Technology, Relevance and Control in Alumni Relations

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Abstract

The field of institutional advancement in higher education comprises the professions of alumni relations, fundraising, and communications. This paper examines how the widespread public adoption and rapid growth of certain technologies is affecting the role of alumni organizations. Specifically, alumni associations no longer play the central role they did before the advent of powerful internet tools such as search engines and social networking web sites. Alumni can now organize events and activities on their own, without relying on their alma mater's alumni office as a central clearinghouse for communication and organization. Having lost their monopoly over the ownership of alumni contact information and information publishing, alumni organizations must consider new ways of supporting alumni interests and serving alumni needs, in order to provide an ongoing connection between alumni and their alma mater. This paper reviews external changes affecting the relevance of alumni organizations, and presents alternatives that may allow those organizations to renew their relevance to alumni populations.

Keywords: alumni, fundraising, technology, advancement, education

Technology, Relevance and Control in Alumni Relations

North American colleges and universities have historically relied on alumni operations to establish information flows that support public relations and fundraising success (Feudo, 1999, p. 5). There is a compact, simple list of traditional activities ("programs") through which they have accomplished this, a list embodied in the event calendars and web sites of alumni organizations everywhere (e.g., reunions, regional clubs and chapters, alumni education, alumni publications, peer-to-peer fundraising, web sites, and volunteer recognition, to name a few).

As described in classic theories of organizational communication, information has flowed from the institution out to alumni. Very little, or no information, flowed from constituents back to the institution, or from alumni to other alumni. In this classic model, the leaders of organizations control information flow, and limit its distribution to selected audiences, according to audience members' seniority or specialization (March & Simon, 1958).

However, the advent of ubiquitous, portable electronic communication is having a dramatic effect on the traditionally one-way flow of information. Recent developments in communication emphasize so-called "user generated content" on the Internet, a phenomenon often referred to by the shorthand title "Web 2.0" (Oreilly, 2007). These developments subvert the traditional one-way information flow by giving alumni multiple, immediate means of communicating directly with their alma mater and with other alumni. This kind of unhindered information flow is increasingly seen as the standard for organizational behavior, and is an expectation of organizations' members (Cairncross, 1997). In the context of educational institutions, these technologies give alumni the ability to find and communicate with each other, without the participation of the institution or its alumni relations programs. Instead of using an alumni directory, produced with information owned only by the school, alumni now find each other via online tools such as search engine Google, online business network LinkedIn, and social network giant Facebook. They can even use these services to form quasiofficial alumni groups without the aid or participation of school officers.

The move away from centralized, organizational control over the flow of information has implications for the effectiveness of official messages to broad audiences. Cross (2004, p. 16) analyzed information seeking and information exchange in a large corporation, and found that information-seekers "relied on those they knew and trusted, and not [on] a database of self-proclaimed experts." In accordance with Cairneross (1997), this suggests that an organization which merely disseminates "official" information may not be trusted by its audiences to provide the best or the most relevant information to them.

These changes, by extension, specifically call into question the traditional relevance and role of alumni organizations. If schools no longer hold a monopoly over the data within the alumni network, then alumni can organize themselves by using that data without assistance from the traditional data manager – the alumni office. Alumni associations, in effect, face competition from their own customers.

Research Question

This paper asks, given external changes that erode alumni organizations'

traditional roles, how can alumni organizations remain relevant and valuable to alumni? This paper describes the traditional model of information flow, and the effect of technology on that flow since the advent of what one researcher has called "ridiculously easy group-forming" (Paquet, 2002). The paper then characterizes the problems or even crises facing alumni and fundraising offices, and proposes specific approaches and tools to address those problems and crises.

A Brief History of Alumni Relations

The general public takes for granted that alumni of a particular institution voluntarily affiliate with each other over the course of their lifetime. Even those who work in alumni relations, the profession designed to address alumni needs, rarely question why alumni want to affiliate with their college or university, or even with one another. This profession is one part of the so-called "three-legged stool" known within higher education administration as "institutional advancement." In addition to alumni relations, the offices of development (i.e., fundraising, or philanthropy) and public relations (which includes communications and marketing) form the other legs ("CASE About Advancement"; Feudo, 1999, pp. 124-5).

Depending on one's definition of alumni relations, the history of the practice in North America coincides roughly with the first decades of America's identity as a nation (Chewning, 2004). In 1792 Yale University was the first to organize its alumni by the year of their class graduation, and in 1821 Williams College in Massachusetts created the first formally organized alumni association. The organization overseeing the professional practice of alumni relations, the Council for

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Advancement and Support of Education (CASE) was established in 1974, through the merger of two older associations, the American College Public Relations Association and the American Alumni Council ("CASE History"). CASE is also the global professional organization for the other two "institutional advancement" disciplines, development and public relations.

The State of the Profession

Across all three professional advancement disciplines, as of February 2010 there were 19,585 individual professional members of CASE, the professional association (C. Nielsen, CASE Information Officer, private correspondence, March 29, 2010).

But why are there alumni professionals at all? Who benefits from an organizational structure designed to oversee the practice of alumni relations? There are at least two reasons why the profession developed and coalesced, maturing into its current form:

1. Alumni are drawn together by *homophily*, which explains why social preferences and shared experiences create the perception of a "bond" with others who share those preferences and experiences (McPherson, 2001); and

2. Until recently, only professionals with systemic access to tools for mass communication and data management could organize events and send out broadcast messages to a large, decentralized population of alumni. This traditional model posits far-flung, widely dispersed alumni populations as recipients of official communications broadcast by the institution. In this model, members of officially sanctioned alumni groups (such as regional clubs or special interest chapters) operate as official proxies for the parent institution. Finally, alumni participate in official institutional activities (such as reunion and Homecoming), designed to bring alumni back to the scene of their student experience. This topdown model, with the institution conceiving, funding, planning and executing sanctioned activities for alumni, is an outgrowth of the long-standing circumstance that only the institution could communicate to large numbers of alumni at one time. Alumni periodicals and postal fundraising solicitations are examples of traditional allalumni communication vehicles.

