ACHIEVING MARKETPLACE AGILITY THROUGH HUMAN RESOURCE SCALABILITY

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Increasingly, firms find themselves, either by circumstances or choice, operating in highly turbulent business environments. For them, competitiveness is a constantly moving target. Many, it appears, are satisfied to enjoin the struggle with patched up business models and warmed over bureaucracies. But some, convinced that this is a losing proposition, are aggressively exploring and even experimenting with alternative frameworks and approaches. The monikers are many -- kinetic (Fradette and Michaud, 1998), dynamic (Peterson and Mannix, 2003), resilient (Hamel and Valikangas, 2003) and our favorite, agile (Shafer, Dyer, Kilty, Ericksen and Amos, 2001) -- but the aim is the same: to create organizations where change is the natural state of affairs. Clearly, this quest poses a number of major challenges for our field (Dyer and Shafer, 1999, 2003), one of which, optimizing human resource scalability, is the subject of this essay.

MARKETPLACE AGILITY

Agile enterprises strive to stay ahead of actual and would-be competitors by being consistently faster and better at spotting and exploiting emerging opportunities, as well as discerning and ducking potential threats. Rather than search for sustained competitive advantages by trying to protect winning business formulas with entry or other barriers, they seek to attain a series of temporary competitive advantages by constantly leapfrogging and outmaneuvering current and potential rivals. They aim to generate endless flows of new products or services, or even business models, both to migrate current customers to higher levels or new forms of business activity and to create entirely new market opportunities (Brown and Eisenhardt, 1997, 1998; Ilinitch, D’Aveni and Lewin, 1996; Roberts, 1999).

To achieve marketplace agility, firms form and pursue a steady stream of path-breaking ventures by traversing ongoing and overlapping rounds consisting of four sets of activities:

- *Exploration* involves relatively low-cost, discovery-driven probes into the marketplace designed to test the viability of emerging ideas, products, or services, as well as to pick up real-time information on leading-edge developments (McGrath and Boisot, 2003; Pisano, 1994).
- *Exploitation* emerges when exploration portends potential winners. Here execution is key, as normally hyperactive firms struggle to develop robust operational models to make and deliver high quality products or services on time and at sufficiently low costs (because these activities are counter-cultural, they are often outsourced).
- *Adaptation* refers to shifts from offense to defense, and incorporates actions taken to anticipate and defray the effects of potentially disruptive actions taken by other firms, as well as shifts in critical technologies or key demographic, social, or legal trends.
- *Exit* incorporates the abandonment of products or services, or even the total withdrawal from markets, when temporary advantages begin to erode, thereby freeing up resources for more promising pursuits.

Ventures rarely proceed through uninterrupted cycles of exploration, exploitation, adaptation, and, eventually, voluntary exit. Sometimes marketplace agile firms gain a degree of control over the process by time pacing the exploration - exploitation - exit nexus, as, for example, when they orchestrate the cannibalization of their own products or services (Brown and Eisenhardt, 1997, 1998). But often exploration fails to produce desired results forcing an early exit, execution is cut short by competitors' actions triggering reversions to exploration or fast-forwards to exit, adaptation suggests new insights leading to further exploration and exploitation, and so forth. Series of temporary advantages, then, accrue to firms that are forever morphing; that is, to those that are consistently better, more timely, faster, and more efficient than their actual or would-be competitors at generating new ventures; culling losers, while nurturing potential winners; transforming potential winners into actual winners (i.e., cost effectively delivering innovative products and services that carry premium prices); fending off potential derailers; and cutting and running when markets show signs of losing their pizzazz.

