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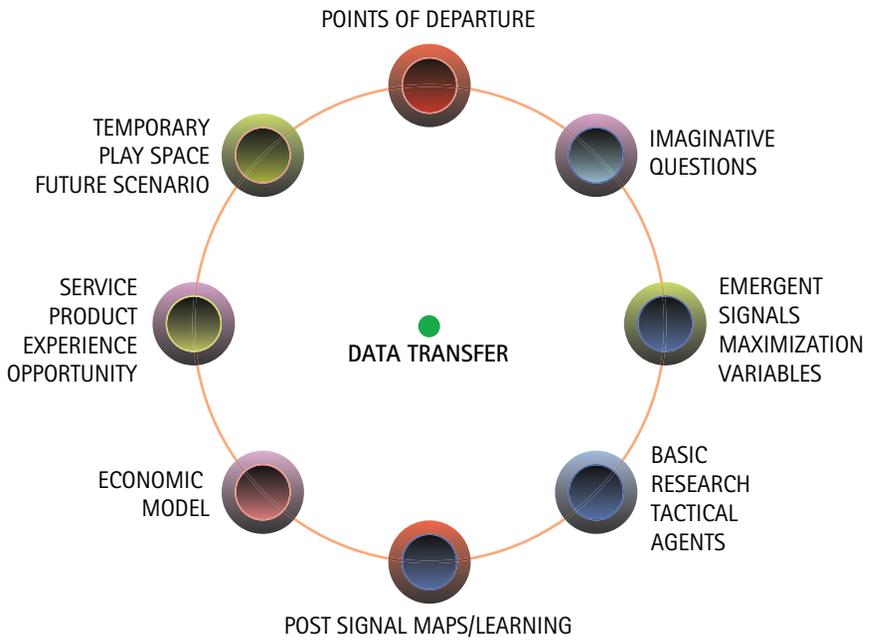
A Workbook for Strategic Creativity

How do we transform what we know and what we can do now into human and economic wealth? The answer to this question is one of the most sought after in the world. This workbook provides a methodology for strategic creativity as a source of organizational and social change, and is a comprehensive guide to using the imagination to generate exceptional services, products, and systems.

POINTS OF DEPARTURE

TEMPORARY
PLAY SPACE
FUTURE SCENARIO

IMAGINATIVE
QUESTIONS

SERVICE
PRODUCT
EXPERIENCE
OPPORTUNITY

DATA TRANSFER

EMERGENT
SIGNALS
MAXIMIZATION
VARIABLES

ECONOMIC
MODEL

BASIC
RESEARCH
TACTICAL
AGENTS

POST SIGNAL MAPS/LEARNING

Toward a New Ecology of Learning, Imagination, and Innovation

We traditionally begin innovation from one of three places: current problems, past experiences, or imagination. Problem solving from current problems is purely perceptual. One needs to feel it, measure it, and test it—or someone else needs to reveal and define it—in order to solve it. In any case, the problem exists, so you need not use your imagination to find it. You need to use creativity. The same is true for past experiences, which are abundant in problems; this too is problem solving.

Innovating from these perceptions most often results in tactical innovation. Take the bottle of ketchup. Since ketchup's invention in 1869, it has been difficult to get it out of a bottle without a struggle—shaking or slapping it. Finally, a few years ago, Heinz introduced upside-down containers—which were not really a new concept, as toothpaste was already being packaged in these. Developing a better bottle certainly must have been a priority for Heinz, as it would improve user access to its product. Yet it took the company 115 years to come up with this "innovative" solution.

STRATEGIC INNOVATION AND ADAPTIVE INQUIRY

But what if the problem is not known? What if you are not trying to redesign an espresso maker (or ketchup bottle)—a tactical innovation—but to invent the espresso method of extracting flavor from ground coffee using hot water under pressure—a strategic innovation?

