

**INTERORGANIZATIONAL MONITORING:  
PROCESS, CHOICES, AND OUTCOMES**

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## **ABSTRACT**

Researchers have traditionally investigated aspects of the interorganizational monitoring process in piecemeal fashion. This conceptual piece argues that juxtaposing the categorization process with interorganizational emulation, imitation, and competition, brings focus to organizations' attempts to acquire information from other organizations, signal internal and external constituencies, and ultimately change. We argue that the depth or intensity with which the monitoring process is pursued, as well as the breadth or degree of overlap in the sets of organizations chosen to monitor, determines the volume and diversity of information acquired, the strength of the signal sent to constituent groups, and the amount and type of change likely to emerge from the process. All of these factors will ultimately affect the firm's future performance.

As organizations compete in ever more complex and uncertain environments, managers increasingly confront the need to change their organizations in response to competitive pressures and to exploit emergent opportunities. This stretches the ability of organizations to gather relevant information, learn quickly, and initiate changes. One important source of learning is from other organizations in one's environment, so keeping track of other organizations and what they are doing has become increasingly important. We call this process of tracking other organizations *interorganizational monitoring*. Specifically, interorganizational monitoring involves the systematic comparison of a focal organization to other organizations with the goal of collecting information in order to affect organizational change. It is a continual process through which organizational members scan their environment, identify other relevant organizations, collect information about and from those organizations, compare their organizations to others, interpret what they learn, and ultimately use that information to make changes.

Interorganizational monitoring presents a great number of choices as to which organizations to attend to and learn from, and also which to ignore. Previous research has examined some aspects of the choices that managers make in interorganizational monitoring; for example, which organizations they categorize themselves as similar to (e.g., Baum & Lant, 2003; Reger & Huff, 1993), which organizations are recognized as direct competitors (e.g., Porac & Thomas, 1990), which organizations they aspire to be like (e.g., Gioia & Thomas, 1996), and which organizations' processes they will imitate (e.g., Haunschild & Miner, 1997). The cognitive perspective employed in studying interorganizational monitoring recognizes that all of the above choices involve categorization, filtering, and selective attention to a smaller subset of organizations that are deemed relevant in some way to the focal organization.

In this conceptual piece, we explore the potential difference between organizations whose top managers view the organizations that they choose to monitor for each of these purposes (categorization, competition, emulation, and imitation) as an undifferentiated, overlapping set, versus organizations whose managers select different organizations for these different purposes. That is, some organization's managers make choices that reflect a high degree of overlap between organizations against whom they compete, emulate, and imitate. Other organization's managers make more disparate choices in the organizations against whom they compete, emulate, and imitate – they might imitate the processes of one organization, while competing against a second, and striving to be like a third.

While some might consider these processes to be virtually identical, there are subtle but meaningful differences between the constructs, and we show that these differences will have consequences for the interorganizational monitoring process, and for subsequent organizational change. Table 1 provides definitions as well as some similarities and differences between these four constructs. Briefly, *categorization* is the process through which sets of objects are associated and viewed as similar on certain dimensions (e.g., Dutton & Jackson, 1987). *Competition* is the rivalry between organizations striving for the same set of scarce resources (e.g., Porter, 1980). *Emulation* is the striving to equal or surpass a comparison organization or organizations on a set of strategic qualities or features (Labianca, Fairbank, Thomas, Gioia, & Umphress, 2001). *Imitation* is the process of copying certain practices or features of another organization (DiMaggio & Powell, 1983). While emulation is striving in a general sense, imitation is the act of changing to be like another organization in terms of a specific feature – imitation is more action-oriented than emulation, and it is more specific (Labianca et al., 2001).

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Insert Table 1 about here

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Because previous research efforts have not examined categorization, competition, emulation and imitation processes in concert, they have not been able to reveal how managers' perceptions of the coupling between these processes can affect monitoring choices and subsequent changes to their organizations. Previous research has also focused on categories of organizations being monitored, rather than the specific choices of organizations to monitor. Thus, our main contribution is to explain the differences between these aspects of interorganizational monitoring and to argue that the degree of overlap in specific organizations to monitor has implications for the diversity of the information acquired through the monitoring process, thereby shaping the changes that managers ultimately make.

### **The Interorganizational Monitoring Process**

We begin by describing the interorganizational monitoring process illustrated in Figure 1, which involves discussing the similarities and differences between the related sub-constructs of categorization, competition, emulation, and imitation.

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Insert Figure 1 about here

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**Categorization.** Categorization is the process through which sets of objects are associated and viewed as similar on certain dimensions (Dutton & Jackson, 1987). As organizations seek to define their essential identity (“who are we?”) as well as the basis of their competitive advantage (“how are we unique?”), they scan their environment and identify other organizations as somehow similar or dissimilar. As the members of an organization compare their organization against others, they classify it as similar to some referent organizations and recognizably different from others on a variety of factors (Albert & Whetten, 1985). Managers categorize other organizations in their

environment relative to their own organization based on similarities and differences in both structural and organizational identity factors (Dutton & Jackson, 1987; Labianca et al., 2001; Porac & Thomas, 1990; Reger & Huff, 1993; Reger & Palmer, 1996). The structural factors represent major resource-based constraints, such as organizational size and geographic location (Baum & Mezas, 1992; Haveman, 1993; Ingram & Roberts, 2000), while the identity-related factors involve differences around the core values of the organization's members (Labianca et al., 2001). At the same time, other organizations are scanning them and attempting to make the same judgments. This provides organizations with a looking-glass self (Cooley, 1902) – not only can the members of an organization categorize their organization in a certain way, but they can also view how the members of other organizations view and categorize them. These outsider judgments also become part of the input into an ongoing categorization process. That is, the members of the organization come to view their organization as outsiders view it (Dutton & Dukerich, 1991).

Over time, and across the many organizations competing for the same resource set, these referent classification schemes become a means to describe organizational variation within an industry or a field (Porac, Thomas, & Baden-Fuller, 1989; Porac, Thomas, Wilson, Paton, & Kanfer, 1995). Essentially, members of many organizations are scanning each other and deciding that they are similar to some, different from others, and this categorization process forms the basis of cognitively constructing the strategic groups in an industry (Reger & Huff, 1993; Reger & Palmer, 1996; Porac & Thomas, 1990).

**Aspiration discrepancy.** The process of categorization is dynamic. While members of an organization and its environment might view the organization as being associated with a certain category, there might be a desire of organizational leaders to have their organization viewed by its members and outsiders as part of another category. When that happens, the organization's top

managers sense an aspiration discrepancy, or a difference between their aspirations for the organization and how outsiders view them. For example, Gioia and Thomas (1996) conducted a qualitative analysis of a large public university whose top managers intentionally initiated an aspiration discrepancy in order to motivate strategic change. At the time, the university was a well-regarded, major public research university with a solid reputation, but it was not considered to be among the elite public universities nationwide. The top managers of the university they studied chose becoming “a top ten public university” as their guiding aspiration. The perceived discrepancy between that aspiration and the organization’s current categorization created pressure for action to change. Subsequent to the university’s top managers communicating that new vision throughout the university, its members began to ask what should be done to achieve it. This led to a decision to increase interorganizational monitoring of universities considered as part of that desired category (“top ten public universities”).

In contrast to the Gioia and Thomas study where top management intentionally caused the aspiration discrepancy, Elsbach and Kramer’s (1996) qualitative study of elite business schools focused on external threats to an organization’s self-categorization. They found that top administrators of elite business schools were forced to react to threats to their schools’ reputational status arising from business school ranking publications such as *BusinessWeek*. The aspiration discrepancy created the need for them to alter the schools they categorized themselves as being similar to so that they could reaffirm their organizational identity and blunt negative news about their perceived reputation. For example, one business school that had previously claimed to be among the top ten but that was now ranked well below the top ten began to categorize itself as a top small business school, thus comparing itself to a narrower range of other business schools among which it could maintain its relative standing.