This is a tall order. Studies show, for example, that in traditional firms: (a) exploitation tends to overwhelm exploration (Benner and Tushman, 2002, 2003; Christensen, 1997; March 1991), (b) simultaneous attempts to move from exploration to exploitation are often bungled (Barnett and Freeman, 2001; Vermuelen and Barkema, 2002), (c) attempts to explore and exit concurrently frequently meet with stiff resistance (Amabile and Conti, 1999; Dougherty and Bowman, 1995; Fisher and White, 2000), (d) adaptations to technological change tend to be delayed and slow (Henderson and Clark, 1990; Tripsas, 1997), and (e) exits (even from uncompetitive and dying businesses) are typically deferred way too long (Foster and Kaplan, 2001). The reasons, of course, are many and varied, although in large part they relate to the existence of cultures and embedded processes that inhibit the free flow, or mobility, of resources, including human resources (Christensen and Overdorf, 2000; Hamel and Valikangas, 2003).

HUMAN RESOURCE SCALABILITY

A strategic human resource goal of any enterprise is to have the right numbers of the right types of people in the right places at the right times doing the right things right, all at an affordable cost. The terms "right" and "affordable" here derive meaning only within a specific context; that is, a pool of human capital that is right and affordable in one set of strategic circumstances is unlikely to be equally optimal under a different set of strategic circumstances. In an intriguing study of the film industry, for example, Miller and Shamsie (1996) found that long-term contracts with movie stars were highly valuable when the industry was an oligopoly (1936-50), while studio investments in creative, technical, collaborative, and coordinative capabilities (i.e., the capacity to move quickly and easily in and out of ventures) made more sense in the more uncertain post-television era (1951-65).

More generally, firms operating in relatively stable and predictable environments are geared toward the exploitation of existing advantages and, thus, strive to achieve right and affordable bundles of human (as well as other) resources and, once successful, to minimize, or at least control, subsequent reallocations. Agile enterprises, in contrast, pursue temporary competitive advantages by regularly churning their portfolios of ventures. For them, then, right and affordable are transitory notions, defined not in terms of carefully aligned and relatively fixed pools of human capital, but in terms of emergent states; that is, constantly transitory and only temporarily optimal configurations of human resources (Barney, 1991). This, in turn, requires human resource scalability; that is, the ability to transition from one potentially unparalleled configuration of human resources to another, and then another, and another, ad infinitum. For agile enterprises, then, a necessary (although certainly not sufficient) condition for success is the ability to attain human resource scalability in ways that current and would-be competitors cannot match or obviate (Eisenhardt and Martin, 2000; Teece, Pisano, and Shuen, 1997).

Figure 1 provides a snapshot of an agile enterprise. It shows that, at any given time, employees are formed into several (sometimes overlapping) project teams working on various ventures focused on one or more of the activities that drive marketplace agility. In the Figure, cluster “A” represents a group of 22 employees working on three projects constituting a venture that is just beginning to explore a promising new technology, cluster “B” involves eight individuals all on one project team whose venture has discovered a promising market niche and is quickly moving on to exploit the opportunity, cluster “C” includes 47 employees grouped into six project teams collectively constituting three ventures combined in an internal alliance that is working with an outside partner to exploit yet another market opportunity, and so forth. Of course, snapshots taken at other points in time would reveal quite different configurations.

Figure 1 About Here

Human resource scalability (i.e., the ability to shift across configurations) involves adjustments that are both internal and external. The former refers to employee fluidity; that is, the ability of current members of a workforce to make continual adaptations in their on-the job behaviors, assignments, and even organizational roles. The latter (discussed later) involves numerical flexibility achieved through various forms and combinations of accessions and losses (Atkinson, 1984; Cappelli and Neumark, 2001). The pursuit of marketplace agility through human resource scalability requires close to frictionless employee fluidity. But here's the kicker. To achieve this idyllic state in ways that competitors may not be able (or willing) to replicate or outdo requires some radically different thinking about organizations and the people in them. In brief, it involves shucking the traditional mechanistic model of organizations and, instead, viewing agile enterprises as complex adaptive, or living, systems populated not by human capital to be manipulated, but by people who can and will, under the right conditions, purposefully improvise and self-organize (Holbrook, 2003; Pascale, Millemann, and Goija, 2000).