One common approach in finding a solution to a known problem is to analyze the parameters of the situation and then decide on a clear path of investigation based on those constraints. For example, in investigating an existing market, the logical and widely accepted approach is to apply established economic models to study factors in expansion potential, social impact, and market value. From this inquiry, one can recognize patterns and draw rational conclusions.

We frequently see questions such as: "What is the future of mobile communications?" or "What is the future of advertising on the Web?" Both are premised on a research method that studies past and current patterns as indicators of where the pattern might lead, if it followed the same course, and what shape it will hold in the future.

But any new interaction with a technology could indicate a latent behavior for which there may not be enough precedent to recommend a logical question. So when applied to an emergent signal, prescribed analysis methods such as this often fail because they are being applied to a set of

← *The research method developed at the Beal Institute, represented as the strategic imagination circle.*

fluid and complex variables that have no definite or explicitly concise attributes to validate the prescription.

As I have discussed, this type of analytical, "left brain" thinking is no longer sufficient. We are currently experiencing and will continue to experience an enormous increase in our social and technological diversity through our interactions and associations. And this diversity is also in a radical state of flux, changing states and perspectives so fluidly that each group is not able to support or sustain sequential analysis. These emerging micro-signals defy objective analysis by actively responding to their investigation; at a small enough scale, the variables are influenced by myriad factors, including their own study. The variable conditions of these systems demand an adaptive learning practice.

For example, the current dilemma of data transfer is that both the content and the portal of transfer are evolving at an extraordinary rate—digital video and the broadband explosion are two such areas. This increase is generating a continuously shifting and evolving map of human action patterned not by the limits of technology, but by the limits of the people using it. In short, there are more possibilities than there are boundaries. In this environment, growth—social, economic, and otherwise—comes not from solving problems of need, but from answering the question "What else can we do?"

"Emerging micro-signals defy objective analysis by actively responding to their investigation; at a small enough scale, the variables are influenced by myriad factors, including their own study. The variable conditions of these systems demand an adaptive learning practice."

Thus, a different approach must be used to study immediate significance and potentiality. To explore the meanings of emerging technology and behavior signals, the process *must* be flexible, as it will grow in many directions at once, with each direction informing and building on the others. This is not the same as determining how to fit imagination or strategic creativity into business models, but rather *how to adapt business to both.*

The most effective process for maximizing innovation opportunities is up for grabs and always has been. The current recognition of the importance of strategic innovation—in business, education, or politics—makes this the opportune moment. To reveal entirely new possibilities, we must free analysis from the current paradigm and explore it under the widest scope of concurrent possibilities.

When the goal is to explore opportunity in a conceptual space, one must proceed from imagination, employing methodologies that empower and nurture possibility. In that respect, the most important intent of this workbook is to foster a perspective that inspires well-informed dialogue and intelligent action.
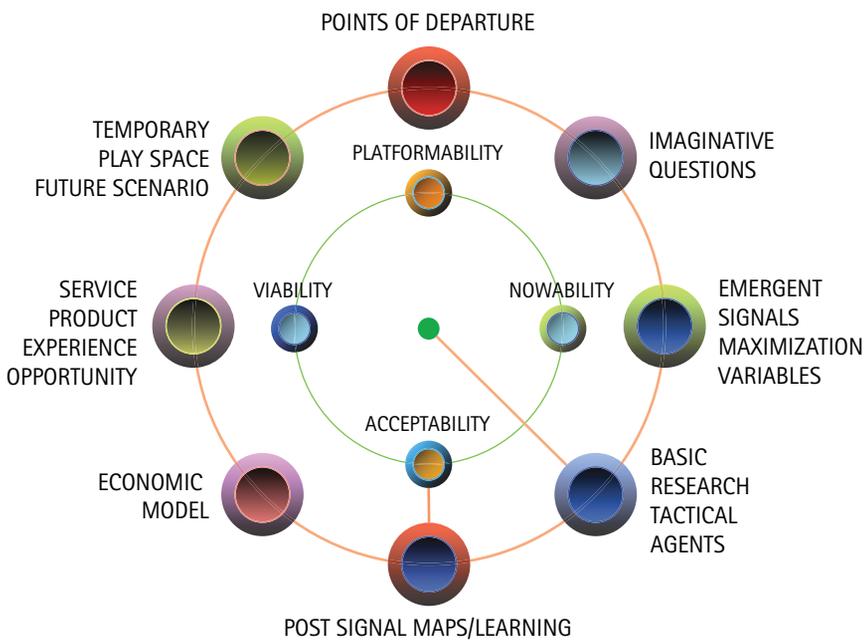
A METHODOLOGY FOR POSSIBILITY