In summary, a compact and simple description of alumni office functions is that they "build the loyalty and commitment of alumni by providing services and managing events and activities that help build bonds and keep alumni informed" (Worth, 2005, p. 31). We shall see how the monopoly of the alumni office over all communication is no longer in force, and what that implies for the office's relevance.

Professional Self-Definition

While the delivery of alumni programs and services is the responsibility of a defined group within a specific sector of the economy (i.e., education), is alumni relations actually a profession? Sociologist James Q. Wilson (1989, p. 60) defined a profession as "a reference group whose membership is limited to people who have

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undergone specialized formal education and have accepted a group-defined code of proper conduct." By this definition, alumni relations is a profession in so far as 1) its members learn their trade in a specialized way not available to the general public, and 2) they conceive and plan their activities more according to the ideas of their peers than according to those of the alumni themselves when deciding what to do and how to do it. So ingrained in the educational advancement professions is this latter idea, that there is a widely known joke about the professional organization's acronym. CASE, the quip goes, actually means, "Copy And Steal Everything" (Ellison, 2009).

Shirky (2008) amplifies the definition of a profession by saying that it "exists to solve a hard problem, once that requires some sort of specialization...Most professions exist because there is a scarce resource that requires ongoing management" (p. 57). In alumni relations, the scarce resource that has enabled alumni organizations and their associated activities (such as fundraising) to thrive is the accumulation and management of large amounts of data. Alumni databases, proprietary and closely guarded by their institutions, contain mundane but valuable information such as alumni educational history (degree, major field of study, year of graduation, advisor name) as well as sensitive, specialized and private information, such as research into individual graduates' net worth, sources of wealth, personal assets and behavioral and attitudinal characteristics, including political views and personal connections (Feudo, 1999, p. 17; Worth, 2005, p. 26).

One measure of the value of this proprietary data is that breaches of alumni data security are newsworthy when they occur. A continuously updated online record of such events showed 24 publicly recorded breaches of alumni association records

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between 2005 and early 2010. There are likely more such leaks of confidential information that have not been reported ("Privacy Rights Clearinghouse").

The definition of the alumni profession is changing, then, because the solution of its "hard problem" – data management – is being democratized. Individuals can now do what previously only organizations could do. Citizens now have greater access to other individuals' contact information, and they have access to tools that allow manipulation of that contact information. The alumni association's customers – alumni (and to a lesser, but increasing extent, students) – can find and use information that previously was available only to their alma mater. Shirky says that the behavioral changes driven by developing technologies cause loss, including "social loss" for "people whose jobs relied on solving a formerly hard problem" (p. 209). Examples of this include convening a group of alumni, or communicating with many of them at one time. That formerly challenging professional capacity is now within the grasp of anyone with a blog and an email account. Wolske, Johnson & Adams (2009) have characterized this trend as the mass amateurization of communications.

The long-established status quo, then, is changing. What risks do alumni organizations and their professional leaders face by not recognizing or acknowledging these external influences?

Risks to Alumni Organizations & Alumni Professionals

One risk is failure to change the collective understanding of what it means to be an "alumni professional." Shirky shows how print journalists, challenged now by amateur and self-styled "journalists" such as bloggers and users of the microblogging service Twitter, failed to anticipate the threat to their traditional primacy as the most authoritative news source, because they defined their profession incorrectly.

> There was a kind of narcissistic bias in the profession; the only threats they tended to take seriously were from other professional media outlets...This bias had them defending against the wrong thing when the amateurs began producing material on their own. (p. 56)

Alumni professionals are in a similar position today. They face the extinction of their traditional roles at a juncture when they have not yet imagined or recognized the new roles they might play in the lives of the institution and its graduates.

A simple example is alumni event attendance. If attendance at long-standing traditional events (such as class reunions or regional club meetings) decreases, will alumni officers find fundamentally new reasons for alumni to gather under the school's banner, or will they try to design new marketing ploys to compel alumni to attend the old, decreasingly relevant events? Some progressive and entrepreneurial associations have been re-tooling their offerings to meet changing alumni needs since at least the early 1990s (Melichar, 2010; Stanford Alumni Association, 1993), but the number of examples in this category is quite small.

Shirky (p. 58) points out that "the professional outlook can become a disadvantage, preventing the very people who have the most at stake – the professionals themselves – from understanding major changes to the structure of their profession." Specifically, he says, professions created around the scarcity of some resource (e.g., access to alumni data) are dramatically affected when the scarcity

vanishes, as it has with the advent of social tools that help alumni find each other and self-organize. His primary example is that news publishers are asking themselves what happens when the ability to publish is no longer unique to news organizations; alumni professionals must ask *what happens when the ability to organize alumni is no longer unique to alumni organizations*?

Shirky's example of how private citizens' blogs affected news organizations is analogous to an important change affecting alumni organizations now. Shirky states that "individual weblogs are not merely alternate sites of publishing; they are alternatives to publishing itself, in the sense of publishers as a minority and professional class" (p. 66). In this exact way, we might say that online social networks are not merely alternate sites for alumni organizations; *online social networks are alternatives to alumni organizations themselves*, in the sense of alumni associations as a specialized function of educational institutions.

This is a critical concept for current alumni professionals, who may regard social networks and related technologies as "tools" to help them continue doing their old job in a new way. It is possible, if not likely, that these services are making their old job (and ultimately, their profession) obsolete, by allowing individual alumni and small groups of alumni to do their traditional job *for* them.