FORMING A COMPLEX ADAPTIVE, OR SELF-ORGANIZING, SYSTEM

Complex adaptive, or self-organizing, systems occur everywhere in nature. Purposefully forming one, however, involves giving consideration to two issues. First, framing in very general terms what is expected of system participants and, then, devising a set of simple rules that encourage spontaneous self-organizing behavior in organizationally appropriate ways.

EXPECTIONS

Broadly, the expectation is that every system participant will take personal responsibility for consciously altering her or his behaviors, assignments, and even organizational roles in real time to form and reform project teams in ways that enhance the likelihood of appropriate, timely, rapid, and cost-effective movement of ventures around and through the marketplace agility cycle (see Figure 2). More specifically, self-organizing requires that everyone in the system constantly focuses on the contributions and process improvements that he or she can, and indeed must, make by continually:

- Sensing, or scanning, emerging conditions and situations to identify actual and potential problems, threats, and opportunities, and devising preliminary ways to correct, obviate, or capitalize on them.
- Improvising, initiating, and testing quick and creative potential solutions, alternatives, or initiatives (vs. taking time to devise fool-proof plans).
- Rapidly redeploying from where they are to where they need to be.
- Spontaneously collaborating (i.e., engaging with colleagues sans the peripheral and disruptive activities that often waste valuable team time).
- Collectively learning to assure that what one knows, all know (or at least can easily access).

Figure 2 About Here

To be sure, these lofty expectations represent standards more to be aspired to than regularly achieved. Fortunately, however, there is no need for perfection. Rather, what is required is a system capable of tapping the distributed intelligence of all participants in ways that enable and inspire them to get to the right places at the right times and do the right things right often and well enough to engender a continuous flow of innovations and, thus, increase the likelihood of leaving more traditional competitors in the proverbial dust.

OPERATING AT THE EDGE OF CHAOS

It takes very special conditions to engender this "… successful sequencing of planned serendipity" (Mirvis, 1998: 590), conditions that are variously described as "chaordic" (Hock, 1999) and "at the edge of chaos" (Lewin, 1999). Less sinister than they sound, these terms refer to dynamic systems that are paradoxically poised between forces favoring chaos and disorder on the one hand and discipline and order on the other (Holbrook, 2003; Pascale et al, 2000). Such systems are simultaneously designed and implemented through constant experimentation with a few simple rules, protocols, or principles that synthesize or reconcile these competing forces, thus keeping the system from spinning into random behavior or, more likely, edging toward increasingly tighter controls and, eventually, stifling bureaucracy. At this point, it is possible tentatively (and, in the interest of space, briefly) to speculate about a logical starting point for the evolution of a few guiding principles (our preferred term) that foster favorable conditions for the emergence of nearly frictionless employee fluidity (see Figure 3) (For a fuller exposition, see Dyer and Shafer, 2003).

Figure 3 About Here

Acquiring and Releasing Employees

Numerical flexibility (Atkinson, 1984; Cappelli and Neumark, 2001) is, as noted above, an inevitable component of human resource scalability. Extant theory and research suggest, however, that expanding, re-mixing, or contracting workforces (whether with regular or non-standard [i.e., temp or contract] workers) are normally disruptive, time-consuming, and costly undertakings (Amabile and Conti, 1999; Anderson, 2001; Baron and Hannon, 2002; Cameron, 1998; Dougherty and Bowman, 1995; Fisher and White, 2000; George, 2003; Rosenkopf and Almeida, 2003; Penrose, 1959) and, thus, generally unsuited as primary means of pursuing human resource scalability. Rather, the challenge for agile enterprises is to manage the inflow and outflow of employees in ways that, if possible, facilitate, or otherwise do no harm to, employee fluidity. Guiding principles on the intake side are: hire for cultural fit (i.e., individuals who are psychologically predisposed to change) whenever possible and otherwise smooth hiring (to avoid overwhelming intakes of dissociated employees). With respect to losses, they include: minimize layoffs (to avoid tearing the social fabric), systematically cull non-contributors (to minimize the damage done by the inevitable misfits), and, when involuntary separations are unavoidable, do them humanely (to strengthen feelings of reciprocity and trust).

