive ended with a fundraiser to close September, a drive to break a Democratic Party fundraising record and reach a stretch goal of 15 million dollars for the third quarter of the year. Simultaneously, there were running totals posted on BlogforAmerica indicating the total number of those who have registered at Meetup.com and

the total number of identified Dean supporters. Through BlogforAmerica, the campaign is in contact with supporters and disseminates information on a continuing basis, in ways which could encourage an individual to make contact with the campaign multiple times per day every day.

One might ask, however, why individuals would participate in a campaign in this way on a continuing basis. As in open source development communities, there might be a mixture of intrinsic and practical motives (Lerner & Tirole, 2002) that cause individuals to participate in such an uncertain public project. One obvious behavioral driver could be the strong belief in the cause of getting the candidate elected. One might also ask whether urban loneliness (Putnam, 2001) and the possibility of belonging to a community (Putnam & Feldstein, 2003) are driving participants as well. Furthermore, motivation could come from the formation of identity that develops from regular engagement with the campaign online and/or engagement with the campaign through offline activities such as distributing flyers and talking to potential supporters about their candidate. Well before Dean became a frontrunner in the Democratic Party Primary race, a number of Dean supporters had begun to refer to themselves online as “Deaniacs” and “Deanie bobbers.” It may be that increased efforts and involvement in the campaign fosters identification (Hertel, Niedner, & Hermann, 2003) that further binds supporters to the ongoing campaign. Finally, the freedom of choice offered to supporters may play a role. A common feature of political campaigns is to have volunteers submit to formal structures and directions from campaign staff. In contrast, the Dean campaign encourages volunteers to address the needs that they see without expecting direction from campaign headquarters. Instead of asking permission to deviate from the formal organization’s rules, the Dean volunteers are free to do anything they want to advocate or support Howard Dean’s candidacy as long as their actions are not expressly forbidden by federal campaign laws. This freedom to support the campaign in any

manner they choose might give volunteers additional motivation to participate vigorously and creatively, more so than if a formal structure of roles, scripts, and rules were imposed on them (Petzinger, 1999).

The autonomy of Dean volunteers, when combined with the ongoing interaction among the campaign headquarters and other Dean supporters, provides a different kind of organizing than is seen in many political campaigns. The Dean for America campaign is composed of numerous independent actors who can perform large scale projects in concert, such as writing tens of thousands of personal letters to registered voters in early primary states. The campaign makes large movements like a whale, but in reality is more like a school of fish.

A Finite Season of Participation

The Dean grassroots campaign resembles an open source development community in many ways, but there are also clear differences. First, unlike many open source projects, there is an externally-defined conclusion to volunteer participation. The organization being generated and maintained by staff and volunteers is directed this winter and spring towards gaining votes in Democratic Party caucuses and primaries throughout the United States, with intentions to continue towards this year's national election in November if Howard Dean wins the party nomination. The candidate's failure to win the nomination would be a dramatic event that would disrupt the campaign's basis for organizing. If Dean becomes the Democratic Party nominee, the campaign also faces termination of organizing in November 2004 regardless of the election outcome. In addition to this clearly-defined conclusion to the project's goals, another difference from many open source projects is the series of formal, time-dependent requirements that the campaign must conform to (e.g., the submission of registered voter signatures to qualify for

ballot placement). These formal requirements are public, and supporters have sometimes initiated drives to fulfill these requirements on their own. However, the formal campaign organization exerts some control to ensure the requirements are met and commits resources to accomplish them because of their critical nature.

The campaign has a core of formal and hierarchical administration that takes responsibility for the most essential functions, such as policy and strategy. For example, the candidate and his advisors continue to focus predominantly on victories in two particular states as the path to winning the Democratic Party nomination. The campaign headquarters accepts financial contributions from supporters in different states and allocates those funds into formal organizations that focus on victories in the two targeted states. Sometimes supporters have questioned the approach, seeking an accelerated development of formal organization in other states, but the campaign headquarters does not share authority for that decision. The Burlington, Vermont headquarters retains a central influence, although the campaign also functions extensively as an open community without formal structure imposed on its volunteers. The headquarters does not exert much authority on volunteers, and many of the volunteers, although self-governing, give some deference to what the headquarters says.

The Dean campaign exhibits some similarities to an open-source development project. It is driven extensively by a vast, open community of volunteers who rely on the Internet for regular contact with the project. However, the campaign also exhibits some differences from an open-source project, particularly how externally-imposed events and deadlines shape its activities. Next, we outline the significant theoretical issues which explain the dynamics of Dean's open campaign and its sources of organizational advantage.