The pursuit of possibility is shaped through *action research* methods. Based on repeating cycles of investigation, critical reflection, and peer review, action research develops and applies a pliable perspective to this pursuit, directing the same flexibility and awareness toward the ideas that emerge and the signals they reveal.

I developed the methodology that follows with a team of researchers at the Beal Institute for Strategic Creativity. It is adaptive action research, flexible because it can change based on knowledge gained along the way; it encourages the pursuit of that which it discovers. It is a process of change and of understanding the nature of the change. As mentioned earlier in the book, informed change in turn informs action, and action informs understanding. Because the process is a continuum of discovery and learning, its best diagrammatic representation is that of a circle that we call the *strategic imagination circle*.

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The Strategic Imagination Circle

The circle process begins in the center, where we place the subject of investigation. It could be any disruptive innovation, artifact, service, or concept that we are trying to maximize in terms of opportunity or understanding. Or it could be the economic driver of the moment. Plastics. Data and data transfer. The internet of things.

POINTS OF DEPARTURE

TEMPORARY
PLAY SPACE
FUTURE SCENARIO

PLATFORMABILITY

IMAGINATIVE
QUESTIONS

SERVICE
PRODUCT
EXPERIENCE
OPPORTUNITY

VIABILITY

NOWABILITY

EMERGENT
SIGNALS
MAXIMIZATION
VARIABLES

ACCEPTABILITY

ECONOMIC
MODEL

BASIC
RESEARCH
TACTICAL
AGENTS

POST SIGNAL MAPS/LEARNING

The eight nodes surrounding the center are the eight steps of the method:

1. Signal discovery: basic research, data collection, and analysis
2. Emerging signals mapping: the diagnostic of opportunity
3. Imaginative questions
4. Points of departure
5. Future scenarios in temporary play space
6. Experience opportunity definition
7. Economic opportunity modeling
8. Post-signal learning

SIGNAL DISCOVERY: BASIC RESEARCH, DATA COLLECTION, ANALYSIS, AND DEFINITION OF TACTICAL AGENTS

The initial investigation of an undefined research area is driven by open and imaginative questions that seek out *opportunity signals* within the expanse of emerging technologies and behavior. The search for opportunity is a process of learning what to look for; what has the capacity to create the most capability. This signal discovery phase scans for potential disruptions to the common behavior model: people or organizations innovating new or existing technology. The scope is broad as opposed to deep, as its purpose is to reveal the dense impact of an opportunity, exploring the unfamiliar before defining parameters.

Data collected in this phase includes:

✦ Objective facts: from specific events or news reports
✦ Constructed facts: people's opinions, social perceptions, or organizational constructs—what organizations implement to manage themselves and their relationship with the "outside" world, such as policies, media releases, and public documents
✦ Filtered facts: the opinions of the team of researchers, based on their insights and analysis

The researchers collect and analyze the data in a dynamic continuum that evolves with the collection of more data. This process continues until the collected data presents a compelling new territory where the emerging patterns of new signals become evident and revealed as either strategic opportunities or tactical agents.