A Dynamic Dialectic: Forces for Free Expression and Forces for Discipline

Initially, to counter natural bureaucratic tendencies, the emphasis is on devising (and, of course, refining or even revising) guiding principles that foster chaos and disorder:

- Maximize autonomy. Think of this as empowerment on steroids; not management parceling out a few more responsibilities here and there, but total reliance on employees to decide what has to happen and then make it happen. (W.L. Gore is reputed to put new employees through an orientation session and then send them out to "find something useful to do".)
- Promote serial incompetence. Ceaselessly create relentless discomfort with the status quo by encouraging all employees to view temporary periods of incompetence as natural states emanating from the need to eschew comfort zones and enthusiastically tackle new and unfamiliar challenges (Godin, 2000).
- Foster reciprocity and trust. Ensure that employees receive returns commensurate with their contributions and fair treatment at all times (as in minimizing layoffs and treating employees humanely when cutbacks cannot be avoided). Reciprocity and trust simultaneously unbridle autonomy and serial incompetence and provide the social glue that makes voluntary and spontaneous collaboration possible (Pascale et al, 2000: Chapter 13).

It is not difficult to imagine that a bunch of unfettered employees relentlessly in pursuit of new challenges might easily run amok. So, it is essential to devise complementary principles that provide direction, accountability, and clarity and, thus, serve as forces for discipline and order:

- Forge a sense of common purpose. Simultaneously stimulate and channel employee energy by promoting the agile enterprise as both a cause and a business by embedding organizational vision and core values deep into the system, while keeping a set of common performance metrics front and center at all times (Hamel, 2000).

- Instill ownership of outcomes. Insist that employees habitually and authentically negotiate meaningful commitments to one another and hold themselves personally responsible for delivering on those commitments. This keeps employee fluidity from degenerating into situations where everyone is responsible for everything, and no one is responsible for anything (Haeckel, 1999:148-154).
- Provide contextual clarity. Assure that all employees understand the essentiality and essence of marketplace agility and employee fluidity receive regular feedback, both damping (i.e., which tells how things are going) and amplifying (i.e., which evokes, or draws attention to, new and different possibilities) (Pascale et al, 2000: Chapter 6).

In the agile enterprise, guiding principles, even if initially well conceived, are far from immutable. They, like everything else, are subject to ongoing modification or even periodic replacement in the inexorable process of emergent self-organization and positive adaptation.

CONCLUSION

Firms whose survival depends on marketplace agility face what we believe is a Hobson’s choice: continue tweaking the old bureaucracy to free up a bit more flexibility or take a bold step into the abyss of a new organizational paradigm predicated on concepts of complex adaptive, or self-organizing, systems. Here there is the promise, or at least the possibility, of attaining new heights of human (and other) resource scalability, perhaps 70, 80, or even 90 percent improvements in employee fluidity that could yield optimal configurations of human resources 10, 20, or even 30 percent more often than is possible for competitors relying on more traditional organizational forms. But, of course, there are risks. One, perhaps more illusory than real, is the dreaded fear of losing managerial control. Another, indisputably real, is borne of ignorance. While the literature contains glowing accounts of tentative and small-scale experiments (cited, for example, in Lewin and Regine, 2001, and Pedzinger, 1999) and a few seeming success stories (examples include Oticon, W.L. Gore, and Capital One), the specter of spectacular failure lurks (Enron comes immediately to mind). For the time being, then, there is much to learn. Herein, though, lies the opportunity; when it comes to hypercompetitivity, it seems, whoever masters agility first, wins.