THE DYNAMICS OF OPEN ORGANIZING

The Dean campaign is an example of a network form of organization, and is characterized by “reciprocal patterns of communication and exchange” (Powell, 1990:295). It makes heavy use of online and networking technologies, although meetings also take place offline. Meetup.com provides a means to direct supporters informally to offline meetings on particular days and times. BlogforAmerica provides a source of constant contact and interaction with the campaign-related events and information. In addition, there are hundreds of self-organized groups of Dean supporters on Yahoo.com, as well as many websites and local volunteer working groups. As a volunteer participant, one of the authors has taken part in a number of communications and collaborations that were initiated outside of Meetup.com and BlogforAmerica. Volunteers contacted each other by phone in these collaborations to brainstorm and plan. Occasionally, these conversations resulted in virtual collaborations, where supporters collaborated by email and phone with other supporters whom they never met in person.

The campaign experienced tremendous growth in 2003, its number of registered supporters rising from hundreds to hundreds of thousands. In such a growth climate, forming strong ties between the volunteers seems difficult if not impossible. The campaign volunteers rather form an assembly of weak ties, temporary yet instrumental to accomplishing specific tasks or goals. The formal campaign organization has little or no formal documentation of these volunteer relationships, and most of the volunteer communications and exchanges occur outside the sphere of campaign headquarters. However, the formal campaign organization still exercises control over campaign resources (funds, in particular), articulates goals, and shares regularly the communities’ progress toward these goals. Yet, the campaign’s open organizing is emergent in the sense that no authority can enforce its continuing motion. The relationships in the grassroots

are entirely voluntary and self-organized, not regulated by formal contract with specified demands (von Krogh, 2003). The Internet-enabled grassroots campaign of Howard Dean presents organizational theorists with a hybrid network form (cf. Powell, 1987). It exhibits the fluidity of a market and the goal-oriented discipline of a formal organization, while being a network in many respects.

Below, we address the dynamics of open organizing that the Dean for America campaign demonstrates. The challenge for organizational theorists is to understand why this particular form of a network has proven viable and effective.

The Transaction Costs of Open Organizing

A number of economic theorists consider opportunism as a costly but natural human behavior (e.g. Williamson 1975, 1985). Opportunism gives rise to transaction costs in economic exchange. In the absence of formal hierarchies or contractual arrangements, open organizing seems potentially open to uncontrolled opportunism and, hence, high transaction costs. The inclusiveness that characterizes the Dean campaign could exacerbate opportunism or free-riding (Olson, 1971).

However, there are some mitigating factors to potential opportunism. For instance, reputation among peers has been credited as a motivation for constructive, merit-seeking behavior in open source movements (Raymond, 1999). The peer-to-peer interaction in an open network enables participants to share knowledge and to learn about other people's behaviors and expertise (Powell et al, 1996). A further mitigating factor may be the importance of defining one's self (in a way that is acceptable to the community) as part of a network in an information society (Castells, 1996). Additionally, in the Dean campaign, transparency is created by linking

any comment posted in a discussion forum to a pseudonym and an email address. Sources of the note's informational content are made public. The authenticity of opinions or contributions is then judged by examining the contributor's claimed identity.

The network structure of generally weak, highly distributed links offers natural protection against global opportunism. For instance, trolls are not uncommon on the open Blogfor America, yet they do not seem to succeed in imposing heavy costs or cause a need for formal controls in the Dean campaign. Perhaps the damage such intruders can do is ultimately limited to a local encounter as it is difficult or impossible for a troll (or a genuine supporter for that matter) to hijack the entire organization. Also, as 19th century U.S. president Lincoln once said: "You can fool some of the people some of the time, but you cannot fool all of the people all the time." In a network of generally weak, highly distributed links, the community of participants will recognize inevitably over time those who are disruptors or provocateurs.

For instance, BlogforAmerica sometimes has visitors who say they were very committed supporters who became suddenly disillusioned due to new information they have heard about Dean. When this occurs, a number of supporters on the blog will probe for inconsistencies in these accounts and sometimes the "disillusioned" former supporters are exposed as trolls who are trying to erode the resolve, commitment, and enthusiasm of Dean supporters. Occasionally, a regular visitor to BlogforAmerica reminds newcomers and less-frequent visitors of the history of a particular troll, so that the effect of a troll's future visit can be minimized. The large number of "eye balls" (i.e., participants in the network), identified in the Linus Law of Open Source (see Raymond 1999), carefully scrutinize identities and knowledge claims. The costs – the occasional challenges and harassment of local trolls – seem to be minor relative to the ability of an open organization to draw on unlimited talent and energy.