Risk of Complacency

Worth (2005) briefly describes the respective roles of fundraising offices and alumni offices in the traditional American advancement model. He then warns of the risk that alumni associations can become self-serving, viewing their role as 'representing' the alumni in affairs of the institution or providing benefits to the alumni at the expense of the institution. It is possible for alumni-relations officers to come to identify with the alumni association more than with the institution itself and for the boards of such associations to view alumni-relations staff as their own. Such risks are greatest for alumni associations that have an independent charter, especially if they also have sources of revenue apart from the college or university itself. (p. 32)

At least one factor mitigates the spread of the phenomenon that Worth warns of: the relative decrease in the number of financially independent, self-governed alumni organizations over time. Willmer (p. 168) found that 17% of alumni associations were self-governing in 1998; the integration of high-profile alumni associations with their associated universities suggests that the number of fully selfgoverned alumni organizations is decreasing over time (Ohio State University, 2010; Stanford News Service, 1998). Nonetheless, high profile battles over the central role of the university's administration continue to make headlines in visible cases (Hacker, 2009).

Repetitive or Habitual Programming

Organizations tend to continue doing what they have done before, often to the exclusion of external influences that suggest they should adapt their activities to

account for changed environments (Hoag, Ritschard & Cooper, 2002). Alumni associations risk ignoring opportunities to update their programs and change what they offer, opting to maintain tried-and-true activities because they are easy to administer, cyclical, and can operate without innovation or significant adaptation. Such programs are also well established among alumni, therefore innovative marketing has not been needed to "sell" the value of such activities to alumni. In short, these activities are easy to design and implement.

One example of such a program is "alumni admissions." Before the broad availability of online tools for researching college choices and applying to college, high school students considered the admission office and alumni to be the central repositories of all knowledge and information about the school. Alumni volunteers have often been recruited and organized by universities and colleges to conduct interviews with applicants for admission, writing reports that become part of the applicant's official file (McCoy, 1991). Over time, the role of alumni in this process has diminished, as students now have a wide number of resources from which they can obtain information about colleges in which they might be interested. With the information about colleges being available from sources other than the college itself, alumni are left without a central role to play in the admission process (Ponzi, 2006).

This loss of an admissions role for alumni translates into a lack of relevance for the alumni organization, which structures and manages admission volunteers' roles on behalf of the institution. This is one more way in which access to new technology, in this case by high school students, erodes the traditional role and relevance of the alumni organization.

Loss of Monopoly over Data

To maintain visibility with alumni, which is necessary for alumni engagement and fundraising, educational institutions must be able to communicate with alumni. For this reason, colleges and universities invest in developing and maintaining the alumni databases mentioned above. Among the various kinds of information historically maintained or controlled by the institution are Contact Information and Class Notes.

Contact Information is a physical or postal address, a telephone number, and more recently, an email address. These have been the key to allowing institutions to communicate with alumni, for example by mailing alumni periodicals or sending email newsletters.

The Class Note is a form of information shared by alumni for the consumption of other alumni. The institution publishes these short, autobiographical items in a printed periodical and sends them via postal mail to all graduates. Historically, a Class Note was the only way to update all of one's classmates with changes to one's employment status, news of awards or honors earned, new mailing addresses, or announcements about the birth of a child. An alumnus sent the note to a class agent (generally another alumnus), who collected notes from all members of a graduating class, sometimes edited them and then sent them on to the alumni magazine editor for eventual publication. Now the institution itself no longer maintains control over access to these types of information, leading to the loss of monopoly over the power to organize alumni. Public access to Contact Information data (for example, via membership in free online social networks) has made it possible for alumni to communicate among themselves. Directories have long been a staple of alumni services because they enabled alumni-to-alumni contact in the era before social network sites. To find a former classmate with whom he had lost contact, an alumnus would have to access either a printed alumni directory or an online directory. Creation and maintenance of both kinds of directories has historically been solely within the power of the institution. This is because the data needed to create them was available only to the parent organization, the school itself (Feudo, 1999, pp. 17-20).

The ubiquitous "status update" in online social networks may be gradually displacing Class Notes (Krishnamurthy, 2008). As the most successful social network services copy one another to maintain a relative competitive advantage, their most-used features appear in a variety of places. The status update is a central feature of the most used social sites on the Internet, including Facebook and LinkedIn, which together boast self-reported combined membership totaling 460 million people ("Facebook Statistics"; "LinkedIn Facts"). The rapidly growing micro-blogging service called Twitter is built upon individuals' fundamental desire to send brief, frequent updates about their activities to friends, co-workers, family members, and even strangers. These services allow instant self-publication of what amount to online Class Notes for free and without labor-intensive and time-consuming intermediation by a class agent or magazine editor. Lead-time for updating one's connections about recent news has dropped from several months in the print-only era, to a matter of moments in the Internet age.

Online status updates provide additional functionality, not available to alumnionly networks. One can update a range of acquaintances that extends well beyond the alumni population to include co-workers, neighbors, business contacts and family members. The advent of easy group-formation increasingly allows one to target personal updates to different subgroups to ensure relevance and appropriateness (Paquet, 2002).

For example, an update that said, "Talked to Joe about April and Sydney" might sound like the author was planning to visit Australia in the month of April. In fact, Joe, April and Sydney might be the names of family members. Such an update would make sense to other family members, but not to alumni unfamiliar with the author's personal life.

Before the advent of these more recent communication channels, the only way to communicate directly to a classmate whose address you did not have was to send a personal note via the alumni office. The alumni organization would forward the message, usually without divulging the recipient's address to the sender, in order to preserve the recipient's privacy. Later, the alumni directory was developed as a sort of private telephone book. Its sale generated revenue for alumni associations, and its information – not available elsewhere – allowed alumni to connect to one another directly.