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FIGURE 1
Employee Fluidity at Work

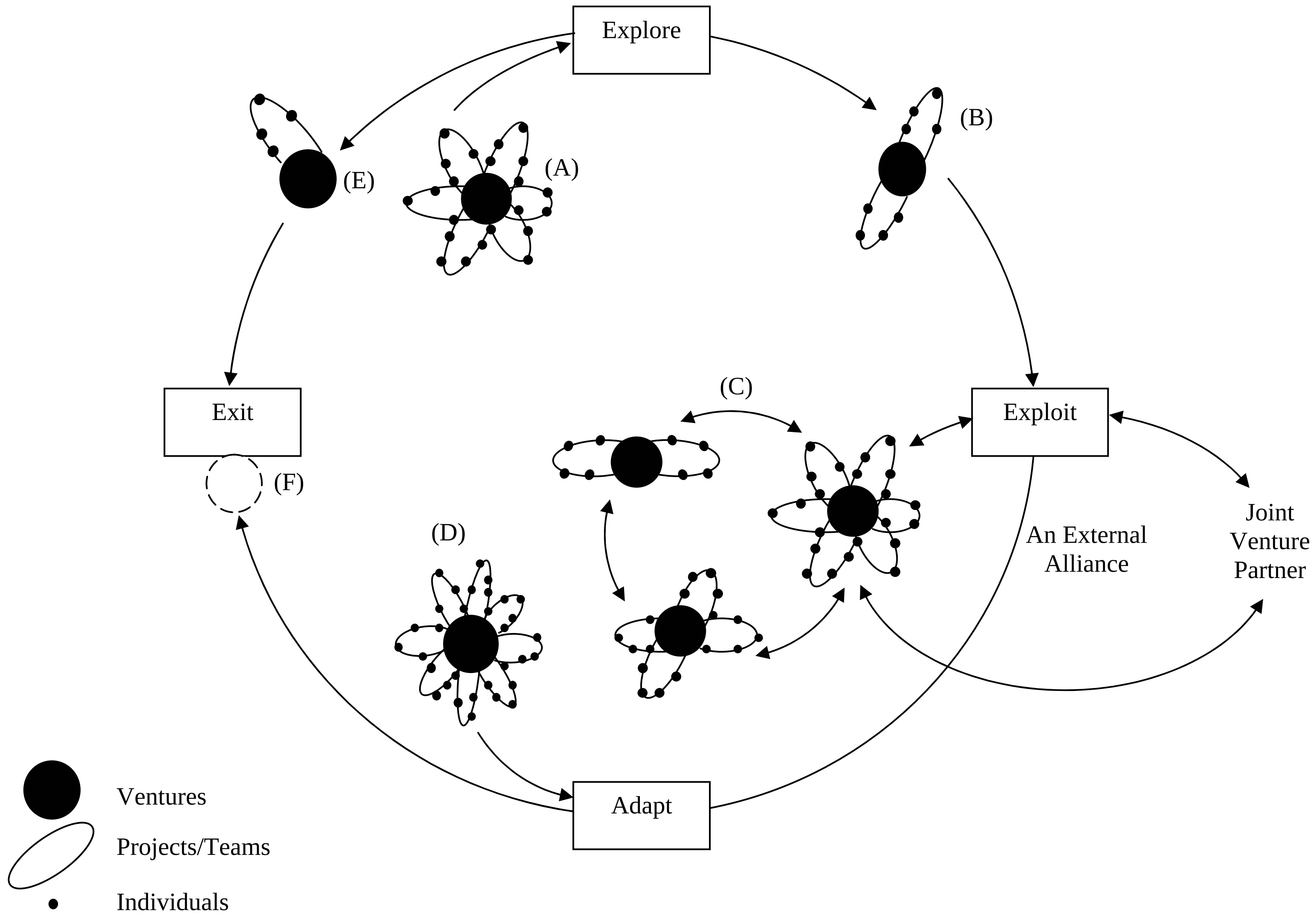