The emergence of Internet-based communication and networking technologies have been credited for lowering transaction costs in all forms of organizing (see e.g. Pickering & King, 1995, Orlikowski et al, 1995, Fulk & DeSanctis, 1995). The online communication tools used in the Dean campaign are likely responsible for reducing the costs of volunteer self-organizing, whether locally or across geographical distances. Such tools also lower the costs of coordination between the campaign headquarters and volunteers, as well as among the activities of the volunteers themselves.

The open organization thus functions without expensive managerial controls or the need to enter into market-like formal contracts. Given a large enough organization, managerial controls and formal contracts usually become difficult to perform in a way that is quick, financially efficient, or economically productive (e.g. Chandler & Hikino 1990). Compared to a Fortune 500 company, the Dean campaign with its half-a-million registered supporters is a large enterprise. It is striking that the campaign seems to benefit from scale without having to bear the managerial costs related to large size (see Mackey & Välikangas, 2004) that are typical where formal hierarchies exist. Through its open organizing, the Dean campaign has been able to capitalize on many small donors and campaign volunteers country-wide without having to make expensive investments in a campaign organization. Self-organization, one has to admit, is managerially cheap and appears to be highly motivating to the participants.

The Benefits of a Resource Pool

While the transaction costs of open organizing appear uncommonly low, what additional benefits accrue from having a large pool of more or less active contributors? The most obvious benefit may be the ability to overcome bounded rationality (Simon, 1986) as a community: the

organization is open to anyone who can contribute. As Raymond (1999) described the effect: “Given enough eyeballs, all bugs are shallow.” In other words, given the collective efforts and attention of numerous people, the most complex problems can be exhaustively examined and overcome. Some authors have talked about distributed intelligence (Kogut and Metiu, 2001) and spontaneous, collective intelligence (2001) as characteristic of open-source organizations. At the minimum, the formal Dean campaign organization is well connected externally to its unofficial elements (i.e., supporters and volunteers), which may give the campaign an advantage in information gathering (see Aigrain, 2003). This effect of doing better with more eyes, brains, or hands can be also expressed as: ‘Nobody is smarter than everybody’ (Petzinger, 1999). It has also been expressed as the locus of innovation being “something more than an individual inventor” (Tuomi, 2002:105), emphasizing the collective aspects of creativity. Communities of practice (Wenger 1998) have further underlined the importance of collegial knowledge sharing in problem solving. While the lack of fixed boundaries in the Dean campaign makes it possible, in theory, to draw on a pool of resources that is unlimited, in practice it is the strength of the organization as an attractor of additional nodes and connections that determines its ability to draw on “everybody”.

The resource pool as a whole is valuable even though the contributions of individual actors may be quite small. We have already noted that such access to a large resource base gives the campaign an edge in talent and fund raising. Small contributions are welcomed because the costs of ideation, opinionating, and fundraising are small. The Dean campaign has thus succeeded in becoming a movement where – so to speak – a river flows from many small drops of water. The campaign also allows passive observers or spectators, in the hope that they will become active contributors.

However, as suggested by von Krogh (2003) and Chesbrough (2003), there are both advantages and disadvantages in a model where the organization's resources are widely distributed. One limitation is modularity – activities that cannot be performed piecemeal may be difficult to open source. Kogut and Metiu (2001) postulate that it is rather the concurrence of debugging and codewriting that gives open source its edge over traditional software production methods. This may apply to the Dean campaign as well: it is the continuous feedback the system generates in reaction to political messages (constantly debugging any statements while expressing further opinions) that has made the campaign feel so inclusive and democratic to its participants.

Finally, a resource pool may be more agile or flexible than a formal hierarchy. A resource pool can reconfigure itself with relatively little effort as there is little or no formal structure to be overcome (e.g. Arrow, 1974). We hypothesize, therefore, that open organizing manifests less structural inertia than organizations that are governed more managerially. According to Carroll and Hannan (2000), structural inertia should not be considered pathological, a source of resistance to change, but a logical consequence as organizations become selected for reliability and accountability over time. Carroll and Hannan further note (p. 363-364) that both reliability and accountability depend on “a structure's being reproduced with high fidelity over time”. It is this requirement of reproducibility that in turn causes these organizational structures to resist transformation. In the case of an open campaign, it is not reliability and accountability that is of consequence, but rather the campaign's ability to continuously transform itself over time to accommodate new people, new ideas, new political challenges. Such ongoing transformation is made cost-effective in part through the public availability of web tools, for example. But it is the

structure of the network – the interconnections between people – that is in continuous flux as network participants accommodate new challenges and come up with new responses.