**Desired outcomes.** Gioia and Thomas (1996) found that the choices of what universities to monitor led top managers to copy key features that were idiosyncratic to those universities, which in turn resulted in major, multi-million dollar changes in the university, including the launching of a new professional school for information technology. Those changes were directly attributable to the amount and type of information the university acquired through the interorganizational monitoring process. That process occurred within a “fishbowl” in that the choice of whom to monitor sent a strong signal to both internal and external stakeholders about the extent and type of change they were seeking to make to the organization. Thus, we would expect top managers to attempt to anticipate the consequences of their monitoring choices on the changes that they envision (to the extent to which that is possible). We would also expect them to choose to obtain an amount and diversity of information that is dependent on the extent and type of change they desire, and their choices to send a signal to internal and external stakeholders concerning the magnitude of the desired changes (Gioia, Schultz, & Corley, 2000). We now turn our attention to describing the different possible outcomes that top managers might seek through the interorganizational monitoring process.

### **Outcomes Derived Through the Interorganizational Monitoring Process**

**Information acquisition.** As top managers sense a greater aspiration discrepancy, they face a greater amount of uncertainty (Gioia et al., 2000). One way to reduce uncertainty is to increase the amount and/or type of information on which to base decisions (Galbraith, 1977). Top managers will seek advice from their counterparts in other organizations (McDonald & Westphal, 2003) as well as observe the actions of other organizations to learn from them (Argyris & Schon, 1978; Nonaka & Takeuchi, 1995). As they attempt to learn from others, top managers make

choices concerning the resources they will allocate to the monitoring process, which will affect the *amount* of information they acquire. They also make choices about which organizations they will monitor, which will affect the *diversity* of information they acquire. If they choose organizations that they categorize as different from their own, it is less likely that these organizations will obtain their ideas and information from the same redundant sources. This greater non-redundancy will increase the diversity of information they obtain (Burt, 1992, 2000; Rindfleisch & Moorman, 2001).

**Internal Signaling.** The choices managers make concerning their interorganizational monitoring process affect their organizations' members. As members gain experience in their respective organizations, they categorize their organization relative to others in the environment. That categorization serves as one basis for organizational identity (Dutton & Dukerich, 1991). Organizational identity constitutes the central and enduring qualities unique to every organization (Albert & Whetten, 1985). Organizational identity defines "who we are" for organizational members, and "how we are unique" relative to others. While fundamental organizational change often requires changing an organization's identity, it is resistant to change (Dutton & Dukerich, 1991). Thus, it is important that organizational members first understand and accept changes to their organization's identity. One way to facilitate such a change is for top managers to overtly change the organizations that are monitored. For example, Gioia & Thomas (1996) found that by changing the universities that were being monitored to a more elite set of universities ("top 10 public universities"), a greater pressure for changes began to occur within various areas of the university. This illustrates the importance of the mere choices of who to monitor, independent of any effort being expended on monitoring, as a signal to organizational members of the desire for change.

**External signaling.** The signaling effect of monitoring choices is not limited to internal stakeholders, but also extends to external stakeholders and the broader market (Lee, 2001). The status-based model of market competition (e.g., Podolny, 1993) suggests that the perceived quality of an organization's products and services is enhanced through its affiliations with higher-status organizations. Accordingly, top managers' monitoring choices serve as an indicator of an organization's desire to be affiliated and categorized with higher-status organizations, which in turn affects the perceptions of people outside the organization and the way they will categorize it. At other times, top managers might choose to monitor organizations that are of equal or lower status in an effort to defend their identity against a threat (Labianca et al., 2001; Porac, Wade & Pollock, 1999). In those instances, outsiders' perceptions will result in a different categorization – one that affiliates the organization with a less prestigious set, but one in which the organization outshines the other members of the category. These choices amount to making decisions about whether to be a small fish in a big pond, or a big fish in a small pond.

**Change.** The amount and diversity of information acquired through the interorganizational monitoring process, and the strength of the internal signal that is sent by the choices made, will affect the extent and type of organizational change. By extent of change, we mean the number of aspects of the organization – input, process, and/or output activities – affected by the change. By type of change, we are referring to first versus second order change (Bartunek & Moch, 1987). First order changes are incremental modifications of established ways of doing things, while second order changes challenge existing models and assumptions about the way things are currently done.

**Performance outcomes.** After a change or changes have been implemented, internal and external constituencies must recognize the organization as belonging to the intended category in order for the change to be considered successful by top managers. Regardless of whether the

performance outcomes are deemed to be successful from the standpoint of the focal organization, however, the process begins anew with a comparison of its existing and aspiration categorization.

**Interorganizational monitoring profiles.** We argue that interorganizational monitoring can be characterized by its depth and breadth. By *depth*, we mean the richness and intensity with which monitoring is pursued – issues of how much of an organization’s resources (e.g., money, people, time) is committed to monitoring and for how long, how often the organization engages in monitoring, and the extent to which information is being sought from the environment to help solve complex, ill-defined, and difficult to quantify internal organizational issues. Organizations can range from low-intensity monitors that idly observe the organizations in their environment, but are mainly internally focused, to high-intensity monitors that actively track and integrate information acquired from interorganizational sources. At this end of the spectrum, these organizations may form learning partnerships with other organizations. An example of low-intensity monitoring behavior is for an organization to only access publicly available information on other organizations in its environment on easily quantifiable topics (e.g., annual reports, salary surveys, trade publication articles). An example of high-intensity monitoring behavior is for an organization to engage in reciprocal site visits and information exchanges with other organizations in order to encourage process improvements.

In addition to affecting the volume of information acquired, the intensity of monitoring efforts will also have a signaling effect on both internal and external constituents concerning the extent of change that is coming, and top management’s commitment to that change. When organizations decide to pursue high-intensity monitoring, the extensive resource commitments are more likely to make the monitoring effort visible to both internal and external constituents because costly signals are more noticeable, and these costly signals relate a desire to focus on increased

quality (Milgrom & Roberts, 1986). This signals that the organization is actively seeking information that might be used to initiate change.

The interorganizational monitoring process's *breadth* is the extent to which the sets of organizations chosen to compete against, emulate, and imitate intersect. Where there is high intersection (or overlap) between the three constructs – that is, where the focal organization monitors only its direct competitors, only aspires to be like the members of its competitive set, and subsequently imitates only its competitors – the breadth of interorganizational monitoring is low. It is much more likely that the information sources that these other organizations have access to will be redundant, the variety of information acquired will be constrained, and the potential opportunity for diverse ideas and information to enter the organization will be limited (Burt, 1992, 2000; Uzzi, 1999). Conversely, when there is little overlap in the sets of organizations being monitored, the diversity of information that might be considered when considering changes will be greater because of less redundancy, more variety, and greater exposure to different ideas.

**The interaction between interorganizational monitoring's depth and breadth.** The effort with which interorganizational monitoring is pursued (i.e., its depth) and the degree of overlap between the sets of organizations chosen to monitor (i.e., its breadth) will have not only direct effects on information acquisition and signaling, but will interact as shown in the two-by-two diagram presented in Figure 1 to determine subsequent change and performance outcomes. These are two separate continua, and organizations can be high, low, or moderate on both the depth and breadth of their monitoring process. For the purposes of describing the effects of these choices, we have created four interorganizational profiles by considering depth and breadth together. We believe that differences in organizations' placement on these two continua will lead to differences in information acquisition and signaling, and ultimately affect the type and amount of

organizational change, as well as the organization's future performance. At any point in time, we can categorize organizations as fitting into one of these four profiles.