Now, the alumni directory, even though electronic and secured by a password to limit the exposure of alumni contact data, is being bypassed. To find a classmate one can use powerful, free online search tools such as Google, or the search function within each online social network. It is worth noting that most online networks allow individuals to import their own electronic address books. Shirky points out that this ease of data sharing influences our ability to communicate with one another online. "...The information we [provide online]" he says, "...has dramatically increased our social visibility and made it easier for us to find each other" (pp. 11-12).

Why does it matter who has access to this information? Economist Ronald Coase answered this question in his influential 1960 article, *The Problem of* Social Cost. Coase argued that because there is a toll on efficiency whenever information has to be transferred, society benefits when access to information is initially granted to those who benefit most from having the information. From this point of view, it is most efficient for alumni to have access to a collection of alumni data, since they benefit collectively from having the information. The institution's role as broker of this information increases the transaction cost to each alumnus. For example, under Coase's formulation, it is more efficient for one alumnus to find and contact another alumnus directly, as opposed to asking the alumni association to find the other alumnus and connect the two individuals. Therefore says Coase, in market terms this inefficient model is unsustainable in an information economy. Coase's argument strongly suggests that the relentless drive toward efficient transfer of information ultimately demands direct access to information by those who benefit from obtaining it (p. 17).

If, as Coase's argument implies, this information is somehow "destined" to be free to those who benefit from having it, why did it take so long for alumni to achieve direct communication with one another? The answer, in a word, is "management." The difficulty of maintaining a large database of individuals' contact information meant that only organizations –not individuals – could support the overhead required to manage the contact data successfully. Now that the Internet facilitates ubiquitous searchable access to vast stores of data, the organization (or in Coasian terms, the "firm") is no longer needed as part of the information transaction. As Shirky puts it, "We now have communications tools that are flexible enough to match our social capabilities, and we are witnessing the rise of new ways of coordinating action that take advantage of that change" (pp. 19-20).

The Importance of Groups

We saw earlier how McPherson (2001) showed that "similarity breeds connection" in social groupings. This basic observation explains why a particular institution's alumni might voluntarily associate with each other, and sheds light on a relevant functional aspect of organizational behavior. In the context of membershipbased associations, this functional aspect implies a challenge to alumni organizations.

When Shirky mentions "ways of coordinating action," he is not referring only to individuals sending single, private messages to one another. Shirky's "ways of coordinating action" imply a group communication function. Indeed, while alumni networks are often cited for their ability to connect individuals for mutual aid and support, their real power may lie not in their individual connections, but in their ability to foster the formation of groups. A closer look at two ways of measuring alumni network value, one of them based on individual connections and the other based on group connections, will illustrate how the coalescence of groups makes alumni organizations more valuable and useful. The underlying basis for estimating the value inherent in a network of any kind is Metcalfe's Law, which is based on individual connectivity. First formulated by George Gilder in 1993 in relation to telecommunications networks, the formula was later applied to Internet-connected devices by engineer Robert Metcalfe. Metcalfe's Law states that the value of a network is proportional to the square of the number of users participating in the network: N^2 (Shapiro and Varian, 1999).

A classic real-world example of this axiom is the telephone. One telephone by itself is of no practical communications value. However, as soon as a second telephone is connected to the first, the potential value of both phones exceeds zero. Adding additional telephones increases the total value (or utility) of the system in which people using these telephones can communicate with one another. Metcalfe's Law is the system traditionally used for measuring the value of individual, incremental increases to the number of participants in any network (such as a group of alumni).

The second way of measuring network value is based on group connectivity and is known as Reed's Law. This law amplifies Gilder's and Metcalfe's observation by asserting that the value of a network grows *exponentially* in proportion to the number of possible sub-groups that can form within the network: 2^N-N-1, where N is the number of network members (Reed, n.d.).

These observations are critical for understanding the effects of social networking technology on alumni organizations. As Shirky points out, "…new technology enables new kinds of group-forming" (p. 17). The tools that allow this are "simply a way of channeling existing motivation," which in this case is what

McPherson identified as homophily – the tendency of familiarity (or similarity) to breed connections, leading to the formation of groups.

Online tools such as social network web sites allow alumni to cluster into subgroups based on shared interests, and therefore these tools amplify alumni network value exponentially. As we have seen, this explosive growth is possible without any participation or support from the alumni organization or the graduates' alma mater.

Social Network Analysis and Alumni Engagement

The rapid growth of online group formation has engendered a new analytical field, social network analysis (Uzzi & Spiro, 2005, p. 447). The roots of this field are best known popularly by the shorthand phrase "six degrees of separation." This concept is based on the claim within popular culture that any two people in the world can be connected via a chain of no more than six people (Watts, 2003, p. 37). Originally useful primarily as a cocktail party amusement, the concept has received more rigorous empirical treatment in recent years, with implications for understanding alumni networks.

The "six degrees" concept is an outgrowth of work originally conducted by psychologist Stanley Milgram in the 1960s (Barabasi, 2003; Milgram, 1967). Milgram's contribution to the budding field of social network analysis was to try to measure the average number of social ties between any pair of individuals in society, and to examine how ubiquitous those kinds of ties are in a given social network. Milgram's particular methodology is still disputed by some, but the existence of socalled "small world networks" is almost universally accepted by social network analysts, and supports the concept that the average number of connections between any two individuals in the world is, by most definitions, unexpectedly small (Barabasi, 2003, p. 30; Watts, 2003, p. 69).

Milgram's model of "paired nodes" is essentially binary in nature; two given individuals are either directly connected to one another or they are not. Milgram did not attempt to measure or describe the relative strength or other qualities of a given network tie. He merely pointed out that a tie exists or does not exist.