← *The strategic imagination circle, with the filters used to assess opportunities for economic potential.*
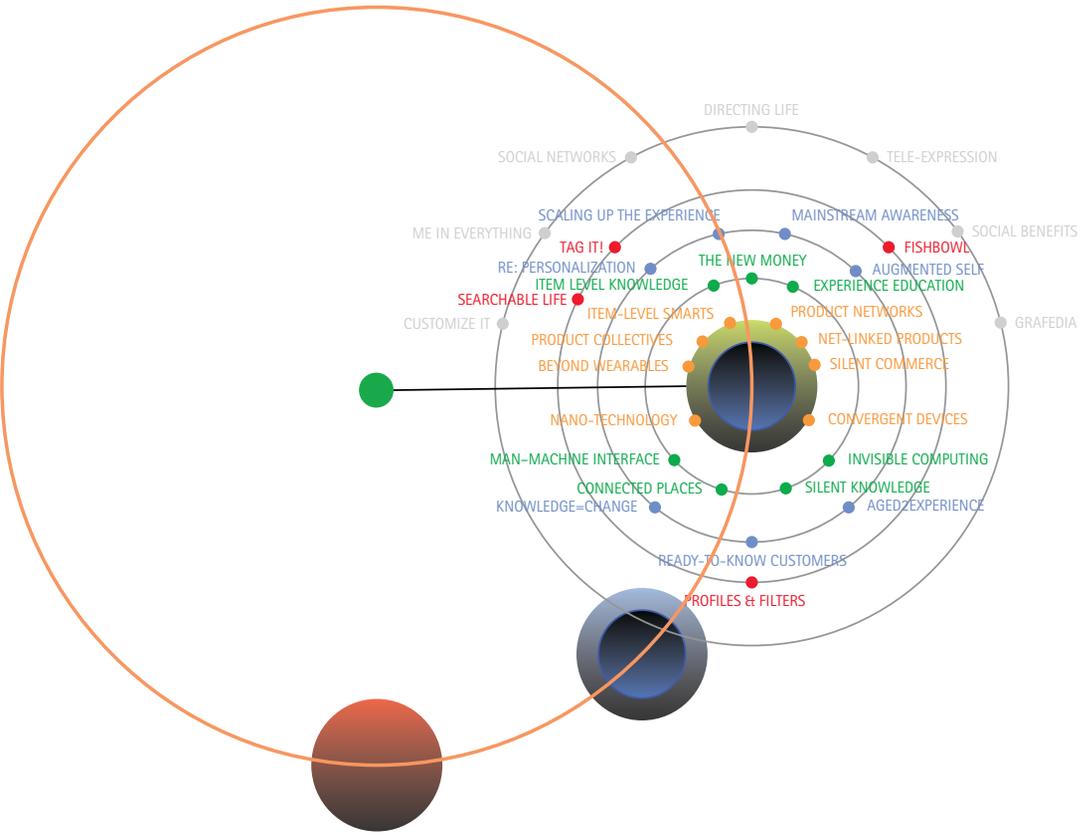
EMERGENT SIGNALS: DIAGNOSING OPPORTUNITY

Within a collection of objective, constructed, and filtered facts, certain behaviors and ideas are seen as "meaning something else." These are *emerging signals*. We use emergent signal mapping to evaluate these and the opportunities they afford, in light of the new variables that they create. This is distinct from technology forecasting in that it does not aim to predict the next technology, but rather to predict which latent behavior or behavior set will emerge from the complex meshing of enhanced and aggregated functions, obsolesced artifact, and new possibilities that a new innovation presents.

"The purpose of emergent-signal mapping is to gain insight into the means, the tools, that the disruptive signal will obsolesce, reverse, and retrieve, as well as into the new functions or purposes that it will enhance. This investigation then advances into the imaginative foresight phase, where the new meaning and benefits of an emergent signal are revealed."

In the emergent signal mapping, signals collected in the discovery phase are explored to understand the behavior they reveal. In *retrieval and emergence maps* (as illustrated in the previous section), systems or object archetypes that define their original purpose or manifestation are "retrieved." The relationships between signals and archetypes (those that are simple, like the camera, and those that are more complicated, like golf) emerge, and the reach of opportunity expands when we look at them through the three frames of inquiry described earlier in relation to Arendt's *Human Condition*: the *how*, the *why* and the *what*.