**Profile 1: High intensity/Low overlap.** This interorganizational monitoring profile represents one extreme in that the organization is placing a great deal of effort into monitoring other organizations, but the organization implicitly or explicitly views the various constructs as being different processes, and thus selects different organizations for each purpose. Thus, while an organization's members emulate one organization and imitate another, they don't view either to be a direct competitor. Interorganizational emulation, imitation, and competition are distinct activities in the minds of the top managers.

The consequences of this high intensity/low overlap interorganizational monitoring profile will be high information acquisition, strong signaling of the importance of the change, and second-order organizational change. Information acquisition will be high because there is a great deal of resources being expended on collecting information from other organizations. The information acquired will be more diverse because it is coming from a greater variety of non-redundant sources than would be the case if there was high overlap among the sets of organizations that are emulated, imitated, and against which they compete (Burt, 1992, 2000). Having greater information diversity is more likely to lead to second-order change (Bartunek & Moch, 1987). By exposing themselves to a wider variety of processes, procedures, and values, it encourages organizational members to reexamine their own processes, procedures, and values in a deep way that can lead to second-order change – challenging existing models and assumptions about the way things are currently done.

There will be strong signaling to internal and external groups because the organizational members are being very deliberate in their choice of organizations to monitor. They are intentionally creating some discrepancy between the different monitoring constructs. For example,

while the organization might compete against one set of organizations, by emulating an entirely different set, it might send a signal to internal and external groups that there is a desire for a greater amount of second-order change to break the current categorization pattern in the industry.

Ultimately, by collecting a great deal of information generated by a broad and different set of organizations, the proposed changes are likely to be extensive and of the second-order variety. The organization's internal and external groups will have been prepared by the signaling throughout the process that this type of extensive, second-order change was being sought and will now take place.

*Proposition 1: High intensity and low overlap interorganizational monitoring will be related to strong signaling to internal and external constituents, high diversity of information acquisition, and extensive, second-order change.*

**Profile 2: Low intensity/High overlap.** This interorganizational monitoring profile represents the opposite extreme in that the organization is both placing little effort into monitoring other organizations, and the organization views the various constructs as being essentially the same process. Thus, they emulate, imitate, and compete with the same organization or set of organizations, and these activities are not distinct in the minds of the top managers.

The consequences of this type of low intensity/high overlap interorganizational monitoring profile will be low information acquisition, weak signaling of the commitment to change, and ultimately the reinforcement of the status quo through the pursuit of, at best, limited first-order change (Bartunek & Moch, 1987). Information acquisition will be low because they are not devoting attention to collecting information from other organizations. The information acquired will be homogeneous because it is coming from a narrow, limited set of fairly redundant sources (Burt, 1992, 2000). Further, limiting the organization's search for information to, for example, the

same set of organizations against which it competes, constrains the organization's ability to learn from the best (Jennings & Westfall, 1992).

There will be weak signaling to internal and external groups of the need and commitment to change in organizations in this quadrant. The low intensity of the monitoring will send the message to internal and external groups that there is not a strong need to learn from other organizations. Also, because the same organizations are always viewed as monitoring choices to satisfy all of the diverse needs of an organization's monitoring efforts, there will be a signal that there is very little deliberation in their choice of organizations to monitor. Further, it sends a signal that the current categorization of the industry or field will not be challenged in any way by the organization's future actions. Ultimately, by collecting a little external information from a narrow, homogenous set of organizations, any proposed changes are likely to be minimal and, at best, incremental, first-order changes – incremental modifications of established ways of doing things (Fox-Wolfgramm, Boal, & Hunt, 1998).

*Proposition 2: Low intensity and high overlap interorganizational monitoring will be related to weak signaling to internal and external constituents, low diversity information acquisition, and minimal, first-order change.*

**Profile 3: High intensity/High overlap.** This interorganizational monitoring profile implies that the organization is placing extensive effort into monitoring other organizations, but the organization views the various constructs as being essentially the same process. Thus, they emulate, imitate, and compete with the same organization or set of organizations, and these activities are not distinct in the minds of the top managers. The consequences of this type of high intensity/high overlap interorganizational monitoring profile will be high information acquisition,

moderate signaling of the commitment to the change, and ultimately first-order changes focused on continuous improvement of existing ways of doing things (Fox-Wolfgramm, et al., 1998).

Information acquisition will be high because there is a great deal of resources being expended on collecting information from other organizations. However, the information will be homogeneous because it is coming from a narrow, limited set of redundant sources (e.g., Burt, 1992, 2000). The high intensity of the monitoring will send the signal to internal and external groups that there is a need to learn from other organizations. However, because the same organizations are always being discussed as monitoring choices it sends a signal that the current categorization of the industry or field will not be challenged in any way by the organization's future actions. Ultimately, by collecting a lot of external information from a narrow, homogenous set of organizations, any proposed changes might be numerous, yet operational or incremental in focus. Rather than being second-order changes, as in the high intensity/low overlap quadrant, this profile is more appropriate for organizations desiring to enhance performance incrementally through first-order changes (Fox-Wolfgramm, et al., 1998).

*Proposition 3: High intensity and high overlap interorganizational monitoring will be related to moderate signaling to internal and external constituents, low diversity information acquisition, and extensive, first-order change.*

**Profile 4: Low intensity/Low overlap.** This interorganizational monitoring profile implies that emulation, imitation, and competition are distinct activities in the minds of the top managers, but that the organization is not placing extensive effort into monitoring other organizations. The consequences of this type of low intensity/low overlap interorganizational monitoring profile will be low volume and high diversity information acquisition, weak signaling of the importance of change, and ultimately little change, with the hope or desire to pursue second-order change at some

point in the future. This is indicative of an organization that is floating trial balloons – there is some signaling that they are aspiring to be in a different category than they are currently in, and they are exploring the possibility of second-order change, but they are not able or willing to commit resources to move ahead with information acquisition.

Information acquisition will be low in volume because there are few resources being expended on collecting information from other organizations. But the high diversity in information acquisition suggests a desire to categorize the organization differently within the industry or field. Because resources are not yet being committed, it might indicate that the organization is still in a preparatory stage for future change. The lack of resource commitment to the monitoring effort acts as a signal to internal and external groups that the organization is not yet serious about change (cf. Lee, 2001; Milgrom & Roberts, 1996).

*Proposition 4: Low intensity and low overlap interorganizational monitoring will be related to weak signaling to internal and external constituents, high diversity information acquisition, and little organizational change.*

### **Monitoring profile dynamics**

We have described interorganizational monitoring profiles in a fairly static manner. But these profiles can be considered a snapshot during a particular moment in the organization's evolution in monitoring, and we expect that organizations will alter these profiles over time. For example, when organizations identify a large discrepancy between their performance and their aspirations, they are more likely to pursue more radical, second-order change (Argyris & Schon, 1978), and this will likely precipitate moving from an interorganizational monitoring profile emphasizing lower intensity and higher overlap toward one that is higher in intensity and lower in overlap. Once the discrepancy between performance and aspiration is somehow reduced, we would

expect those organizations to stabilize during a period of incremental, first-order change (Tushman & Anderson, 1986), which is more likely to result in higher overlap in the sets of organizations chosen to monitor or perhaps in a reduction in the intensity of the monitoring process.

### **Constraints on the interorganizational monitoring process**

To this point, we have discussed the interorganizational monitoring process as if managers have the freedom to choose their monitoring profile at will. However, there are numerous resource, political, and cognitive constraints that hamper a top manager's ability to dedicate resources to monitoring, or to alter the overlap between the different monitoring processes (Kraatz, 1998; Reger & Palmer, 1996).