For counting connections within a network of acquaintances, or for measuring the distance between two particular network members, this model works well enough. But sociologist Mark Granovetter built on Milgram's approach to measuring network scope, and broke new ground with his seminal paper, *The Strength of Weak Ties* (1973). Granovetter introduced a critical and deceptively simple observation: network ties can be characterized by their relative strength. Strong ties exist between people who interact frequently, who trust one another based on past interactions or mutual trusted acquaintances, and whose respective social networks overlap extensively (Granovetter, 1983, p. 209). Weak ties are those between people whose acquaintance is relatively shallow or undeveloped – friends of friends, co-workers from long ago, and distant relatives who are rarely seen or heard from (p. 223).

A counterintuitive outcome of Granovetter's observation is the understanding that for certain kinds of social interaction, weak ties are more effective or valuable to individuals than are strong ties. While strong tie connections – those closest to one in personal terms – are more developed, more trusted and more reliable, the relative homogeneity of small, closed networks means that relatively little new information enters the network (Gilbert & Karahalios, 2009). For job-seeking, obtaining advice about unfamiliar topics, and introducing novel information or experiences into one's own social interactions, weak ties are best; the weakly-tied connection is a person who does not move in the same circles as oneself and whose personal network does not overlap much with one's own. Therefore a weak tie connection does not share the same sources of creative ideas and advice, and is likely to have access to resources or insights that are completely unknown among a subject's strong tie connections (Burt, 2004; Granovetter, 1974).

One early finding from the nascent field of network analysis was that while members of small, densely connected networks of people are strongly attached to one another, every network member also has ties to *other* groups or communities (i.e., other networks). For example, a college student is strongly tied to a small, dense network of the classmates with whom she attends school. However, she is also deeply embedded in a network of childhood friends and members of her own family, in a community that may be thousands of miles from her home. This student serves, in effect, as a connector of discrete networks that might otherwise be disconnected – her college network and her hometown network.

The connecting of small, densely connected networks to one another eventually leads to the formation of large, loosely connected, shallow networks on a very large scale. The so-called "Small World" pattern of networks allows small groups to connect to each other, forming tightly knit, dense networks. This is in contrast to relatively large groups, whose members generally exhibit looser overall connections to one another (Barabasi, pp. 56 and 150). One way to conceptualize the difference between small, dense networks and large, loose ones is to consider the close-knit relationships that characterize a family living in a single household, compared with the bigger, but less intimate relationships that characterize the members of the entire neighborhood in which that household exists. In smaller groups, alumni can connect primarily with those who share their own interests or values, creating a small, cohesive network of closely connected individuals. Reed's Law shows that these small subgroups within a network increase overall network value. This, in turn, suggests that educational institutions should encourage and support the creation of small, densely connected subgroups of alumni within the overall alumni network.

While these theoretical constructs help explain the relative potential value of various groups and group sizes, the problem for institutions such as colleges or universities is to translate this potential value into tangible results. The measurement of these results is broadly known in the alumni profession as "alumni engagement" (Weerts & Vidal, 2005). To best understand how to make connections within a group valuable to group members one must measure alumni engagement over time. Presumably, increased alumni engagement leads to greater support by alumni for alma mater, for example in the form of increased participation in donations of money or volunteer effort (pp. 11-13).

Kumar, Novak and Tomkins (2005) examined the growth stages of online communities and the types of behavior members exhibit. They showed that online communities grow organically after a stage of rapid growth followed by a brief decline. The authors postulate that the pattern is due to the activities of early adopters who create significant linkages in their exploration of the system, followed by a period of rapid growth in which new members join more quickly than friendships can be established, settling finally into a period of ongoing organic growth in which both membership and linkage increases. (p.1)

How long and rapid each growth phase is depends on the ratio of different behaviors exhibited by group members. These behaviors depend, in turn, on the mix of member types.

According to Kumar et al. (p. 6), there are three types of group members:

Passive users join out of curiosity but do not engage in group activity or communication;

Inviters recruit friends from offline communities; and

Linkers actively connect to other members to increase the density of connections within the network.

In an effort to be inclusive, alumni professionals often ignore behavioral tendencies in the alumni population when designing face-to-face activities. They design programs and services likely to appeal to the "average" alumnus. This is in keeping with the desire to engage as many alumni as possible; rather than risk excluding or alienating a potential donor, communications are meant to be inclusive. However, in terms of interaction with alma mater, the fraction of alumni whom we can consider engaged with the institution is extremely small. For example, attendance at regional alumni events rarely exceeds 3% of the population invited, and a 1998 study found that among alumni organizations collecting membership dues, on average only 8% of alumni paid such dues to join the organization (Willmer, 2007, pp. 167-8).

Another proxy for alumni engagement is participation in annual fundraising campaigns. According to the 2009 report on the Voluntary Support of Education in the United States, the average percentage of alumni donating to public research and doctoral universities in 2008 was 9.6%. Although giving is higher at private institutions, the same comprehensive survey revealed that alumni participation in giving to *all* types of post-secondary institutions averaged 10.0% in 2008 (Council for Aid to Education, 2010, p. 5).

Distribution Models of Alumni Engagement

Conceptual approaches to engagement can illustrate different ideas about how alumni actually connect and interact with their alma mater. Without consulting quantitative information, one might assume that alumni engagement is distributed in normal, or Gaussian fashion, forming a Bell curve. Charting alumni engagement level versus alumni population, we would expect a distribution like that shown in Figure 1.



Figure 1. Hypothetical relationship between alumni engagement level and alumni population. The vertical axis shows the degree of engagement, from low at the origin to high. The horizontal axis shows the percentage of the alumni population.

The presumed curve describes a normal distribution clustered around the mean. In this traditional assumptive model, the greatest percentage of alumni is clustered around a moderate level of engagement. According to this description, there is a moderate number of engaged alumni who are interested in the programs and activities of the institution, as provided through its alumni association.

