"Strategic Doing": A New Discipline for Developing and Implementing
Strategy within Loose Regional Networks

Ed Morrison
Regional Economic Development Advisor
Purdue Center for Regional Development
Purdue University
West Lafayette, IN
edmorrison@purdue.edu

Abstract: Designing and implementing regional development strategies poses serious challenges. Part of the problem may be that the traditional approach to strategy, a linear process of strategic planning, is not well suited to the task. This paper explores a new approach to strategy designed for the open, loosely connected networks that characterize a regional economy. Called "Strategic Doing", this approach emphasizes transparency, agility and experimentation.

Any effective strategy answers two questions: "Where are we going?" and "How will we get there?" It seems simple enough. Yet, nothing is quite so muddled as the process of building a strategy for regional development. Few people who have gone through the process want to repeat it. Typically, the process is long and exhausting. Many efforts take a year or more. What is worse, most strategies, it seems, do not work. In many regions, these strategy reports appear unused, crowding shelves and clogging file cabinets.

In a recent case, civic leaders in one region called the Purdue Center for Regional Development with a predicament. They had just invested over $600,000 in their regional strategy. They received a very detailed series of reports from a prestigious national consulting firm, but they were unsure of

what to do next. Not surprisingly, given stories like this one, a great deal of skepticism swirls around the effectiveness of strategy in building prosperous regional economies.

Frustration and doubt are showing up at a bad time. We are facing rising economic complexity and uncertainty that is outstripping our abilities to adjust. The future is coming at us faster than ever before and demanding higher levels of ingenuity to confront these challenges (Homer-Dixon 2000). At the same time, deep shifts are underway in the way in which wealth is created within our economy. These shifts undercut the effectiveness of traditional approaches to how we plan for the future: strategic planning.

As we shall see, we need new approaches to strategy to keep up with the fast and complex changes sweeping across communities and regions. These new strategy disciplines will help us adapt to the fast moving world of open networks that now characterize our economies.

The good news: After years of experimentation, the core disciplines to guide strategy in loosely joined networks — the type of networks that drive prosperity in regional economies — is emerging. This paper explores where we stand with these new approaches and where we might be heading.

How did we get here?

Our concepts of strategy for regional development come directly from business management. Strategic planning as a management discipline emerged from the remarkable logistical achievements of the U.S. military in World War II. In the 1950s, corporations began applying strategic planning to manage the challenge of allocating capital investment across multiple organizational units. Out of these early efforts a traditional strategic planning process evolved. In 1962, a Harvard Business School professor, Arthur Chandler, argued that developing a strategy represented a core discipline of

management. Companies could achieve superior competitive performance by designing their organization to implement critical strategic decisions (Chandler 1962).

Chandler's work provided the foundation for continued academic exploration of strategic planning. At about the same time, a management consulting firm, the Boston Consulting Group (BCG), aggressively moved these concepts into the marketplace (Stern and Deimler 2006). BCG's success led to a growth explosion for corporate strategy consulting firms, such as Bain & Co. and McKinsey.

Over time, corporations and their consultants evolved different formal processes to implement strategic planning. New ideas emerged, but the basic one remained the same: a corporation could achieve superior financial performance across its multiple divisions if its top management focused on developing and implementing a strategic plan. Several key features define the process of traditional corporate strategic planning.

- First, thinking and doing are separated. A small group of top managers define the strategic plan. Others lower in the organization execute it. Traditional strategic planning conforms to and reinforces the hierarchical, "command-and-control" organization chart.

- Second, the process is linear and stable. It assumes that the management team logically completes each step before moving on the next.

- Third, the process assumes that strategic plans, once drawn, can be reliable guides for years into the future. In other words, strategic plans, once built around vision and mission, are stable; they do not need to change much.

- Fourth, analysis must be completed before decisions are made. Developing the planning base — gathering all the facts — represents a critical early step that drives the quality of the plan. Without a thorough understanding of opportunities and threats or strengths

and weaknesses, management cannot make sensible strategic choices. Gather facts first; then make decisions.

All of these features create clarity and stability. At the same time, they undercut the effectiveness of traditional strategic planning in the dynamic markets we confront today. Before we explore how strategy practice has evolved, we should look back to see how the traditional approach to strategic planning migrated to the world of regional development in the United States.

Applying strategic planning to regional economic development

Starting in the early 1980s, corporate strategy consultants began applying business strategy concepts to the challenges of regional economic development. It is easy to see why. The 1970s was a decade of economic dislocation in the United States. An oil embargo in 1974 triggered a global recession. A prolonged period of "stagflation" followed that combined both high unemployment and high inflation. The 1970s ended with yet another oil crisis. The decade saw the worst economic performance from industrialized countries since the Great Depression.