*Resource constraints*, including money, people, and time, will obviously come into play as an organization decides the intensity and overlap of its interorganizational monitoring efforts. Perhaps the only reason that an organization employs Profile 4 (low intensity, low overlap) rather than Profile 1 (high intensity, low overlap) is that, despite the desire for extensive, second-order change, there are insufficient resources available to commit to the effort at that particular point in time. Time constraints also challenge an organization's ability to comprehensively monitor the environment. Given sufficient time to affect changes, administrators might choose to monitor other organizations more broadly and deeply, having the luxury to exercise care in the process of collecting, evaluating, and acting on that information. On the other hand, in the face of time pressures, administrators might limit the breadth and/or depth of information sought (March & Simon, 1958).

*Political constraints* often come into play as the organization decides on the intensity of the monitoring process and the degree of overlap in the sets of organizations it monitors. The values and beliefs of important constituents concerning their organization's central, distinctive, and

enduring qualities can serve as the basis of some constraints (Dutton & Jackson, 1987; Dutton & Dukerich, 1991; Elsbach & Kramer, 1996; Labianca et al, 2001). For example, a business school that is highly ranked might realize that a low-ranked business school, or a different type of school altogether, such as a for-profit business school, has created an interesting innovation that might improve its performance (e.g., a new technology-based program delivery format). The administrators might want to implement that innovation in their school, but internal groups, such as faculty, and external groups, such as alumni, might view imitating a school that is “behind” them or too “different” from them as illegitimate (Labianca et al., 2001). This creates pressure on management to keep its monitoring choices more tightly overlapped, with the subsequent consequence that learning and signaling are constrained, and the type of change that is pursued is less second-order and more first-order in nature. Political constraints would also occur where some constituencies feel that resources should not be “wasted” on monitoring other organizations, because the information and changes necessary can be generated internally. This might be particularly true where the focal organization is high in status and constituencies feel that external comparisons are irrelevant or illegitimate. Political constraints might also force managers who are under pressure to change their organization to act quickly in an expedient manner when making monitoring choices. Although that pressure might stimulate the process of interorganizational monitoring, it might also act to limit the choices made, which would enable managers to point out progress quickly in order to ease the pressure under which they are operating. In such a situation, the objective of appearing to be changing would have more importance than actual changes that might better serve the organization over time (DiMaggio & Powell, 1983).

*Cognitive constraints* can also affect the degree of overlap in the monitoring process if organizational members have difficulty envisioning how information collected from one set of

organizations can be transferred into their organization. While the ability to acquire diverse information is important, the perceived ability to utilize the information collected is also important (Rindfleisch & Moorman, 2001). This would lead organizational members to argue for higher overlap in the monitoring process because it would allow them to filter out information that might seem to be irrelevant. For example, cognitive constraints might keep organizations from monitoring organizations in other industries. Business schools might be able to learn a great deal about service delivery from monitoring luxury hotels, but cognitive constraints on how to transfer information collected from the hotel industry to academia might lead them to never consider luxury hotels as possible monitoring choices. Further, cognitive constraints can affect the amount and/or type of information being sought. If an organization's attention is focused predominantly inward, it could create a situation whereby administrators would fail to recognize the benefit of outside information to assist with the change process or to improve performance.

Constraints affect not only the choice of monitoring profiles, but also any desired subsequent shift from one monitoring profile to another. For example, an organization with a low intensity and high overlap profile (Profile 2) would have a very difficult time in making the leap to being a high intensity and low overlap monitoring organization (Profile 1) because of the resource, political, and cognitive constraints mentioned above. It is much more likely that an organization that has always emulated and imitated only its direct competitors, and then only in an arms-length manner that did not require a lot of resources, will decide to either increase its devotion of resources to monitoring, but not change the overlap in its monitoring choices, or change the overlap in its monitoring choices, but not alter the devotion of resources to monitoring. That is, it is more likely to move from Profile 2 to Profile 3 or 4 than directly to Profile 1. There is also a learning process that is embedded in the interorganizational monitoring process itself (e.g., "who should we

monitor?” “how should we do it?” “what do we want to get out of the process?”), and attempting to increase both the depth and breadth of the monitoring process simultaneously might be too much for the organization to digest all at once. Learning about how to conduct interorganizational monitoring, and being able to consciously question the organization’s monitoring profile, is an example of third-order change (Bartunek & Moch, 1987), where the process itself becomes a topic for thought, discussion, and debate among the members. As the organization increasingly monitors other organizations that are very different from it, being able to transfer what is learned back into the organization becomes increasingly difficult, and requires increasing understanding of the monitoring process itself.

### **Goizueta Business School case example**

We use the example of Emory University’s Goizueta Business School’s (GBS) recent introduction of a major, multi-million dollar change – the launching of a doctoral program – to assist the reader in grounding the abstract concepts involved in interorganizational monitoring. We offer this example not as a rigorous, in-depth case study, but rather as a platform for illustrating these concepts in a more concrete fashion. The first author, who joined GBS as a tenure-track assistant professor in 2001, created the example by engaging in informal interviews with faculty and administrators involved in the change, through observation of discussions in faculty meetings, and by reviewing the archival documents from the benchmarking committee formed for this change. The first author was not involved in any way with launching the doctoral program, and remained an unobtrusive, impartial observer of the monitoring process at GBS.

### **Monitoring choices for the new doctoral program**

**GBS in 1998.** The top administrators at GBS are faced with the issue of bringing in necessary resources for the continual functioning and improvement of the organization. These resources include funds, students, staff, and faculty. A major component of GBS's five-year strategic plan developed in 1998 was to increase the number of faculty, with particular emphasis on those with greater research productivity and potential. The administrators knew that in order to attract and retain the best research faculty, potential faculty members must view GBS as a viable employment option. At the time, GBS felt that it was competing most closely with Vanderbilt and Washington University for faculty. It was also aspiring to compete successfully with Duke, but was often failing when it came to luring prospective faculty that had the choice between GBS and Duke, as well as other prestigious schools like Duke.

As Emory transitioned from a teaching-focused school to a major research university in the 1980s and early 1990s, new research-oriented faculty members were hired into GBS with the promise that a doctoral program would follow. Administrators wanted to keep that promise in order to retain these faculty members. Administrators also were concerned that GBS be viewed by other academic units at Emory as being actively engaged in knowledge creation through high quality research. The introduction of a doctoral program would generate greater research productivity in GBS and serve as a signal to the rest of the university about the seriousness of the commitment to becoming an elite research business school.

As administrators and influential faculty members pushed for the introduction of a doctoral program, they encountered some resistance at the university level because of the significant resource commitment necessary to achieve that goal. They also encountered some resistance within GBS itself from faculty members who felt that GBS's increased prominence was due mainly

to its investments in the MBA program (e.g., more intensive marketing, improving the career management center, hiring dedicated administrators), which had been steadily climbing in external rankings by business publications, and was viewed as a “top 30” program by the late 1990s. For example, GBS’s MBA program ranking at *BusinessWeek* went from a “second tier” program in 1996 to a ranking of 28 in 2000. More importantly, the business school’s ranking in *U.S. News and World Report*, which was heavily reliant on other business school deans’ ratings of the school’s quality, also improved dramatically. These faculty members felt that resources should continue to be funneled into enhancing the quality of the MBA program, as reflected in those external rankings, rather than diverted into an expensive doctoral program.

GBS administrators and faculty members wanting to create the doctoral program pointed out that GBS had a publicly stated goal of being a “top 20” business school. Yet, every one of the “top 20” business schools (with the exception of Dartmouth’s Tuck School) had a doctoral program in business. They used this as a political tool to convince internal faculty members that only focusing on the MBA program was no longer an option if GBS wanted to continue to climb in reputational status. They also pointed out to the university as a whole that when faculty members were going up for promotion and tenure, they were being compared to colleagues at other “top 20” schools, and yet they didn’t have similar research resources in the form of a doctoral program. Further, they continued to note that it was becoming increasingly difficult to attract faculty from other top schools and doctoral programs to GBS because of those potential faculty members’ expectations that a top business school would have a doctoral program.