FIGURE 2
Essence of Employee Fluidity

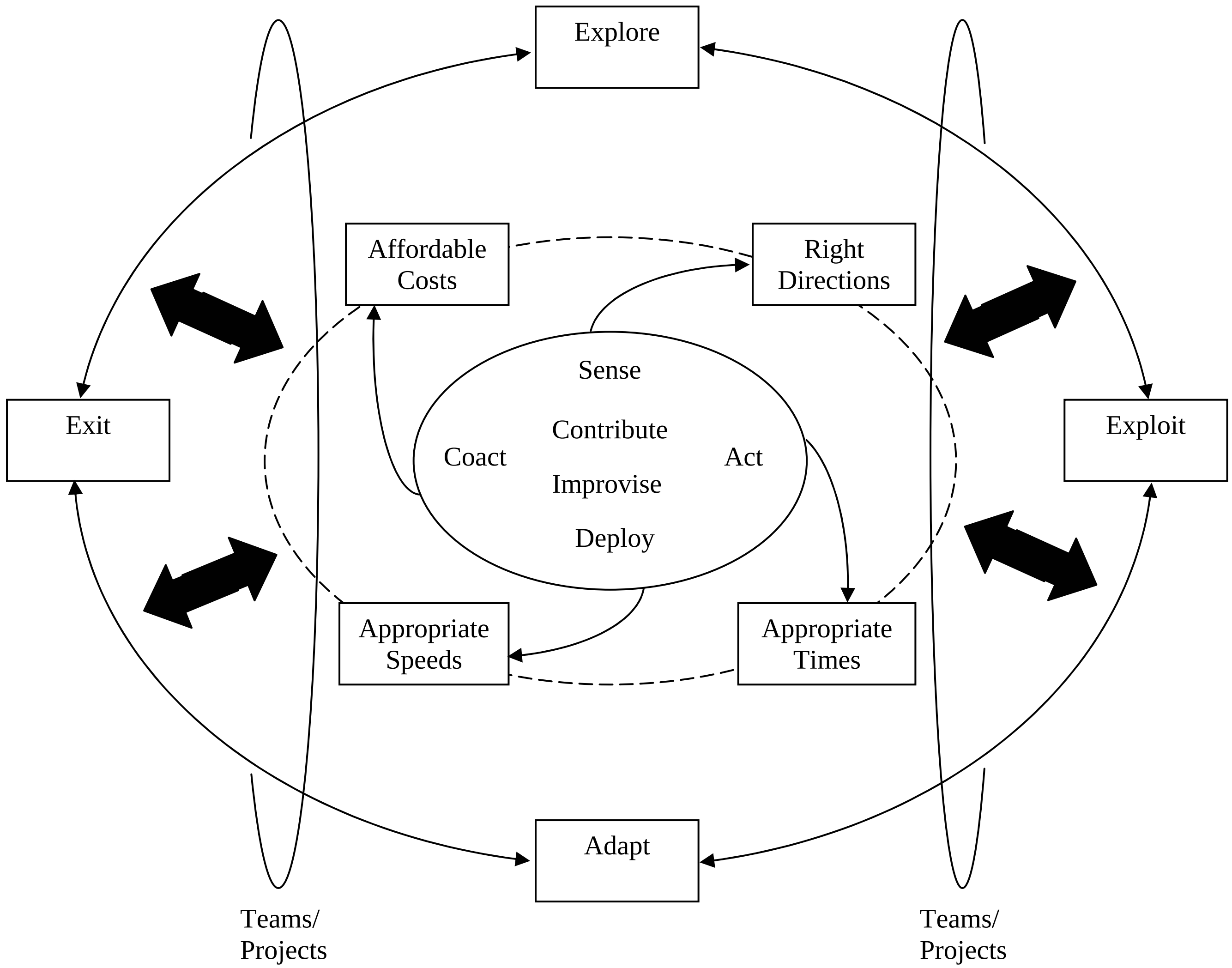

FIGURE 3
Context for Fostering Employee Fluidity