Efficient Search and Resource Allocation

Networks, such as the Dean campaign, that have predominantly weak links may use these links as a search mechanism. As noted by Granovetter (1973, 1974), it is the weak links that usually provide the most unique information content in a network. Such information may signal a need for volunteer efforts in a particular town, for example. Such a decentralized organization is locally connected and probably better able to articulate political messages attractive to particular audiences. The campaign may also be able to learn about field signals much earlier than it would otherwise.

The effectiveness of a network as a search mechanism may depend on its topology, however. As Powell et al (to be published) study found, one of the key factors to network effectiveness is its dominant logic of affiliation. According to the Powell et al study, the strength of the emerging biotechnology field has been its ability to be multivocal in its link building. That is to say, it can create links in which those who joined early do not have an overwhelming advantage over latecomers, and there is sufficient diversity among the participants (hence avoiding homophily – strong connections among people who are already socially similar or homogenous). This topology governs the capacity of the network to access knowledge (Powell et al) – to search for the most pertinent information using its links. The topology also has implications for the network's ability to allocate resources efficiently. While it is not obvious which logic of affiliation dominates in the case of the Dean campaign, one can at least observe the diversity of people and the continuous addition of newcomers to the network.

Self-allocation of talent and resources is a radical departure from formal hierarchies. In a traditional hierarchy, resource allocation is a prerogative of management. The efficiency of such decisions ultimately depends on the quality of information on which these decisions are based as well as on the understanding the management has of the organization's capabilities. This creates bottlenecks (Hamel and Prahalad, 1994) in a formal hierarchy. Open organizing may connect the two steps much more closely than is possible in a firm: people act or don't act based on the information at hand without managerial intervention. Open organizing, through its quality of self-organization, which implies self-interest and self-selection (see Kogut & Metiu 2001, Koch & Schneider, 2001, von Krogh 2003, von Krogh, Spaeth & Lakhani, 2003), may thus be seen to be efficient in the sense that information leads to resource allocation much faster and more directly than is possible in a managerial decision making system. Highly decentralized organizations have shown evidence of this capability, too. Weick and Sutcliffe (2001) characterize highly reliable organizations as those that develop deep environmental awareness and sense-making capabilities. The redundancy of links may also contribute to the reliability of a network (Barabasi, 2002). The efficiency of open organizing, however, is rooted in its ability to invite people to volunteer where and when they feel they can best contribute. An open-source project "waits" for someone to fix a bug without allocating resources in a centralized manner. In a similar vein, open organizing "waits" for people to come up with ideas and raise money, thus vacuuming all pockets of interest by making it simple and motivating for them to do so. Thus, open organizing moves from the realm of resource allocation to resource attraction (see Hamel, 1999).

Social Construction of Meaning

Blogging or online meetings do not solely involve exchanges of information. It is also includes the construction of meaning (Berger & Luckmann, 1967). As new information becomes introduced into the BlogforAmerica community, for example, the participants consider its content from their local perspectives but also go to the original, unedited sources of information for verification. For the most part, the culture of blogging is relatively literate in that the bloggers seek to contest biases they perceive in public discussion and writings, thus separating opinion from information. Trolls may add noise or misinformation, but the more regular bloggers usually are able to expose trolls and the weakness of their arguments relatively quickly, especially if a troll is not aware of past discussions. Because information shared online gains a “social life” (Brown and Duguid, 2002), the online communities become the locus for political sense making beyond the kind of two-liners common in media such as TV. The appropriation of meaning is now done online, and political information has indeed gained its real social context (beyond TV commentary or editorials).

The structures for determining meaning matter. As Weick writes in his reflections on the Mann Gulch disaster (1996:6): “By the time a decision needs to be made, sense-making processes have already determined its outcome... We need to design structures that are resilient sources of collective sense making.” The Dean campaign offers a structure for real-time sense making. An example happened on December 24, 2003 as supporters on BlogforAmerica learned of a new Boston Globe interview with Howard Dean entitled “Dean touts his Christianity.” Some commenters on the blog expressed trepidation at the headline, apparently fearing an awkward pander to religious voters. However, this trepidation subsided as the article was

published because more bloggers had read it, and the article's contents were shared and discussed.