**GBS in 2000.** Ultimately, the decision was made to create a doctoral program, thus making GBS resemble more closely the “top 20” business schools. At this point, GBS had to decide how the doctoral program would be set up and how it would actually operate. The focus turned to

monitoring other business schools' doctoral programs to determine how to best implement the new doctoral program, and to imitation of their best practices. Figure 2 summarizes the monitoring choices made.

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Insert Figure 2 about here

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The doctoral studies committee chose other business schools to monitor through a process that was both deliberate and opportunistic. Deliberate choices included the University of Central Florida, which had most recently introduced a doctoral program, and Notre Dame, whose recent written proposal for a doctoral program would be useful for creating their own proposal to the university. INSEAD was also chosen to monitor because it had created a successful doctoral program in business only a decade earlier. The University of Rochester was selected because the finance-oriented members of the administration and senior faculty saw that business school's doctoral program, which was only three decades old, as being very successful, and thus worthy of serving as a good model. The doctoral program in finance at Vanderbilt was also examined because the finance faculty there was considered "better" than GBS's, and recent potential hires had chosen Vanderbilt over Emory. The marketing-oriented members of the administration and senior faculty felt that a faculty member at Harvard Business School was particularly successful at creating and maintaining a doctoral program, so he was contacted. Finally, there were some opportunistic choices. Some faculty members from the management area gave talks at Northwestern and Columbia and also used the opportunity to explore the doctoral programs in their business schools, which were regarded as being very successful, and this information was included in the benchmarking effort. It is interesting at this point to note several business schools that might have been expected to be imitated, but were not. Duke, Tulane, and Washington University were

not included as monitored schools for GBS's doctoral program, despite the fact that business schools at these universities all had doctoral programs and were very similar to the GBS on many dimensions, including size, resource availability, private ownership, and values toward research and teaching.

### **Description of the underlying monitoring constructs**

The above example illustrates the monitoring process and the similarities and differences among the different constructs that make up the meta-construct of interorganizational monitoring (categorization, emulation, competition, and imitation). Continuing with the GBS case example, we can see how subtle differences between these processes led to the choices of which schools to monitor.

**Categorization.** The administrators and members of GBS categorized their school relative to other business schools. In the process, they recognized some schools as being very similar to GBS, including Vanderbilt and Washington University. Those schools are similar on many structural and identity-related factors. For example, from a structural perspective, they are private, medium-sized, resource-rich schools. From an identity-related perspective, they have similar values in terms of the relative emphasis they place on research, teaching, and service. They all value high-caliber basic research and outstanding teaching in their MBA programs, commensurate with their national reputations and high rankings in popular business publications. However, GBS differed from these schools by not having a Ph.D. program. This difference was minimized in the minds of internal stakeholders for years because of the overwhelming similarities, which drew attention away from the exception. The flip side of the categorization process is the dissimilarity judgment. GBS does not view itself as being very similar to Wake Forest or Tulane, although they are very similar structurally and on most identity-related factors. The only major factor on which

those schools differ is external reputation with popular business publications (e.g., *BusinessWeek* ranked Tulane's MBA program in the third tier, and Wake Forest's in the second tier consistently through that timeframe). That dissimilarity is exaggerated in the minds of GBS administrators and faculty, and consequently very little attention is paid to these schools for monitoring purposes.

**Aspiration discrepancy, competition, and emulation.** Categorizing is being done not only by internal stakeholders (i.e., deans and current faculty), but also external groups (i.e., prospective faculty and students, other units of the university, and other business schools), and the interplay between internal and external groups' perceptions motivated GBS's change to incorporate a doctoral program (e.g., Dutton & Dukerich, 1991). As GBS's reputation with external rankings improved and they flirted with entering the "top 20," external stakeholders, such as prospective faculty, began to question why GBS didn't have a Ph.D. program like nearly all of the other "top 20" business schools. This was an often-cited reason for a job offer that was declined. Internal groups began pointing out the inconsistency of trying to be a "top 20" business school without a doctoral program, even though they realized that the doctoral program would be an enormous resource drain, and that it might divert attention and resources from the successful and continually improving MBA program that had led to the higher rankings. But as internal groups decided that achieving their next aspiration level – to be a "top 15 business school" – required an improvement in research faculty, they decided they needed to introduce a doctoral program to improve their ability to attract those faculty members. This move also eliminated a competitive disadvantage relative to GBS' key competitor and the school they most sought to emulate: Duke. This illustrates that emulation – the striving to equal or surpass a comparison organization or organizations on a set of strategic qualities or features – is simultaneously done against both aggregates of organizations (e.g., "top 20" business schools), as well as against specific organizations (e.g., Duke). The

emulation process is often anchored against a specific organization that is ultimately almost the mirror image of the organization in terms of structural and identity-related factors (Labianca et al., 2001). Duke is the school that is most similar to Goizueta in most structural and identity-related factors, except that Duke has a higher ranking and more prestige.

**Imitation.** The example also illustrates bandwagon effects on imitation (e.g., Abrahamson & Rosenkopf, 1993; Haunschild & Miner, 1997), and how external groups pressure organizations to copy practices or features (DiMaggio & Powell, 1983). In the highly institutionalized realm of business schools, doctoral programs are taken-for-granted features among most of the top business schools (Meyer & Rowen, 1977). Particularly salient to potential new entrants to the “top 20” are legitimacy concerns, and this leads faculty and administrators to ask, “can we be a legitimate top 20 school if we don’t have a doctoral program?”. This type of imitation is being done at the aggregate level – the focus is on the “top 20” business schools, and not on any one particular school. While emulation is striving in a general sense, imitation is the act of changing to be like another organization in terms of a specific feature – imitation is more action-oriented than emulation, and is more specific (Labianca et al., 2001). We do not mean to imply here that the imitation GBS is employing is “blind” imitation. That is, the introduction of a doctoral program is extremely important and considerable thought has gone into the decision to introduce the doctoral program. However, GBS’s own aspirations to be viewed as an elite generator of business school knowledge is increasing pressure on the school to imitate by adopting a program in order to resemble other elite business schools.

**Specific monitoring choices: Intensity and breadth.** Once the decision was made to move forward with a doctoral program, however, more specific information was needed to actually design and implement such a complex and resource-intensive change. The doctoral studies

committee monitored business schools that had most recently introduced or proposed doctoral programs (University of Central Florida and Notre Dame) because they could obtain documents and information that would assist with the administrative side of proposing and introducing a new doctoral program. On the intellectual side (including program content and delivery), information could not be obtained solely from publicly available sources. At that point, a number of exemplar business schools were selected for monitoring (INSEAD, Northwestern, Columbia, Rochester, Harvard, and Vanderbilt – see Figure 2). These schools were in the “top 20,” but with the exception of Vanderbilt, were not generally regarded as direct competitors, nor did GBS actively seek to emulate them. Rather, they were viewed as having successful doctoral programs that were worthy of scrutiny. Administrators at those schools willingly participated in the monitoring effort, allowing GBS access to information regarding their doctoral programs through site visits and conference calls. One example of something that was learned through monitoring this group was the concept of “DocEd.” Modeled after “ExecEd” programs where faculty members from other schools were contracted to deliver executive education courses at a school, INSEAD had contracted with faculty members from other universities to teach doctoral seminars at INSEAD. INSEAD administrators felt that DocEd had allowed their doctoral program to quickly become well-respected, and had helped increase the number of prestigious placements for their doctoral students by introducing them to faculty at other elite business schools. GBS viewed this as an important innovation that they were interested in adopting.

