

## Introduction

Increasingly unpredictable and rapid change follows unavoidably from doing business in an Information Age. What could be more strategically important than coming to grips with the implications?

The message of *Adaptive Enterprise* is that large, complex organizations must and can adapt systematically--and successfully--to this kind of change. *Systematic* is a property of the sense-and-respond model described in this book. *Success* will be determined by leadership's competence in making a particular set of choices within the model framework.

The only strategy that makes sense in the face of unpredictable change is a strategy to become adaptive. Speed-to-market, customer intimacy, operational excellence, and organizational agility, however important, are not adequate strategic objectives in and of themselves. They are attributes of the real objective: successful and systematic adaptation. Adaptation implies more than agility. It requires *appropriate* organizational response to change. And when change becomes unpredictable, it follows that the appropriate response will be equally so.

In this environment, therefore, *planned* responses do not work. If the underlying reality is an inherent unpredictability in what customers will actually need, having sufficient organizational

agility to get to market first with quality offerings based on customers' predictions of what they will want is a fool's errand.

This is why complexity theory has recently attracted attention as a new way of thinking about strategy. Certain (but not all) systems operating far from equilibrium consistently demonstrate an ability to self organize and display emergent properties that enable them to adapt in unpredictable environments. Why not reconceptualize businesses as complex adaptive systems? Companies will no longer have to develop appropriate strategies, they will simply emerge. Strategy collapses into a universal imperative: Become a complex adaptive system. Next case.

Complexity theory has an enormous amount to contribute, and some of its principles constitute major underpinnings of the sense-and-respond model. But it is insufficient, because it does not address the unique properties of *social* systems--which is precisely what human organizations are. Individuals can and do make decisions *within* the system *about* the system. These decisions include if and how to change their own behaviors inside the system, the structure and rules of the system, and even its purpose. For this reason, the sense-and-respond model adds *intentionality* and *purposefulness* to complexity, adaptiveness, and system as essential organizational properties.

An enterprise's ability to adapt depends on how it processes information. From complexity theorists we learn that all successfully adapting systems have something in common: They transform apparent noise into meaning faster than apparent noise comes at them. Sense-and-respond organizations leverage this insight into a generic way of fostering adaptive sensemaking and action. The particulars of what is sensed and of how it is interpreted are role-specific, and depend on the amount of adaptability required. No role requires more careful design of its adaptive loop than the one accountable for translating apparent noise into meaning about when and how to adapt the *way* the organization adapts. That role, of course, is leadership.

Unpredictability implies that organizational behavior must be driven by current customer requests--tacit as well as articulated--rather than by firm-forward plans to make and sell offerings. Customer-back adaptiveness means dispatching capabilities on demand, as opposed to scheduling them efficiently in advance. This, in turn, implies a modular organizational structure, which cannot be effectively managed with a command and control governance system.

The sense-and-respond model addresses these issues first, by organizing information in a specific way to represent and support systemic adaptiveness by key roles in the firm (the

adaptive loop); second, by organizing assets and capabilities as a system of modules that can be dynamically dispatched into one-off value chains (modular organization); and third, by replacing command and control with a commitment-centric governance system that propagates the purpose, bounds, and essential structure of the business throughout the organization. It manages the interactions--rather than the actions--of modular capabilities through a universal and general commitment management protocol (the technology-assisted commitment management system).

A sense-and-respond organization, then, is a collection of capabilities and assets managed as a purposeful adaptive *system*. This presupposes an ability to manage organizations as systems--an idea too rarely preached and almost never practiced in today's large enterprises. The theme threads its way through this entire book, because a deep appreciation of this concept will be vital to the leadership of sense-and-respond organizations.

In this book the term *sense-and-respond* refers both to a type of organizational behavior and to a specific prescription for systematically achieving it. Sense-and-respond *behavior*, that is, the triggering and determination of a firm's operations by the requests of individual customers, characterizes many small and some intermediate-sized organizations, but only a very few large, complex ones. (Some systems integrator firms come to mind.) The sense-and-respond *model* is a new conceptual design for producing this behavior economically and at large scale. Its successful implementation will require the adoption of some new concepts, new tools, and new leadership competences. As yet, no complete exemplars of the sense-and-respond model exist. But prototype implementors have put its various parts into practice.

The prescription is radical. The first few chapters of *Adaptive Enterprise*, therefore, will establish the conditions under which leadership will find it imperative to undertake the transformation required. A detailed description of sense-and-respond behavior and some of its important underlying concepts follows. Subsequent chapters explore elements of the sense-and-respond model, the responsibilities of leadership, and the early experiences of some sense-and-respond pioneers. Examples help flesh out sense-and-respond theory, bringing it to life in the context of real companies dealing with difficult cultural and business issues as they work through this transformation. These chapters also describe several principles and some early conclusions about good practice.

We will need books that explore the learning curve of shaping and managing successful sense-and-respond organizations. They will be written as good practice emerges from those who

commit themselves to the transformation from offering to responding. But these practices will have to be grounded in a model with sound conceptual underpinnings. First things first.

I believe readers need to understand the theoretical building blocks of sense-and-respond so that they can draw their own conclusions about the quality of its foundations and the logic used to synthesize them into a model. But I also recognize that the case for sense-and-respond should be presented as simply and clearly as possible, without diversionary excursions into complexity theory, systems theory, information theory, decision theory, computer science or linguistics. To resolve the conflict between these two needs, I have used endnotes and appendices to expand on some of the core ideas behind sense-and-respond. Michael Shank's description of modular organizations in appendix A, and the discussion of adaptive decisionmaking by Michael Kusnic and Daniel Owen in appendix B, make particularly important contributions. The references and bibliography will be useful to those who want to delve more deeply into these and other subjects.

As the reader will discover, I believe that the careful use of words is very important for leaders as well as authors--especially when using familiar ones to explain something new. Words such as *leadership*, *accountability*, *commitment*, *collaboration*, *trust*, *process*, *procedure* and *governance* mean many things to many people, but they have very specific meanings in the sense-and-respond model. For ease of reference, the sense-and-respond definitions of these and other important terms are provided in a glossary.