The purpose of this inquiry is to gain insight into the means, the tools, that the disruptive signal will obsolesce, reverse, and retrieve, as well as into the new functions or purposes that it will enhance—an analysis based on McLuhan's tetrad. This investigation then advances into the imaginative foresight phase, where the new meaning and benefits of an emergent signal are revealed.

Mapping emerging signals allows us to evaluate opportunities and predict the ➜ *behaviors that will emerge.*

DIRECTING LIFE

SOCIAL NETWORKS   TELE-EXPRESSION

SCALING UP THE EXPERIENCE   MAINSTREAM AWARENESS

ME IN EVERYTHING   SOCIAL BENEFITS

TAG IT!   FISHBOWL

RE: PERSONALIZATION   THE NEW MONEY   AUGMENTED SELF

ITEM LEVEL KNOWLEDGE   EXPERIENCE EDUCATION

SEARCHABLE LIFE

ITEM-LEVEL SMARTS   PRODUCT NETWORKS

CUSTOMIZE IT   GRAFEDIA

PRODUCT COLLECTIVES   NET-LINKED PRODUCTS

BEYOND WEARABLES   SILENT COMMERCE

NANO-TECHNOLOGY   CONVERGENT DEVICES

MAN–MACHINE INTERFACE   INVISIBLE COMPUTING

CONNECTED PLACES   SILENT KNOWLEDGE

KNOWLEDGE=CHANGE   AGED2EXPERIENCE

READY-TO-KNOW CUSTOMERS

PROFILES & FILTERS

IMAGINATIVE QUESTIONS

Nothing shapes our journey through life so much as the questions we ask.
— author Gregg Levoy

We all possess an old story, a fundamental narrative that structures our perception and is enriched by our values and beliefs. As the mythology of our experience, the old story reflects the meaning that we assign to ourselves and to the things we encounter, shaping the patterns of our behavior and constraining the path of our explorations. To reveal new meaning and possibility, we must shift our perspectives toward the creation of new stories, where potentiality exists in everything and where the irrelevant falls away.

"In this phase, we frame signals with a series of questions in order to motivate and guide the inquiry by focusing on possibility rather than probability."

In *The Cluetrain Manifesto: The End of Business As Usual*, Christopher Locke, Rick Levine, Doc Searls, and David Weinberger wrote, "The questions we ask won't predict the future. They will create the future." Imaginative questions are not about problem solving; they are about uncovering new possibilities for situations we find ourselves in and situations we imagine. While engaged in the journey for answers, we describe and shape the possibilities for the future, empowering ourselves to set a course for achieving those goals. Imaginative questions open multiple horizons, as they do not have a single and simple answer. By their nature, they invite us to more questions and a deeper level of exploration. They open doors to possibility and allow a new story to emerge.

In this phase, we frame signals with a series of questions in order to motivate and guide the inquiry by focusing on possibility rather than probability. So if RFID tagging is a current signal, and its capability permits the transfer, reception, storage, and generation of data, an example question would be: If every object, person, and place could talk to one another, what would be the subject of their conversation?

Imaginative questions are developed from three sets of signal analysis: maximization variables, tactical agents, and strategic opportunities. Along with the framing questions, these direct the research and future-scenario building by amplifying the dynamic representations of behavioral and technological signals.

Signal Analysis in a Grain of Sand

The functions of the three sets of signal analysis:

✦ **Maximization variables** reveal the layers of *meaning* that have not yet been considered in a signal, affording new images of possibility. They allow us to perceive what other meanings that signal could have; to look through a different lens and seek out a different path. Maximization variables ask you to imagine the possibilities in a grain of sand: a marker for time, an ingredient in Murano glass, a projectile in a storm, an abrasive, or the trace of wind in the desert.