Interestingly, all of the schools chosen for monitoring on intellectual content outside of Vanderbilt were different in terms of structure and identity when compared to GBS’ closest competitors. They are much larger business schools and have better academic reputations. Not only are they dissimilar from GBS, but they are somewhat dissimilar from one another in their

external reputations (e.g., in the academic programs they emphasize and the instructional methods they employ). GBS did not choose to monitor Washington University's or Tulane's doctoral programs, despite the fact that Washington University and Tulane are both very similar to GBS in terms of structural and identity-related features, and would appear to share many of the same constraints that GBS would likely be facing with its new doctoral program. The doctoral programs were not considered relevant referents because of the relatively lower external reputations of those schools (e.g., *BusinessWeek* ranked Washington University's MBA program 17 in 1998 and 23 in 2004, and Tulane's was ranked in the third tier consistently throughout this period). Another interesting point is that Tulane was also involved in a doctoral innovation similar to INSEAD's DocEd program where Tulane faculty were contracted to go to various prominent South American business schools to teach doctoral seminars for faculty and students. However, GBS did not have access to this innovation because it never even considered Tulane as a possible organization to monitor.

**Signaling.** To some extent, not monitoring Washington University's programs was, intentionally or unintentionally, a signal intended for both internal and external groups that Washington University was an increasingly irrelevant competitor. By the year 2000, GBS administrators were using their monitoring efforts as a signal to their faculty that their aspirations were to emulate "top 15" business schools, not to outcompete the schools "behind" them in terms of status. Although GBS was still in direct competition with Washington University in the minds of the best prospective faculty and students – both of which are important scarce resources on which Washington University and GBS clearly compete directly – GBS was either intentionally or unintentionally signaling a desire to redefine the categories of these external groups, in part by choosing to monitor outside of those competitors.

Once the doctoral program began to be implemented in 2002, GBS began preparing for its new five-year strategic plan. GBS's MBA program had risen in the *BusinessWeek* rankings from a second tier program in 1996 to a ranking of 22 in 2002. By 2004, GBS had a ranking of 20 among U.S. business schools in the *Business Week* rankings and in *U.S. News and World Report's* business school rankings, and GBS administrators began talking about becoming a "top 15" business school. Although GBS had previously emulated Vanderbilt, recent rankings by external business publications had consistently placed GBS ahead of Vanderbilt in the five years since the last strategic plan was created (Vanderbilt's MBA program was ranked 30 by *Business Week* in 2004, down from 24 in 1998, and Vanderbilt's business school was ranked 39 by *U.S. News and World Report* in 2004), and Vanderbilt was no longer considered a school to emulate. Indeed, GBS was considering dropping Vanderbilt as a monitoring target for other issues (e.g., the amount of scholarship money being given to MBA applicants). While GBS administrators were increasingly eager to no longer view Vanderbilt as a direct competitor, they knew that external constituencies (e.g., prospective faculty and students) categorized them together. Duke, meanwhile, continued to be emulated, and remained an organization to closely monitor for other issues. It was expected to remain a major emulation and monitoring target, particularly as GBS's aspirations increasingly targeted becoming more like Duke, which was consistently ranked in the top 10 by major business publications (and was ranked 11 in 2004 by *Business Week*). Therefore, it was not surprising that Duke's dean participated in an external review of GBS as its administrators looked to formulate their next five-year strategic plan in 2003.

**GBS's monitoring profile.** When the decision was made to introduce the doctoral program, significant resources were committed to monitor other schools, including conducting site visits. This indicates a relatively high intensity monitoring effort. GBS emulated Duke specifically

and the “top 20” business schools more generally, competed directly against Duke, Vanderbilt, and Washington University, and imitated aspects of doctoral programs at Harvard, Columbia, INSEAD, Northwestern, Notre Dame, University of Central Florida, University of Rochester, and Vanderbilt when it created its doctoral program. This reflects a relatively low degree of overlap. GBS’s monitoring profile, thus, would be representative of schools in profile one – organizations pursuing extensive second-order change.

**Outcomes: Information acquisition, signaling, change, and performance.** The interorganizational monitoring process in which GBS was engaged pursued multiple outcomes simultaneously. There was a desire to increase the organization’s perceived performance (e.g., its reputational status) by improving its faculty. Over time, this had the effect of successfully re-categorizing GBS from a “second tier” school to a “top 20” school. This necessitated a major and resource-intensive change to the organization – the introduction of a doctoral program. This represented an extensive second-order change for the school because it necessitated changes in what the vast majority of faculty members do at GBS, while altering their roles as professors in fundamental ways (Bartunek & Moch, 1987). The introduction of the doctoral program led to the need to offer Ph.D. seminars, which increased the number of courses offered dramatically, leading to more hiring; the new hires have been more research-focused than previous hires. These new hires have brought with them a norm against relying on a large number of adjunct faculty to teach in GBS programs. The relatively small size of the program meant that Ph.D. students from various areas of GBS (e.g., management, accounting) take courses together, and this has promoted greater interdisciplinary research as the students’ advisors learn of research projects occurring elsewhere in GBS. Faculty members have now taken on the roles of mentors in addition to their previous roles.

The need for change necessitated information acquisition about what was required to operate a successful doctoral program. But throughout the process, administrators were keen to make certain that the monitoring process itself sent the right signals to internal and external groups about the organization's aspirations for its future status and performance (Spence, 1973, 1974a, 1974b). Although signaling might not always be a conscious, stated outcome of the process, it is an important secondary outcome of monitoring. The organization's ability to acquire information and effectively signal important constituent groups will, in part, determine its future performance. The interorganizational monitoring cycle then began anew as GBS looked at its new "top 20" categorization and as its members' aspirations began to evolve to being seen as a "top 15" school.

### **GBS's monitoring profile dynamics**

GBS created a new aspiration to become a "top 15" business school, which broadened the gap between its current performance and its aspirations. This led organizational members to cast a wider net in their interorganizational monitoring in order to affect changes to propel them toward that level. If GBS attains that level, a number of possibilities could occur. One possibility is that GBS will increase the overlap in their monitoring to reinforce the practices and actions that got them to that level. That choice will make GBS vulnerable to other schools that are pursuing radically different approaches to business education because they are in GBS's "blind spot." Alternatively, GBS's administrators might simply reduce the amount of interorganizational monitoring with the assumption that they have learned what they needed to learn from the other organizations in their environment. This option also leaves the possibility of being overtaken by a competitor. Here, however, it is not because the competitor is unnoticed, but rather that not enough effort has gone into understanding how the changes that competitor has implemented are affecting performance. The final option is that GBS sets a new aspiration level and alters its monitoring

profile again. This might actually entail increasing the monitoring effort to an even greater extent than has been done in the past.

## DISCUSSION

We have shown that viewing categorization, interorganizational emulation, imitation, and competition as part of the larger interorganizational monitoring process brings focus to organizations' attempts to acquire information from other organizations, signal internal and external constituencies, and ultimately change. We argued that the depth or intensity with which the monitoring process is pursued, as well as the breadth or degree of overlap in the sets of organizations chosen to monitor, determines the volume and diversity of information acquired, the strength of the signal sent to constituent groups, and the amount and type of change likely to emerge from the process.

Previous researchers in the arena of organizational identity management have focused, as we do, on how internal changes to important elements of an organization, such as its identity, interact with signals sent to internal and external constituents via projected images that ultimately affect reputation (e.g., Gioia et al., 2000). The process they describe is one whereby perceived discrepancies between an organization's current and desired future identity, and its current and future image, creates pressure for action to change both the organization's image and identity. However, their model's black box is in the action phase, where organizational members ask, "should we do anything?" and "what should we do?" (Gioia et al., 2000: 69). Our model contributes to this literature by showing that as an organization seeks information from other organizations in its environment to answer these questions, the choices it makes during the interorganizational monitoring process will affect both the substance and degree of the changes

attempted, as well as the signals projected to internal and external constituents. Organizations that devote a great deal of intensity to their interorganizational monitoring process and that have little overlap in their choices of organizations to monitor are more likely to acquire a higher volume and diversity of information to answer the questions “should we do anything?” and “what should we do?”, and will be more likely to pursue more change, particularly of the second-order type.

