Rethinking Organizational Design for Complex Endeavors

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The future of Organizational Design (OD) will be shaped by the extent to which the field can address the fundamental organizational design challenges we face in this Age of Interactions (Alberts, 2011). Will we prefer to take the well-paved path directly ahead, perfecting the design processes currently employed to increase the probability that a particular organization is successful in a particular environment? Or will we blaze a new trail, re-conceptualizing the fundamental elements of organizational design in response to a world that is changing the nature of organizations and the capabilities they need to survive?

Reinventing OD partly involves going back to basics to reconsider what we mean by an “organization” and the defining characteristics of its operating environment, the measures of merit or fitness by which the quality of a given design is determined, and the meaning of design itself. While this may be a formidable challenge for the field of OD, only by venturing down this alternate path will we be able to create the agile complex enterprises needed to tackle the pressing security, societal, economic, and environmental challenges we face.

Rethinking the Fitness Measure for Organizations

Organizations in almost all competitive spaces have recognized that their worlds are becoming more complex and are seeking better ways to deal with this complexity. Kates and Galbraith (2007), for example, note that the increasing rate of change as well as the interconnectedness of the environment contribute to the greater complexity faced by their client organizations. Increased environmental complexity and dynamism translate into more ambiguity, less predictability, and greater risks for organizations. Surprises occur with greater frequency, and unfamiliar situations become more common. These trends suggest that we may benefit from changing the way we determine the quality of a particular organization’s design, employing different metrics in the OD process. The traditional metrics used to assess the fitness of an organizational design have been alignment or congruence, coupled with measures of organizational performance calculated under a specific set of circumstances, usually either current circumstances or a predicted set of circumstances. Different measures related to performance, effectiveness, and/or efficiency have been used as a function of the most urgent or persistent problems faced by an organization at its particular stage of development or maturity.

As the level of complexity and the rate of change experienced by the organization increases, the future, both immediate and longer term, becomes less clear. The question faced by the designer ultimately becomes, “What circumstances do we use to evaluate and determine if the design of a particular organization is working or not?” The response to this assessment challenge is usually to add more “scenarios.” That is, instead of assuming that the current situation (scenario) is appropriate and sufficient, the assessment process is enriched by creating some number, usually a limited set, of possible futures. While definitely a step in the right direction, the scenario-based approach provides no real assurance that the planning scenarios used are representative of future challenges. In fact, history has shown that we, as individuals and organizations, find ourselves in situations that we did not anticipate and for
which we are ill-prepared.

One question that needs to be addressed by the OD community is whether or not an organization’s design can itself contribute to it being ill-prepared for the unexpected. That is, to what extent does a particular design make an organization more susceptible to surprise and less able to deal with unfamiliar circumstances? In its more general form, this question is whether or not an OD process is suggesting designs that are, to some degree, less well-suited, or even unsuited, for a complex and dynamic world. A related question is whether or not OD, as currently conceived and practiced, adequately addresses situations where the expected life of a design is relatively short and where a series of design changes is needed to maintain a minimum level of fitness.

It has long been recognized that no single organizational approach works well under all circumstances. Thus, there are circumstances for which any given organizational approach will be ill-suited. Furthermore, as a particular design is fine-tuned (optimized) over time, for a well understood and stable situation, the likelihood that it will not perform acceptably increases if the situation changes. At some point, then, efforts to improve efficiency may actually increase the probability of failure, if and when circumstances change significantly.

Given an uncertain and dynamic future, the ability to successfully cope with changes in circumstances — that is, to demonstrate agility (Alberts & Hayes, 2003) — would seem to be a desirable, even existential, property of an organization. Thus, an organization’s agility is a necessary consideration when assessing the fitness of a particular organizational design. The concept of agility, as used here, incorporates notions of responsiveness, versatility, flexibility, resilience, adaptability, and innovativeness. Individuals, processes, systems, and particular organizational designs that have these characteristics can be called “agile.” Designs that are not agile detract from the organization’s ability to dynamically adapt to its environment.

Organizations are not limited to adopting and keeping a particular organizational design for a given mission, task, or set of circumstances. If an organization recognizes salient features of the situation and selects, from among a set of design options, the one that, if not perhaps the best-suited, would be well-suited, then the organizational design process itself exhibits a measure of agility. Overall, the agility of the organizational design process would greatly increase if the process could (a) sense relevant changes in circumstances and, based upon the nature of the changed situation, determine if the current design options are still appropriate; (b) determine that the current organizational design is no longer appropriate and suggest a more appropriate design option; and (c) effect a timely transition from the current design to a more appropriate one.