At the same time, the export-led growth of the "Asian tigers" — Hong Kong, South Korea, Singapore and Taiwan — signaled that a rapid economic transformation was taking place across the globe. To economic commentators and policy analysts, it was clear that fundamental changes were sweeping the U.S. economy. According to some, the preeminent competitive position of the U.S. economy was eroding (Magaziner and Reich 2001).

Across the country, some regional economies fared better than others. Distressed regions, especially in the industrial Northeast and Midwest emerged from the 1970s as the "Rust Belt." At the same time, states of the South and Southwest — the "Sunbelt" — experienced continued population growth throughout the decade. Most important, the strong economic performance of some "high technology" regions, such as Silicon Valley, Boston's Route 128 Corridor, and Research Triangle Park in

North Carolina, suggested that collaboration among universities, government and the private sector could successfully promote higher growth, high-technology development. The message to regional leaders became clear: By replicating the lessons of Silicon Valley, regions could become globally competitive (Office of Technology Assessment 1984). The right strategy, it seemed, could push a region to the forefront of global economies.

Not surprisingly, Rhode Island, a state devastated by the migration of its textile industry to the South beginning in the 1950s, launched one of the first large-scale efforts to apply corporate strategy concepts to economic development. In 1984, the Rhode Island Strategic Development Commission undertook an ambitious plan to developing a statewide investment strategy to spur high-technology growth. After a year's work, the Commission's produced a strategy report of nearly 1,000 pages.

The analysis provided exhaustive detail on virtually every dimension of the state economy from the business climate and infrastructure to industries and education. Consistent with its ambitions, the Commission, led by the private sector, developed a bold approach to guiding both public and private investment to high-value sectors of the economy. The Commission's understanding of wealth creation guided the process. The key: boost productivity, as measured by value-added per worker (Rhode Island Strategic Development Commission 1985, Volume 1, 5).

The Commission's strategy relied heavily on the advice and guidance of its consulting team, drawn from a firm of former BCG partners. The consultants recommended a bold investment program of nearly $200 million to jolt the state economy out of long-term economic doldrums. (Disclosure: I was part of the consulting team for the Rhode Island Commission.)

Not surprisingly, the strategy provoked a fierce, polarizing debate within the state. Critics called the Commission's work a state-level version of a national industrial policy. They accused the Commission of injecting too much politics into the economy, of "picking winners and losers," of

interfering with the "free market." The criticism hit home. Statewide, the initiative designed to fund the strategy failed in a referendum 4 to 1 (Feldman 1984).

Several lessons emerged from the Rhode Island experience:

- Successful economic development requires broad-based support, and this support depends only partially on facts. Emotions — how people feel about their future — play an equally important role. Leaders cannot generate these positive emotions by facts alone.

- Politics matter. If public money is part of the plan, the strategy ultimately depends on voters; business leaders may have ideas and money, but they rarely have enough votes. Therefore, the process — how an economic development strategy is developed — is as important, if not more so, than the final recommendations. Again, the facts alone do not drive the process.

- The need for public consultation is ongoing throughout the process; authentic engagement is not satisfied with an event, summit, a hearing or a forum. Public support emerges gradually and can disappear quickly. Therefore, the strategic planning process for regional development cannot easily be streamlined. Taking shortcuts with civic engagement is risky. It takes time to build a political consensus behind each strategic initiative.

- The political consensus supporting each initiative is different. The "top-down" model of strategic planning that operates efficiently in a corporate environment does not translate well to the civic environment of regional development in which there are no hierarchies. Bluntly put, nobody can tell anybody what to do.

Soon after the failure of the Rhode Island Greenhouse Compact, I had the opportunity to apply these lessons in a strategy in Northwest Louisiana. This strategy adjusted for many of the mistakes encountered in Rhode Island. By successfully guiding public and private investment in a depressed

region, the plan won the first Arthur D. Little Award for Economic Development Excellence presented by the American Economic Development Council. The project demonstrated that regional leaders could apply corporate strategy models to regional economic development, but only with significant difficulty. In Northwest Louisiana, the regional leadership needed both time and money — nearly 2 years and over $150,000 — to design and launch a successful strategy using this traditional strategic planning approach (Morrison 1987).

Strategic planning for regions: The traditional model

In the years since these early experiments, a small consulting industry has emerged to provide strategic planning services to civic leaders in regional economies. The traditional economic development strategy model mirrors the traditional, linear approach to strategic planning.

The process ordinarily starts with designing a "plan for the plan" in which the consultant guides the region's leadership in designing an appropriate strategy process. This preplanning phase outlines the steps that will guide the strategic planning process. Much of this early work also pulls together a planning team capable of guiding the lengthy process.