Throughout the monitoring process, they will be sending strong signals that significant change is coming (cf., Lee, 2001). In contrast, organizations devoting little intensity to their monitoring process, and having significant overlap in their monitoring choices, are more likely to answer the “should we do anything?” question with a “no,” and “what should we do?” with a “not much” response. There will be very little change, what little change occurs will be more incremental or first-order, and a status quo acceptance will be signaled to constituents by the monitoring process itself.

While previous research on aspects of interorganizational monitoring (e.g., Elsbach & Kramer; Gioia & Thomas, 1996) has examined how organizations categorize themselves into general categories such as “top public universities” and “elite business schools,” the emphasis has not been on exploring specific monitoring choices. We contribute to the literature in interorganizational monitoring by pointing out that while organizations might aspire to be a member of a broad category (e.g., being viewed as a “top 10” school), understanding the particular choices of which organizations to monitor or not to monitor will provide a better understanding of the process by which interorganizational monitoring affects subsequent outcomes such as change and performance. This viewpoint emphasizes that while two organizations might both aspire to be viewed in a category such as a “top 10 school,” the choices of organizations to monitor and the intensity with which to monitor them can lead to very different outcomes.

Our model also contributes to the broader strategy process literature. The concept of strategic intent – deciding on what your position relative to other organizations in your industry is to be – is rooted in cognitive and symbolic processes (Hamel & Prahalad, 1989). That aspiration process is often manifest in language such as “we will become a top 10 business school,” as well as the symbolism of establishing often aggressive goals that require organizational members to stretch their capabilities, which will require long term commitment from the organization. Conversely, other organizations might decide to pursue more modest objectives that are more easily achieved and more short-term in nature. Strategic intent requires managers to choose between these long-term and short-term approaches to competitive positioning. Our model suggests that organizations with a high intensity and low overlap interorganizational profile are more focused on long-term positioning, whereas organizations with a low intensity and high overlap profile are devoting their managerial attention to short-term objectives. The monitoring process reflects the strategic intent of top managers. If they wish to pursue a great deal of second-order change over the long-term, this is likely to be reflected in a high intensity and low overlap profile. However, if political, resource, or cognitive constraints do not allow free choice of the monitoring profile, the choice of a different profile (e.g., high intensity and high overlap) might alter the amount of change and the organization’s strategic intent.

This model also contributes to the literature on cognitive strategic groups (Fiegenbaum & Thomas, 1995; Porac & Thomas, 1990; Reger & Huff, 1993; Reger & Palmer, 1996) by providing insight as to how organizations might move from one competitive category to another in the minds of organizational members and outsiders. By understanding the interorganizational monitoring process and how it results in both perceptual and actual changes, we can continue to move management thinking about strategic groups away from static clusters of organizations constrained

in their mobility by the rigidities imposed by an IO economic perspective (Porter, 1980), and toward strategic groups as dynamic, cognitive categories that can evolve continuously within an industry (Reger & Huff, 1993; Reger & Palmer, 1996) and that can serve as reference groups for strategic action (Fiegenbaum & Thomas, 1995). The interorganizational monitoring process can be one component of organizations' attempts to change their strategic group membership through both substantive changes to the organization, as well as symbolic changes to how they are viewed within their industry. As organizations announce their aspiration goals through whom they are emulating, for example, they are setting in motion the strategic changes that might ultimately lead them from their current standing in one strategic group in the industry to another. GBS's experience illustrates an organization that is in the process of changing its membership to a more elite strategic group within its industry, thereby enhancing its ability to attract necessary resources to improve its future performance.

**Methodological considerations.** Studying the interorganizational monitoring process requires researchers to undertake analyses of an entire industry or field. We would suggest contacting top managers in all organizations within an industry and asking them to reveal how many resources are committed to the monitoring process, and to identify their choices for emulation, imitation, and competition. These choices can be entered in matrix format to create three industry networks (one each for the different choices). The degree of overlap for a particular organization would be the correlation between the choices for each of the three constructs, ranging from 0 to 1. This can be accomplished in UCINET, a network analysis program (Borgatti, Everett, & Freeman, 2003). Researchers will also need to capture the extent and diversity of information acquisition, as well as survey internal groups about signaling by capturing their views on image and identity, and reputational rankings to assess external groups' views of the organization (see

Labianca, et al., 2001, for an example of the methods to employ in researching interorganizational monitoring constructs). We would suggest the use of longitudinal studies to better understand how monitoring is related to organizational change and subsequent performance outcomes.

**Boundary condition.** Our theory is broadly generalizable. We believe that all organizations are engaged in interorganizational monitoring to some extent. Clearly, however, the acquisition of information from other organizations, and the signaling to internal and external constituents, is more critical in certain industries than in others. Meyer and Scott (1983) describe two major types of environments – *institutional* environments, where outcomes are ambiguous, rules are prevalent, and legitimacy is a critical resource for organizational survival, and *technical* environments, where outcomes are more unambiguous, and markets are the primary determinants of performance and survival. We believe that interorganizational monitoring is particularly crucial in highly institutional environments, such as academia, where organizations are rewarded for using correct structures and processes, but where it is difficult to unambiguously determine the ultimate performance of the organization. However, we argue that interorganizational monitoring is a basic process in any organization, regardless of whether the environment is institutional or technical.

### **Conclusion**

A more comprehensive examination of the different aspects of the interorganizational monitoring process can yield insights into the management of change. Rather than focusing on any particular aspect of monitoring, we argue that taking a more integrative approach and understanding how the process affects information acquisition and signaling will better inform practitioners and researchers seeking to understand how organizations learn from other organizations to enhance their change process and ultimately improve their performance.

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**Table 1**  
**Constructs Subsumed Under the Interorganizational Monitoring Meta-Construct**

*Interorganizational monitoring* is the systematic comparison of a focal organization to other organizations with the goal of collecting information in order to affect organizational change. It is a continual process through which organizational members scan their environment, identify other relevant organizations, collect information about and from those organizations, compare their organizations to others, interpret what they learn, and ultimately use that information to affect changes.

| <b>Construct</b> | <b>Definition</b>  | <b>Similarities and differences with other monitoring constructs</b>   |
|------------------|--|--|
| Categorization   | The process through which sets of objects are associated and viewed as similar on certain dimensions (e.g., Dutton & Jackson, 1987)  | Two organizations can be categorized as similar or become associated in insiders' and outsiders' minds, even if they are not in competition (are not striving for the same set of scarce resources).                                   |
| Competition      | The rivalry between organizations striving for the same set of scarce resources (e.g., Porter, 1980).  | Threatening to the organization, specific to identifiable organizations, can be strategic or tactical. An organization might or might not emulate or imitate direct competitors.   |
| Emulation        | The striving to equal or surpass a comparison organization or organizations on a set of strategic qualities or features (e.g., Labianca, Fairbank, Thomas, Gioia, & Umphress, 2001). | Emulation is strategic, broad, and aspirational. Organizations might emulate organizations in a different category entirely.   |
| Imitation        | The process of copying certain practices or features of another organization (e.g., DiMaggio & Powell, 1983).  | Imitation is tactical or operational, and specific. While imitation is action-oriented (active copying), emulation is aspiration-oriented. An organization might seek to imitate organizations in categories that are very dissimilar. |