In open organizing, the viability of the network depends on shared meaning making. Given the lack of formal means to shape behavior, meaningful social interactions are the only glue to the organization. More generally, meaning may be created through repeated interactions that lead to cooperation (Axelrod, 1984) and a subsequent creation of an identity. Meaning may be created through the motivational aspects of being able to exert influence in a political system (Tocqueville, 1839). Such an exercise of voice might be more empowering than exit from the system. Motivation may also come from a sort of meritocratic competition for sense making that occurs when peers examine statements others make, critically studying sources and biases and considering the credibility of the claimed identity of the person in question. Meaning is also created as the campaign appears successful due to everyone's efforts as a commons-based activity: the Dean campaign constantly communicates such milestones and achievements. Finally, meaning may be created through the emergence of behavioral norms in online activity. Given that these rules are negotiated in the interaction between the participants rather than imposed from the top, the conformance to these rules may give a sense of integrity to the participants.

The social construction of meaning, in addition to transaction costs, resource pools, and efficient search and resource allocation, are several of the significant organizational issues and theories which can explain the dynamics of Howard Dean's open campaign. These issues also help explain the campaign's organizational advantages. We address, in contrast, the potential hazards that might arise from the campaign's open organizing in the next section.

THE HAZARDS OF OPEN ORGANIZING

Open organizing is no panacea. Its open, informal, emergent nature poses a number of inherent hazards. We have already referred to some of these hazards: open organizing is a risky proposition in that its success can often be judged only in retrospect. Due to the voluntary nature of collaboration, people cannot be commanded to task and controlled as to their output. For each successful open source project, for instance, there are a number of beginning communities that have ended in failures or simply dissipated. Open organizing relies heavily on the community to be a source of motivation and quality control; should the community not be able to perform such tasks or be unwilling to do so, open organizing has no traction. It is also possible that the opportunity for unlimited free-riding endangers an individual's willingness to contribute. Sober and Wilson (1998) note that altruism works when everyone in a community is willing to punish free-riders rather than simply waiting for someone else to act. Similarly, the policing of trolls is important and occasionally emotionally demanding in the Dean campaign; there has to be widespread willingness to expose trolls rather than wait for someone else to do so. We will discuss four additional hazards of open source organizing below, in the light of the Dean campaign.

The Weakness of Weak Ties

Much has been said previously about the efficacy of weak ties as sources of information. However, weak ties have their limitations as a basis for community building. Weak ties cannot be relied upon beyond instrumental purposes such as information acquisition. However, even information acquisition presents at least two challenges: first, knowing whom to ask (a weak tie would imply only superficial knowledge of other people's expertise, for instance) and second,

gaining access to the requested information. The access may depend on the perceived mutuality of the relationship—gifts are given but there is also an expectation of a return gift later in time. In a peer community, there commonly are informal or expertise-based hierarchies that make some information channels privileged. Thus, weak ties may generally facilitate information acquisition and exchange in a vast community, but these information processes may still be inefficient or limited in practice.

Beyond information exchange, weak ties are also likely to represent secondary priorities in social networks. They can easily be ignored due to competing demands. They can easily be severed due to misperceptions or miscommunications (common in email exchanges, for instance). A social network based on weak ties is likely to be susceptible to disruptions and distractions, and, thus, can face potential challenges of reliability and consistency in work relationships. Furthermore, weak ties are vulnerable to social pressure. For instance, when the Dean campaign receives positive news coverage, a grassroots participant may feel proud and motivated to maintain his or her weak ties with other supporters and build additional weak ties within the campaign. Conversely, when the campaign receives extensive negative news coverage, such as the kind that follows a primary loss or a widely-reported embarrassing campaign incident, some participants might feel ashamed of their association with the campaign and pull away from their weak relationships with other supporters.

Although an open campaign depends on the strength of weak ties for the exchange of information in an open community, it remains vulnerable to the weaknesses of weak ties.

Structural Holes

Due to its emergent nature, the Dean campaign network has no organizational design. Volunteers self-identify and join based on their calling. The network is thus likely to have a number of structural holes (Burt, 1992) relative to the complex character of the voting population of the US. It is widely reported, for example, that African-Americans are not well represented in Dean campaign rallies and events. Another potential structural hole might exist among voters in America's southern states (see e.g. the Economist, Jan 3, 2004), due to the differences in the political and cultural climate between those states and Dean's home state of Vermont.