As Shirky explains, increased engagement of an audience is a result of effective communication practice with network members (p. 138). His model shows how official institutional communication, for example with alumni, is based on a "width-versus-depth tradeoff." The traditional alumni relations model, as described earlier, has institutional messages broadcast without regard to the specific interests of alumni subgroups, in a wide but shallow pattern. Audiences, however, increasingly expect the small group intimacy and "tight conversation" that they experience in dense networks (for example, among friends participating in ubiquitous social network sites on the Internet).

Shirky (p. 129) shows that the relationship between audience size and conversational pattern follows what is called a power-law distribution, in distinct opposition to the normal distribution along a Bell curve that is shown in Figure 1. In a power-law distribution, there is a very small number of items with large values, but an exceedingly large number of items with very small values. In Shirky's example, there are few communication channels with many participants, but many channels with just a few participants. For example, a nationwide broadcast television channel reaches tens of millions of viewers, but there are very few such channels. On the other hand, small social groups such as book clubs, hobby groups, or civic organizations may reach just a handful of members each. Yet the number of such small groups is beyond anyone's ability to count.

As seen in Willmer (2007) and the Council for Aid to Education survey (2010), the number of alumni who are highly engaged is very small. This group would include alumni trustees and alumni association volunteer leaders, plus the relatively small percentage of alumni who make a donation or pay dues to join the alumni association. With this reality as a guiding principle, charting alumni engagement level versus alumni population suggests that real-world alumni engagement follows a power-law: the number of highly-engaged alumni is very small, while most alumni are not engaged at all. The graph of this function (as shown in Figure 2) has implications for alumni programming in educational organizations.



Figure 2. Relationship between alumni engagement and alumni population expressed as a power-law distribution. A small number of alumni are highly engaged, but the vast majority is not connected at all to alma mater.

We have seen how easy group formation and ubiquitous connectivity make alumni associations less valuable to members of alumni networks. What might these organizations do to increase their relevance with alumni and their potential value? For our purposes, a relevant organization is one that performs functions that are

- needed or desired by a large fraction of its audience; and
- not available as effectively or easily elsewhere.

Options for Alumni Organizations

Presented here are some options for organizations seeking new kinds of relevance with alumni. These directions are either being explored for the first time now, or are newly available due to technological developments, and are as yet untested.

Many alumni professionals might see these as risky endeavors because they represent a departure from traditional activities. However, if behavioral externalities like those described above erode the value of traditional activities, then failure to experiment with new directions will lead to professional obsolescence for alumni professionals, as described above.

Support virtual clubs and groups

Technology enables the creation of so-called virtual groups, which will offer alternatives to diminished interest in traditional group activities. Current students are experimenting with virtual clubs and are finding that online interaction has valuable aspects that face-to-face meetings do not. For example, digital interaction can be archived so that presentations and discussions via the Internet can be indexed, searched and easily shared after a meeting is over (Kolowich, 2010). However, traditional events may have value that cannot be replicated online, and over time fundraisers may encounter decreased alumni giving as a result of less engaged alumni whose online interaction does not connect them strongly to the institution.

Crowdsource alumni program planning

A trend recently identified and analyzed in the literature is "crowdsourcing" (Brabham, 2008). This term was coined in 2006 and defined as "taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call" (Howe, 2006). In alumni relations, this could mean relying more heavily on alumni volunteers to conceive, design and deliver programs and services that would be of interest or benefit to the alumni body or to the institution itself.

For example, the University of California at San Diego experimented in 2009 with a service named AlumnIdea. This service allowed alumni to suggest activities or initiatives for the alumni organization to pursue, and to vote on the suggestions of other alumni. The goal was to help make alumni planning more participatory, and more representative of alumni needs and interests (M. Gullo, personal communication, March 3, 2010; UCSD, n.d.). Shirky describes the Internet site Meetup.com as performing a comparable function (pp. 195-197). This approach supports letting group members suggest activities, with the understanding that only a very small fraction of these activities will not succeed by any objective measure.

Who might be involved in this exercise? Different institutions have slightly different definitions of who qualifies to carry the label "alumnus." However, the accepted definition generally involves an individual having studied as an enrolled student for some minimum length of time, and having received a diploma or certificate signifying completion of official minimum requirements for the specific

credential granted. This practice has a dual effect: while it effectively increases the value of the credential by artificially limiting the supply, at the same time it limits the potential number of alumni members by setting an explicit (often relatively high) standard of achievement. To avoid extreme constraints on the number of potential recipients of alumni communications, some organizations allow non-alumni such as institutional post-doctoral scholars to participate in official alumni activities and to join the alumni association (Caltech Alumni Association, 2010).

Similarly, some alumni groups allow the parents of currently enrolled students to join the association, and others have no restriction whatsoever on membership eligibility (UCLA Alumni Association, 2010). In this way, Associations can increase the number of network members, fueling a proportional increase in the network's value, as described by Reed's Law. At the same time, dues-based organizations generate additional revenue to support activities designed to increase alumni engagement.

Connect alumni activities with core institutional missions

As participants in social communities, there are many times when alumni gather to relax and interact casually. This is the stereotypical image of reunions or Homecoming activities. However, alumni programs can demonstrate their value to the institution itself by exhibiting explicit support for academic teaching and research. This illustrates to alumni and to senior leadership of the institution that the organization is not merely a social one, but one that supports the institution's academic mission as well.

Organize small, densely connected groups of alumni

The Small World pattern of network formation suggests that smaller groups, organized around shared, narrow interests will provide more alumni engagement over time (Watts and Strogatz, 1998). This is more challenging to organize than a traditional model in which alumni are treated as a large, homogeneous group. However, it likely increases the chance that the group will cohere around small, cause-driven or issue-based activities, before having a central alumni program around which to rally.