**Figure 1**  
**A Model of Interorganizational Monitoring**

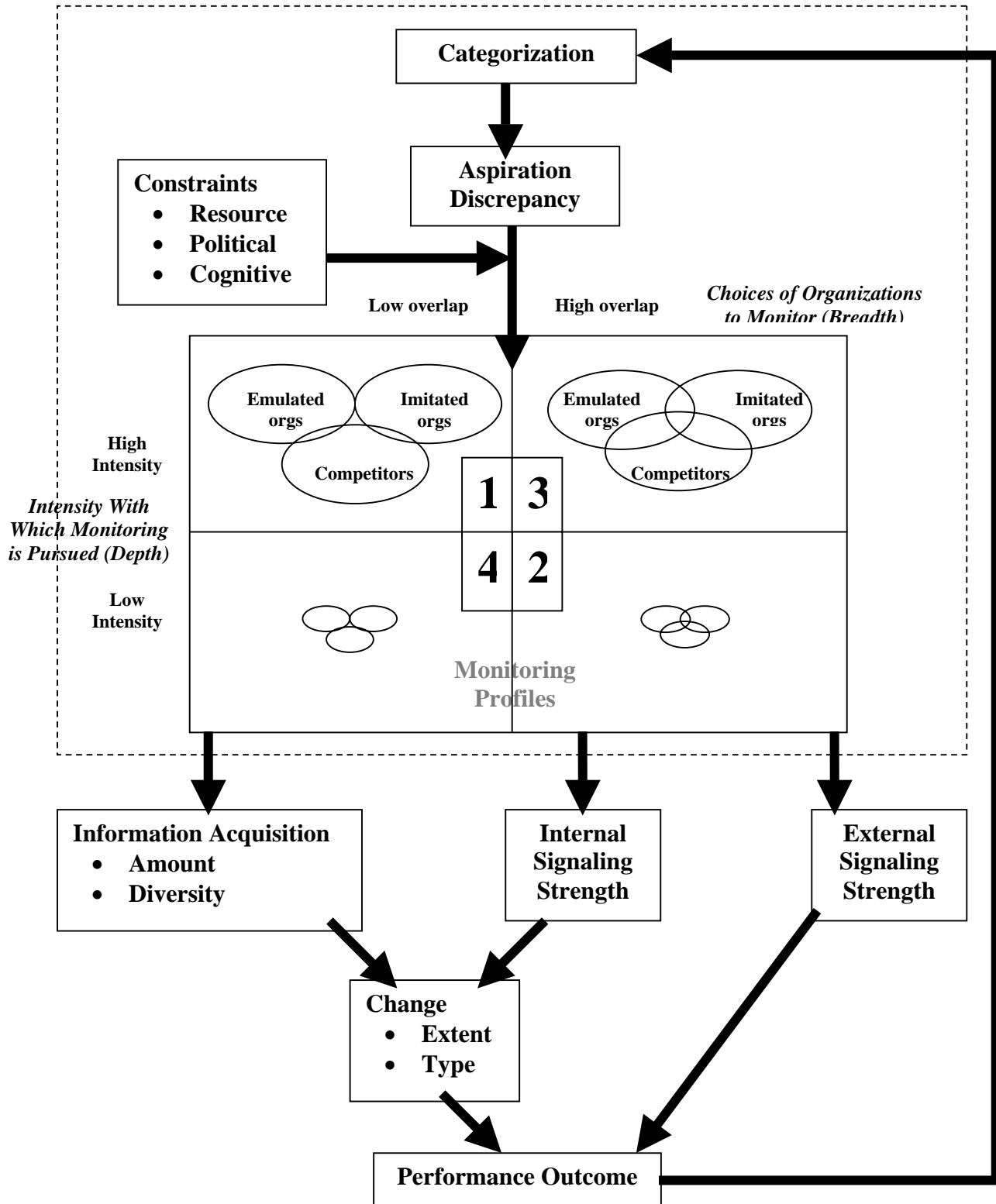
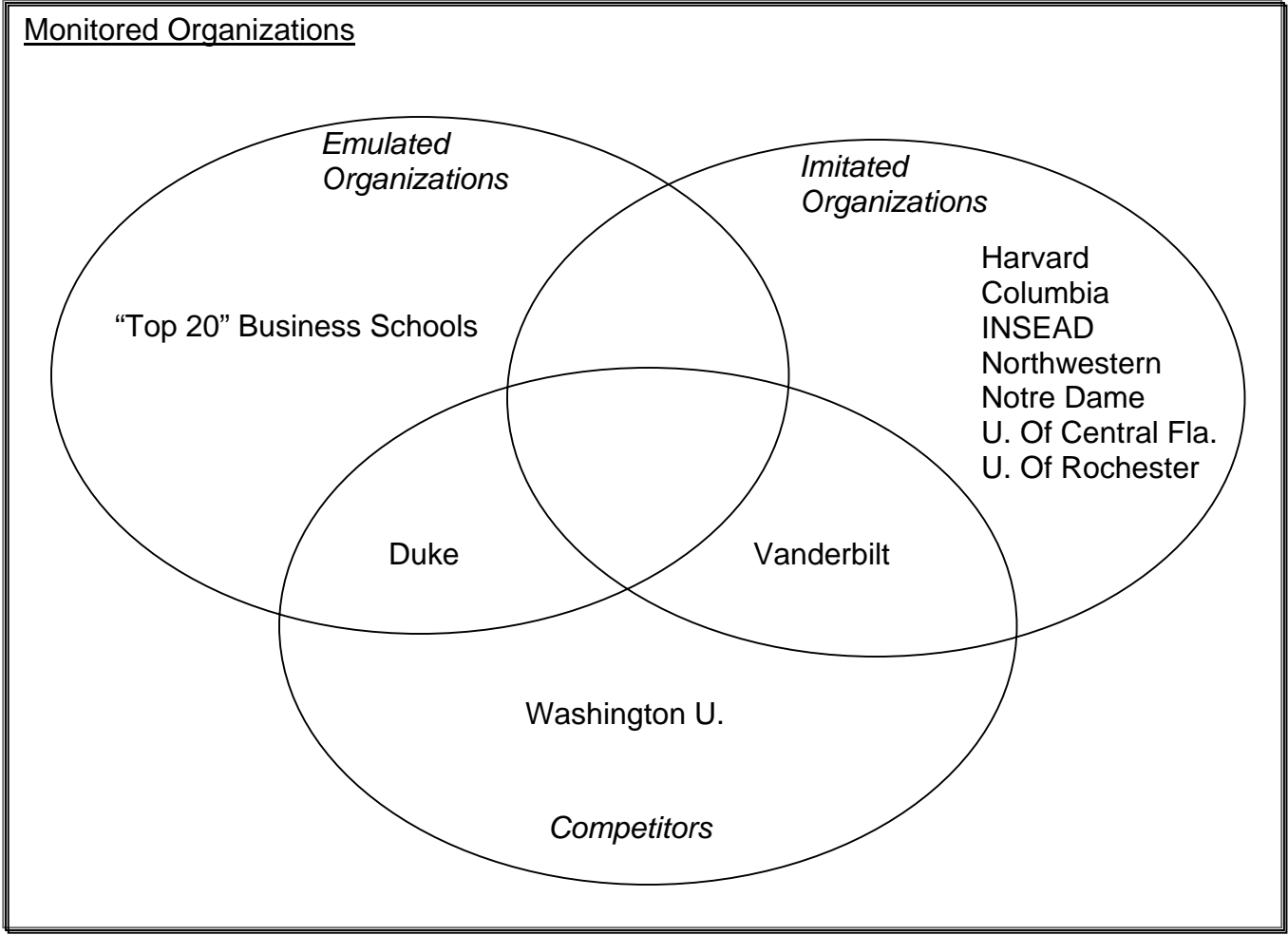


Figure 2

Goizueta Business School's Monitoring Choices  
During Introduction of Ph.D. Program



- Not Monitored
- Tulane
  - Wake Forest
  - Other Southern private,  
Ph.D. granting  
business schools