Typically, the planning process launches by defining a vision and mission to frame the strategy. The next step focuses on building an extensive base of facts from which to design a strategy. Most commonly, benchmarking and some form of SWOT analysis (Strengths, Weaknesses Opportunities and Threats) helps to organize facts, puts them into a competitive context, and translates data into insights and strategic issues. Consultants add their own mix of target market analysis, cluster analysis, workforce analysis and so on.

After this stage, the public is often invited to contribute ideas through forums, or more recently, a project website. The planning process then moves to developing a portfolio of strategic

initiatives with (in some cases) budgets and implementation plans. Finally, the strategy typically proposes some form of evaluation and monitoring.

There are some inherent limitations in this approach. The traditional strategy model, as the examples in Rhode Island and Northwest Louisiana demonstrate, is long and expensive. Many communities and regions rely on an outside consultant to design and conduct the process. Yet, this approach has limits. When it comes to translating words on the page to action in the streets, the process tends to break down. The reason is simple. Consultants rarely have the deep local knowledge needed to guide implementation.

Another limitation: Early in the process, strategic planning calls for developing a vision statement. This step is neither simple nor straightforward. This complex task often absorbs more energy than it is worth. To forge consensus, regional leaders often draft vision statements that turn out to be bland and confusing. Extensive effort often yields surprisingly little.

Other problems arise along the way. In most places, the pool of civic leaders is relatively thin. After a year or so of guiding a strategic planning process, many civic leaders tire. The challenge of developing successors to the initial leadership team poses a major challenge. With so much effort being focused on the planning process, implementation and execution often become difficult to sustain within a small, engaged group.

Finally, the presumption that this small group of leaders can design and implement a strategy also does not hold in most places. This weakness hits at the core of why the traditional approach to strategic planning does not work well in regional development. Strategic planning models were built to guide hierarchical organizations, in which a relatively small number of people at the top of the organization did all the thinking, and the rest of the organization did the doing. Yet, these command and control mechanisms do not exist in the civic environment. Regional development strategies are

formed and executed in the "civic space" outside the four walls of any one organization. This civic space is not organized hierarchically, as in most private corporations. Rather, the civic life of most regions involves complex interactions of organizations and personalities that defy simple description and quick analysis. In this civic space, no small group of leaders can tell anyone else what to do.

The traditional model of strategic planning promises a framework for identifying opportunities for the cooperative investments at the heart of economic development (Economic Development Administration 2001). Yet, it delivers relatively little in practice. Because the process itself is costly, complicated and cumbersome, the traditional model remains very difficult to apply. More worrisome, by the late 1990s, evidence continued to accumulate that a deeper economic transformation is underway in the global economy. This transformation, which continues today, is making the traditional model of strategic planning – never a particularly good fit for regional development — far less effective.

Where are we heading? The emergence of networks

In the early 1990s, economic commentators understood that a major transformation was underway in the U.S. economy (Drucker 1992; Thurow 1994). Knowledge was becoming a major source of new wealth. The shift most clearly appeared in the growing income gap between educated and low skilled workers (U.S. Census Bureau, 2002).

At about the same time, Michael Porter, a professor at the Harvard Business School, drew the attention of policymakers to the importance of clusters — geographic concentrations of related businesses and support organizations —as a key driver of regional prosperity (Porter 1990, 1998). Porter emphasized how clusters provided firms with competitive advantages through streamlined access to knowledge, including inside market information and the specialized skills of experienced employee.

The theory of clusters got an unexpected boost from economist Brian Arthur, who pointed to the emergence of increasing returns in markets characterized by knowledge-based products (Arthur 1996). Arthur explained that markets with increasing returns generate instability, not equilibrium, as predicted by classical economic theory. These markets are characterized by multiple potential outcomes. It is not always true that the best mousetrap wins, and markets do not necessarily settle on a single equilibrium point.

Knowledge within markets is constantly changing as new information is generated, new insights emerge and new experiences are incorporated. Because the competitive consequences of new knowledge are dynamic and uncertain, businesses compete differently. They look for new waves of increasing returns, and to do so, they collaborate to compete (Kelly 1998; Logan and Stokes 2004). In these markets, successful strategies value agility, flexibility, speed, collaboration and continuous learning.

In this market environment, clusters have become an increasingly important strategy for regional economic development with good reason. Clusters enable firms to leverage their assets and manage the risks of rapidly shifting markets. Embedded in a cluster, businesses can learn faster, spot opportunities faster and locate partners faster. They can be more competitive.