Brokers (Hargadon, 2003) may be needed to map the network holes and exploit opportunities to fulfill unaddressed campaign needs. Such brokers need to proceed with caution, however, so as not to interfere with the self-organizing structure of the campaign, proven to be so motivational to the volunteers.

Absence of Feedback

Even though the volunteers feed the campaign with a continuous flow of information, the Dean campaign is less able or ready to provide feedback to the volunteers. The communication so far has been limited to directional milestones and general commentary on how the campaign is progressing (e.g. amount of funds raised). However, it appears the volunteers in the open campaign sometimes crave more – a sense of someone responding to their worries and offering help when they feel overwhelmed. Some people wish for mentoring, too. At a minimum, the volunteers occasionally want feedback on the campaign's situation and information on where recognized leaders would like to take the campaign. However, it is difficult for the formal

campaign organization to provide such detailed feedback and direction because there are numerous demands for its attention (cf. Ocasio, 1997).

One may observe that the absence of such feedback creates a hazard that is not uncommon to all types of organizations: gossip fills the role of missing information (cf. March and Sevon, 1988). This hazard is particularly pronounced when ties between persons are weak ones and they are geographically-dispersed online relationships. People's imaginary fears grow to fill the feedback void. Imagination starts taking over reality, and people see what may be benign neglect as intent to ignore an issue or a constituency group on purpose. The official campaign's absence of feedback is interpreted as a strategy of disregard or abandonment. It is a human tendency to seek explanations even to random events (see e.g. Taleb, 2001) and assign reason where there is none. Resulting speculative story spinning is a hazard that can potentially derail an organization, and by the time the discomfort is heard in the formal organization, damage control may be too late.

Requisite Variety and the Network as an Echo Chamber

We have already noted that the campaign has some structural holes in terms of its network structure. Related to that point is the question of requisite variety: how diverse are the people, opinions, ideas that are presented in online meetings, for instance? Is the organization's diversity reflective of its environment? One might ask whether the use of Internet technology already biases participation because it favors contributors comfortable with the technology and leaves out others (Mack, 2001) who are less technologically savvy.

A related hazard, however, is that a small group of aggressive and highly vocal persons in the network may begin to dominate the discussion, thereby discouraging others with different

opinions from joining. The network then becomes an echo chamber of biases and opinions that are not shared by the majority (cf. Hayek, 1944). It is an echo chamber that sounds one well-known note alone. When strong links emerge among a limited, dominating few, the network loses its character as an attractor of novel contributions and innovation evaporates (Välikangas, 1997). Such strongholds often have negative connotations as the “old boys” become a bastion of resistance and conservatism towards change and novelty. In sum, the loss of requisite variety is yet another hazard that competes with the potential advantages of open organizing.

CONCLUSION

“Open source” is used with increased frequency to describe the mobilization of an open community of volunteers to work on a demanding public project. However, scholarly consensus has yet to form on whether, or to what extent, this mode of organizing can translate from the software domain to other endeavors. We have explored these issues by focusing on the Internet-enabled grassroots campaign of presidential candidate Howard Dean, an undertaking that exhibits similarities to an open-source community.

The campaign’s demonstrated viability and effectiveness in raising money and volunteers and lifting the candidate from obscurity to frontrunner may feed the growing interest and enthusiasm for open organizing. It contributes to an emphasis on the potential payoffs of open organizing without much attention to the potential hazards. We have identified several of the advantages inherent in the campaign’s form of organizing: lower transaction costs for organizing, a larger pool of talent and resources, an efficient search strategy for new ideas and resources, and a locus of sense making that competes with mass communications. Perceptions of weaknesses in the Dean campaign generally focus on factors other than those having to do with

campaign organization: the candidate's positions, his statements, or his electability. However, the campaign's form of organizing also has internal risks that might threaten the relationships that bind together this highly-mobilized open community and that could damage the campaign as a whole. These risks include the absence of strong ties among volunteers, the existence of structural holes, insufficient feedback commensurate with the emotional investment of volunteers, and an inability to attract new sources of variety into the community. The challenge is that many of the advantages cannot be achieved without the hazards, and that managing these competing tensions is an ongoing gamble with this form of organizing.

The Dean for America campaign demonstrates that open-source concepts can be translated from software development to other endeavors. However, we find upon closer investigation that a broader conception of open organizing has its own merit as a topic for organizational theorists. Open organizing suggests a variety of organizational advantages and hazards that organizational researchers can examine within and beyond the software development domain.

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