Use Social Network Analysis to Examine Alumni Networks

Recent developments in the analysis of online social networks provide a promising new direction for the analysis and understanding of alumni organizations' audiences. Gilbert and Karahalios (2009) propose a model that predicts the relative strength of ties between members of a social network, based on social network data. Examining 74 variables allowed them to predict with 85% accuracy the relative strength of social connectedness between subjects and a random sampling of their subjects' friends on Facebook (p. 1).

The value of this to alumni organizations is that it shows how analyzing alumni network member data can improve the design elements of online networks that allow alumni to remain in contact with one another and with the institution from which they graduated. There are obstacles that make such analysis challenging, the most daunting of which is the need to respect individuals' privacy and the networks' own acceptable use policies. Nonetheless, armed with knowledge about the strength of weak ties, alumni organizations have the opportunity to learn more about which relationships and potential relationships within the alumni body will deliver the highest utility and the most value to individual network members.

Be willing to take small risks, and to fail

Fear of organizational failure is well documented and easily understood. Nonetheless, where innovation is desirable, risk-taking is required (Amburgey, *et al.*, 1993). People working on failed projects can immediately shift their attention to new efforts and test them rapidly, moving on again if failure results.

Alumni organizations are planted squarely at the center of competing influences that tend to work counter to large-scale change. On the one hand, their stock in trade is nostalgia. Reminding alumni about what it was like to be a student, how the institution was, and then showing them that the same familiar place still exists can drive alumni fundraising, volunteerism and support (Mael & Ashforth, 1992).

At the same time, the institution needs alumni to know about its modern facilities, new computer networks, state of the art labs, and contemporary programs that attract top students. The associations' difficult role, then, is to balance these competing influences: the need to show that nothing has changed, and the need to show that the school has evolved through the decades. Brown University alumnus Charles Evans Hughes (class of 1881) is reputed in school lore to have quipped that "It is always the old Brown, and it is always the new Brown." This neatly characterizes modern institutions' dilemma.

As one administrative component of those institutions, alumni offices have tried to strike a balance between old and new. But they remain largely associated with programs designed in - and for - a prior age. As noted, it is normal organizational behavior to forego a risk whose outcome is unknown in favor of an existing practice whose results have been measured (Amburgey *et a*l.). Shirky (p. 245) proposes that the "overall effect of failure is its likelihood times its cost." The easiest way to reduce the effect of failing is by making it less likely to happen; the easiest way to make it less likely is to reduce the number of risks taken.

In most organizations the cost of failure is high, relative to the resources that the organization must expend to test a new idea. Therefore staff members or boards of directors try to evaluate an idea's likelihood of success and then decide whether to pursue it at all, based on that evaluation. This is one major difference between formally structured organizations and loosely aggregated self-constructed groups. With the new tools at their disposal, an entrepreneurial group of alumni can try a new idea without evaluating in advance its likelihood of success. One example is the creation of an online group around a homophilous special interest, such as parenting techniques ("Techers as Parents"). If the effort does fail, the loss is minimal because the risk is very low; the cost of creating an unofficial grouping of alumni around an interest is virtually zero. This is not only true of online or virtual groups; online tools such as MeetUp allow for individuals to organize traditional face-to-face events as well as online meetings (MeetUp).

As Shirky points out, in this context, "the failure of even a sizable number of

groups also carries little penalty" (p. 247). He explains that this is "where Coasean theory about transaction costs and power law distributions of participation intersect." Institutions often refuse to attempt innovations because the potential cost of failure is deemed to be too high, and the predictability of success is too uncertain.

Can one predict the "payoff" for a specific set of alumni programs? Assessment questions have plagued alumni relations, as it is difficult to find direct results from alumni activities. Web strategist Jeremiah Owyang published a matrix of "Impacts to Alumni Organizations in a World of Social Networks" (Owyang, 2010). Shown as Table 1, it projects likely outcomes from five approaches that alumni organizations might take to implementing online social tools. This version embeds additional practical learning based on professional practice in alumni relations.

To determine whether resources have been wisely invested, either online or in traditional settings, alumni organizations will need to measure business outcomes more effectively than in the past. A growing movement to establish industry-wide metrics for assessing the results of alumni programming will help professionals gauge the results of their efforts (PCUAD, n.d.).

College and university rankings, while questionable in their accuracy and relevance, are nonetheless influential with the general public, and institutions sometimes fall prey to the temptation to manipulate reported data so as to increase their visibility in ranking schemes (Lederman, 2009). Nonetheless, alumni outcomes could form a valuable component in college rankings, if they were based on reliable data collected in a consistent manner across the education sector. This supports the need for reliable data about alumni, and could exert long-term pressure on institutions

Use Case	Opportunities	Risk	Resources Needed
Do Nothing	None.	Organization bypassed by self- organization becomes irrelevant to alumni who use online tools to find one another, to communicate, and to act around shared interests (cause-driven).	None.
Use tools to talk to them	Use tools to for community management. Listen to alums' needs and wants; use tools to connect individuals (not just organizations) to alumni. Watch evolving behaviors to learn about alumni interaction preferences. Intervene with information of relevance and utility. Use tools to connect alumni to each other (e.g., Twitter Lists; LinkedIn Groups).	Delivering info with low/no relevance, or failing to solve alumni problems/meet alumni needs. Being seen as inauthentic – trying to fit in, forcing the organization's formal identity into an informal, non-organizational context (e.g., Tweeting as "the university").	Part time staff and committed resources in a budget-constrained environment. Commitment, understanding and support for this direction from senior administration and volunteer leadership (including Trustees, Regents, or other high- level governance group).
Ambassador/Marketing Program	Alumni recruit members, volun- teers, and donors via social tools, low cost marketing. Owyang's checklist can be very useful for non-profits.	Most will not want to evangelize; limited control of message	A formalized program; compelling motivation for alumni involvement; understanding that relatively few alumni will be this engaged; public feedback to reward effective champions and advocates.
Aggregation of alumni voices	Inexpensive way to create ongoing content and uplift existing mem- bers. Establish association role as broker or hub of alumni information and relationships- not the "owner" of the information. Example: Stanford's alumni blog directory	Limited message control, content will not be all signal.	Manual or automated aggregation tools (may have a dollar cost). Reliance on consumers' willingness to filter what alumni and institution are publishing.
Organize online and real world events	Facilitate an event that's difficult for alumni to self-organize on their own and that has value or relevance to alumni (e.g., through institution- specific content or privileged access to location or to key people).	Alumni will self-organize instead, forfeiting the convenience of having the institution do the work in order to get control over how the work gets done, who is included, what the cost is, etc.	Utilize existing social tools that offer events management: Facebook events, Eventbrite, Evite, Wufoo, Icebrrg etc.
able 1 Imnacts to Alumni Organ	izations In A World of Social Natura	ke: Fiva Hea Casas	