This discussion suggests that, as the environment becomes more dynamic and complex, organizational agility becomes more important. Further, an agile organizational design process may need to provide appropriate designs at any given point in time. Hence, the ability of an organization to prosper, if not to simply survive, may depend, at least partially, on the existence of an agile OD process.

FROM ORGANIZATIONS TO COMPLEX ENTERPRISES

When we turn our attention from the micro challenges associated with the fitness of individual organizations operating in a competitive space to 21st-century macro challenges (nuclear proliferation, climate change, failed states, global financial crises, national health policies, disaster relief, cyber-security, etc.) that involve a large number of entities working together, complexity increases in two main ways. The first involves an increase in the complexity of the problem while the second involves an increase in the complexity of the actors.

In the first instance, macro problems involve interdependent, multidimensional spaces that can give rise to unintended consequences, sometimes cascading consequences. To begin to understand the possible consequences of potential actions in such situations, actors will, in many cases, require expertise that they traditionally have not had. In the second instance, overcoming these global challenges is almost always beyond the abilities and the resources of any single entity, no matter how large, capable, or rich. Thus, to both develop the understanding required to craft solution strategies and to implement them, a heterogeneous collection of actors needs to work together in ways that heretofore have rarely been seen.
Collectives of independent organizations, termed complex enterprises, cannot be “organized” in traditional ways. In such collectives, there is no one who is “in charge.” Instead of a single chain of command, there are multiple hierarchies, no one of which is authorized to command the others.

The tasks associated with management or governance are far more difficult in a complex enterprise. In a traditional organization with a chain of command, allocating decision rights – that is, roles, responsibilities, and authority – is rather straightforward once the organization’s routines have been determined. The allocation of decision rights for a complex enterprise (and with these rights, access to “community” resources) needs to be determined collaboratively. Fostering an appropriate pattern of inter-organizational interactions and associated information-sharing behaviors to achieve a desired distribution of information, while certainly not trivial in any organization, becomes quite challenging for a complex enterprise. To date, experiments with organizational designs for complex enterprises have occurred primarily within military organizations and civil-military coalitions (Alberts, Huber, & Moffat, 2010).

Although individual organizations can be quite large and diverse, particularly international organizations, they differ from collectives or complex enterprises in important ways. One major difference is the question of persistence or permanence. The complex enterprises formed in response to a variety of challenges (e.g., international conflict, natural disaster, economic or social crisis) are temporary in nature. Organizations, as we have come to think about them, are designed to persist. As a consequence, our notion of an effective organization is one that grows and becomes sustainable. We need a better understanding of how organizations can be designed to be of the right scale and scope to be immediately effective and then dissolve (or redirect) when the mission is accomplished.

**FROM DELIBERATE TO EMERGENT DESIGN**

The verb “design” implies authority, understanding, process, and control. If any of these four design prerequisites are missing or lacking in some way, then the organizational designs that result may be less effective or less effectively implemented than they otherwise might be. Collectives or complex enterprises differ from organizations in ways that impact all of these design prerequisites. With no one in charge in a complex enterprise, there is no accepted design authority and no control over efforts to adopt (or change) a particular design. These impediments might be overcome if there is sufficient shared understanding among the actors about the nature of the complex endeavor, the environment in which the endeavor is to take place, the appropriateness of different design options, and the consequences associated with the choice of an inappropriate collective approach. One could envision a case where, given shared understanding, participating actors might see that adopting a particular approach would be in their self-interest. At this point, however, we lack the theoretical foundations and empirical evidence upon which such an understanding would be built. Theory-driven emergent designs, once developed, will be powerful mechanisms for solving 21st-century problems.

**FUTURE OF ORGANIZATIONAL DESIGN**

The future of the field of organizational design will be tied to its ability to expand (a) its view of organizations to include complex enterprises, (b) the set of criteria it uses to assess the fitness of design options to include agility, and (c) the set of possible design options to include those that are better suited for complex challenges in a dynamic and uncertain operating environment. In addition, the OD community will need to focus on developing a better understanding of the inter-relationships between the designs of individual organizations and the design of the complex enterprises to which these organizations will, at times, be a part. To the extent that the OD community is able to make progress in these areas, it will fill a need in our understanding of better ways to bring the energy, creativity, expertise, information, and resources available to bear on the most important and challenging problems we face.
REFERENCES


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