✦ **Tactical agents** create the constraints for the new story to emerge. Their focus is directed toward the *how* of a question—how context is situated and built to increase the meaning and relevance of a signal. In this set, the meaning and purpose of a grain of sand is revealed only in the *context* of a desert or a Venetian glass studio; it requires constraints as a framework for any narrative to unfold.

✦ **Strategic opportunities** are inextricably tied to meaning and context, and explore the *possibility* of purpose within an inquiry: What else can this do? We can tailor the intent of a question to amplify a signal's core capabilities, transforming the capacity and extent of the story being told. Asking "What else is it?" rather than "What is it?" encourages one to look beyond the obvious surface, creating the opportunity for a deeper and perhaps more engaging story. By going beyond the obvious properties of sand—for example, by asking what happens when it is heated to about 1100°C—and creating constraints to control the temperature and process, we discover a new purpose, glass, as well as triggers to new perspectives.

To integrate into the social, economic, and cultural stream, organizations need imaginative concepts to maximize their capabilities. Competitive pressures no longer drive this need; the very nature of the stream does. It is continually moving and changing, requiring adaptive responses as it flows. The organization is the boat, the market is the current, the capability is you as you row or paddle. The role of a strategic creator is to define in which direction movement occurs, while moving along with it and broadcasting from the stream.

In this dynamic environment, how can you leverage *your* core capabilities to become an indispensable participant in shaping the future? To anticipate what kinds of needs will arise from the changing landscape and what you can do to fulfill them, as Apple did with iTunes?

Need is an imagined possibility. And to imagine, one needs to create images of the mind that are first shaped as questions.

What could be possible? What if my toothbrush could speak?

A powerful question has no singular answer, but rather elicits more questions and greater exploration. The question as metaphor allows for explo-

ration leading to change. In itself, it does not create change, as change is an inevitable continuum. But it has the power to shape change by giving it new meaning.

POINTS OF DEPARTURE (POD)

The next stage in this action research method is to build on what the answers to the imaginative questions reveal by developing a series of provocative statements or queries called *points of departure*. These direct the thematic course of the emerging story or perspective that will explore the potential of signals. As a platform into possibility, these PODs must be well articulated and developed—it is the power of the phrase that cultivates and compels further imaginative thought.

The point of departure—a generative metaphor—frames new possibilities for action. Learning theorist Donald Schon once noted that the value of generative metaphors is their "problem setting" capacity in relation to organizational transformation. The underlying metaphors and stories we tell in our organization—that it is grassroots or that our employees are "family," for example—point to our orientation toward our work and our relationships to others. A generative metaphor is a powerful new attractor and can be critical to the transformation of an organization. The more powerful the metaphor, the more we are invited to look at the world with new eyes and figure out new ways to shape it; the more we can make the unfamiliar familiar.

Cascading Points of Departure

In the strategic imagination circle, the point of departure is a medium for exploring key themes that generate new perspectives and new possibilities throughout the course of inquiry. It is a base point for raising a series of subquestions that inform the exploration of future applications and services. In the case of environmental design or RFID development, for example, these questions might flow like this:

✦ What does a place want to know? It wants to know: Why did you come here?

✦ What will happen when the place knows? Then the place can serve you, acting on its purpose much faster and better, so you can get more out of the place.

✦ What have you brought? What you bring allows the place to react to you. This is not unique to places. In an enabled situation, such as the one we're imagining, a desk can be a place.

✦ Where are you when you're not here? In other words, what kind of profile do you have that might interest me to help you better?

✦ How can I improve myself? How can your presence benefit me, give me more meaning, so I could be of more use?

THE TEMPORARY PLAY SPACE AND FUTURE SCENARIOS

A future scenario builds upon the operating platforms explored in the points of departure, investigating how a latent behavior becomes manifest and emerges from the conditions of the generated stories. These stories could describe new product concepts, services, or business models from an experiential, first-person perspective. "What if my toothbrush could speak?" generates stories about health monitoring or the appearance of your mouth based on an existing behavior, and opens the door to the new questions and possibilities, as illustrated earlier. Scenarios incorporate signal behavior into existing behavior models, informing how traditional perspectives shift toward new possibilities. By creating a compelling platform from which to explore an experience, we gain a deeper understanding of the events, user roles, actions, and objects that would be used in performing tasks, as well as the role of support systems such as services and businesses.