Table 1. Impacts to Alumni Organizations In A World of Social Networks: Five Use Cases (Revised by Andrew Shaindlin with permission of Jeremiah Owyang. Original version: http://tinyurl.com/alumni-matrix/

to invest in improved data collection and management practices. It might also increase data sharing within institutions as well as maintenance to keep records accurate. Finally, regular alumni outcomes surveys might provide a feedback loop to institutional managers, allowing for the creation of more student and alumni programs that carry greater relevance and meaning for students and alumni (Dwyer, 2009).

The power-law distribution in Figure 2 engenders a final question. Do alumni organizations need to continue trying to satisfy all alumni, if only a small fraction is inclined to high engagement? For organizations willing to pursue a narrower scope of alumni outreach, there is a suitable existing model to emulate: major or principal gifts fundraising. These programs focus on the largest donations the institution expects to receive from alumni and friends, often tens of millions of dollars each. These fundraisers focus their attention on a small subset of likely or past donors, with the intention of establishing relationships with those most likely to give.

Conclusion

Alumni organizations should consider marketing and delivering their programs and services to the small segment of the alumni population that is most likely to participate, instead of expending resources on high overhead functions with small returns, such as sending printed event and membership marketing materials to all alumni. While the number of alumni targeted for engagement would be only a small segment of the total alumni population, it would be the segment most motivated to participate, who would gain the most satisfaction from overtures by their alma mater. Therefore it is the segment that would return the largest return on investments in alumni communication and outreach.

A fruitful avenue for further research would be a systematic approach to measuring alumni networks using social network analysis (Kilduff & Tsai, 2003; Uzzi & Spiro, 2005). Specifically, alumni organizations should model the expected evolutionary progress of online communities to determine how to allocate resources to their growth and management. Existing research has identified the types of behaviors common in public online communities, such as the popular photo-sharing site Flickr.com (Kumar *et al.*, 2006). However, it is not known whether online groups of homophilous populations such as university alumni would evolve in the same way. Structured experimentation and measurement would answer that question.

This research would inform the debate over whether, for example, traditional printed alumni magazines should continue to print their well-known Class Notes, given the expense, long lead times, and staff oversight required to do so. Given that many alumni do not belong to online communities, some fundraisers worry that printed class notes are the only way for alumni to keep in touch offline. In particular, older, more affluent alumni tend to be an institution's largest donors, but also tend to be online in smaller numbers than younger, less affluent alumni.

Related areas for research include the application of the predictive "tie strength" methodology to large sample populations of alumni in sites such as Facebook (Gilbert & Karahalios). It is likely that individual graduates' ties to alumni organizations provide alumni with more opportunities to activate (and to benefit from) weak social ties. The scale and degree of this likelihood has not yet been measured.

It is perhaps ironic that because weak ties have latent value for individual

alumni network members, an increase in the number and availability of weak ties makes the network "stronger." Novel information, untapped sources, and creative connections deliver utility to network members (Granovetter, 1983).

Conversely, alumni organizations have the opportunity to use smaller, denser, more closely-connected subgroups of alumni within the larger network to broadcast information "such that it only passes through trusted friends" (Gilbert & Karahalios, p. 9). So-called "viral" messages spread through the network organically and with little friction, according to Coase's model of efficient information transfer (pp. 17-18 above). This means that smaller, denser alumni social networks increase the success rate of broadcast messages relative to effort expended. In short, tie-strength analysis and research holds promise for alumni organizations with potential access to large databases of alumni connection information (Gilbert & Karahalios, p. 9).

A final area for further research may shed light on alumni engagement metrics. Measuring alumni engagement is not yet established with any methodological rigor. While the power-law curve proposed in Figure 2 provides a starting point for thinking about alumni engagement, specific existing frameworks will yield quantitative results that can be rigorously tested. One such framework is the Lorenz Curve, used by economists to describe income distribution across a population (Gastwirth, 1971).

A recent analysis of online community discussion uses the Lorenz Curve to assess what fraction of content was contributed by what fraction of the community (M. Wu, 2010). This can be applied to alumni communities, and can be used not only for measuring discussion forum activity, but also for other behaviors that can be assessed online, such as those used to predict network tie strength among Facebook members (Gilbert & Karahalios, 2009).

Not every idea proposed here will provide a benefit to most institutions, but a constant flow of new ideas is likely to generate a few valuable ones. Linus Pauling, the famous molecular chemist, noted that the way to have a "good" idea is to have many different ideas (Touchette, 1990).

To keep pace with the rapidly changing landscape of alumni community engagement, alumni organizations must brainstorm ways to use socio-technical tools to help them achieve strategic goals. They must also make sure that the activities and programs they offer to alumni are relevant to alumni needs and, where possible, unique to the institution itself. Finally, they must accept the loss of their historical control over the flow of information among the institution and its constituents. Although the familiar ways of interacting with alumni have changed forever, new tools and new attitudes may yet prove an even greater boon to educational institutions' advancement efforts.

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