EXPERIENCE OPPORTUNITY DEFINITION

As each scenario explores the user's potential experience with devices, applications, or methods that might be employed in the course of normal daily activities, they in effect explore opportunity. *Experience opportunity* is the parsing of scenarios for revealed opportunities, and includes explored products, services, business alliances, and collaborations. By taking a broad view of one sector and looking at possible impacts across all sectors, we can do an exhaustive analysis of the possible peripheral effects of potential products or services in all markets. This is referred to as *opportunity maximization mapping*, an integral element in the construction of strong business cases for each opportunity and the development of new economic models.

ECONOMIC OPPORTUNITY MODELS

The opportunities are then assessed and adjusted to maximize their economic potential under four filters:

✦ Acceptability: Does the opportunity respond to an existing or emerging human behavior?

✦ "Nowability": Can the opportunity be sufficiently realized using existing technology?

✦ "Platformability": Does the opportunity help advance toward platform leadership? What is the strategic value of acting upon the model?

✦ Viability: What is the economic risk-to-reward ratio of the model?

POST–SIGNAL LEARNING

Once a full revolution of the strategic imagination circle has been completed, and opportunities identified and mapped, those conclusions are then repositioned into the node of basic research,z and the process begins again. In each subsequent revolution, we see increased depth and specificity of signals, opportunities, and analysis. The process is a system of perpetual motion, which continually fuels itself through the knowledge it generates. The methodology is flexible enough to allow each person's unique strengths and areas of expertise to structure the course of the inquiry.

The methodology of strategic creativity is not meant to be restricted to business or product development. Its true potential is that the more we practice it, the more it will permeate our patterns of day-to-day thinking and behaviors, changing the very systems from which it emerges.

"While the frameworks for strategic-creativity research are urgently required in the microcosmic ecologies of organizations and businesses, they are more urgently needed in the macrocosmic ecologies and systems of being human."

An organization that uses strategic creativity in project-based or departmental isolation is effectively negating the possibility of long-term survival. The philosophy, and at least part of the methodology, that guides strategic creativity must be implemented throughout all areas and levels of an organization—from human resources to finance, to R&D, to the way people think when they leave the workplace and go home. Each person in the organization will have a different degree of insight and practice, but they will all understand and accept the idea that adaptive inquiry methods are integral for success in the emerging economies, as well as in the emerging cultures that support it. Everyone participates, and everyone gains.

As this happens, the boundaries between the cultures of business, design, education, work, and play, among others, will continue to dissolve, and with this dissolution comes the need for these modes to be applied throughout our lives. An example is the Serious Games Initiative started in 2002 to explore leadership and management challenges through the use of games. These games are the temporary play space in its purest form; they allow for the expansion of the game as an imagination platform in any public or private domain where leaders face immediate challenges, from public policy to education, training, and health.

While the frameworks for strategic creativity research are urgently required in the microcosmic ecologies of organizations and businesses, they are more urgently needed in the macrocosmic ecologies and systems of being human—in the ways we produce, communicate, politicize, consume, construct, purchase, and transform ourselves as well as our environments. This method will enable us to navigate our future landscapes as well as negotiate our future selves.

Strategic creativity offers us the opportunity to formulate authentic relationships with the knowledge, places, and people around us because of the lens we look through. We are both subject and object, with a transitional mobility between the two. There is no illusion or boundary that separates us from the research; the whole experience of being alive and having agency compels us, and drives us, toward the possibilities of our future.

We are as much a part of the process as quite literally everything else, and that connection demands a scope that is accurate and focused, rich in meaning and analysis, and fueled by the potential of our imaginations.