All of these factors disrupt the traditional model of strategic planning. In 1994, Henry Mintzberg, a management professor at McGill University and noted authority on corporate strategy, voiced serious doubts about the traditional model. He underscored a number of different fallacies that made the traditional approach to strategic planning unworkable (Mintzberg 1994). To Mintzberg, strategic planning is different from strategic thinking. While strategic planning is primarily analytic, strategic thinking combines analysis with creativity, intuition and synthesis. This approach to strategy is more flexible and informal, more in line with the rapidly shifting dynamics of markets driven by knowledge. Mintzberg's writing provided an important insight: To compete effectively in markets

driven by knowledge, collaboration and innovation, we need to do our strategic thinking differently. We need to free ourselves from the rigidities of strategic planning.

As Mintzberg was writing in 1994, Netscape launched the first beta version of the web browser. The explosion of popularity for the Internet further undermined the traditional model of strategic planning. The Internet, our first interactive mass medium, enables companies to build more sophisticated networks with their suppliers and customers. With these networked business models, market information has become more immediate and dynamic. As the speed of market information has accelerated, the slow, linear process of traditional strategic planning falls increasingly out of step.

Not surprisingly, other business school professors have taken up Mintzberg's call for new approaches to strategy (Pietersen 2002; Ackerman and Brown 2005; Duggan 2007). As Peterson notes (Pietersen 2002, 12), "In an age when everyone has instant access to infinite information, sense-making — the ability to turn flows of information in real knowledge — has become today's scarcest and most valuable resource and the key leverage point for value creation. The company's primary source of wealth is therefore derived from its insights, knowledge, and ideas. Its success depends on how it leverages its intellectual capital."

This world is quite different from the economy that led to the traditional model of strategic planning. As we have seen, the traditional model emerged in the 1960s as a way for corporations to allocate capital across multiple business units operating in relatively stable markets. In these markets, cost structures driven by scarcity and diminishing returns determined the contours of competition. The traditional model reinforced hierarchical, command and control organizations capable of managing a long, detailed and costly strategic planning process. While the traditional model provides some useful frameworks for organizing information and generating insights, it is unable to keep up with increasingly dynamic markets.

Regional economies as open networks

The rise of the Internet enables us to see more clearly that knowledge drives wealth creation and that markets operate as a set of open networks embedded in other open networks. Economies are open networks of interactions that continuously transform and adjust. Eric Beinhocker provides a clear perspective on economies as complex, open networks. "Economies are not just metaphorically like open systems. They literally and physically are a member of the universal class of open systems" (Beinhocker 2006, 71).

To build prosperity in regional economies, we need a more agile strategy process capable of adjusting quickly to dynamic, knowledge–based markets. In particular, this process needs to be geared toward developing clusters of higher growth, knowledge-based businesses. The traditional model of strategic planning, invented for another era, has likely seen its day. We are left with some important questions. What replaces the traditional model of strategic planning? If local and regional economies consist of interconnected networks, can we design and guide these networks strategically? Is strategy even possible in a fast-moving world of open networks?

Fortunately, we have a path forward. In studying how managers develop strategy in dynamic markets, Kathleen Eisenhardt and Donald Sull came to an important insight. Successful strategies in rapidly shifting markets emerge from following simple rules (Eisenhardt and Sull 2001). To capture opportunities in these markets, Eisenhardt and Sull found that companies large and small benefit from deploying a set of simple rules to guide their strategies. This approach to strategy is clear, focused, disciplined, adaptive and iterative. Without this simple approach to strategy, companies can become quickly confused and paralyzed by the swiftly moving markets around them. Eisenhardt and Sull provide an important insight. To manage the complexity of strategy in fast moving markets, you cannot rely on a process that is slow, linear, costly and complicated.

Using this insight, we can see that the search for an alternative to the traditional model should focus on simple, clear frameworks and disciplines. Simple rules can guide members of the network toward transformative outcomes in the midst of shifting markets and opportunities. As we have seen, the burdensome traditional model does not perform well in local or regional economic development. The model does not easily support fast-moving knowledge-based companies or innovative regional clusters. We cannot layer a complex process on top of complex markets and expect to accomplish much.

Recall that an effective strategy answers two questions: "Where are we going?" and "How will we get there?" Following this logic, a new model for guiding strategy in open networks and regional clusters will have two core components. First, we need a simple process or discipline that can design and guide strategic collaborations quickly. These are collaboration that can move toward measurable outcomes by following a clear pathway, while making the inevitable adjustments along the way. Next, we need an understandable strategy map that can make sense of the networks needed to transform a regional economy, so that we do not get easily lost or overwhelmed.

The simple process of forming strategic collaborations

Strategy in open networks requires collaboration, and collaboration begins with conversation. A strategy process for open networks will guide these conversations, focus them and translate words into action. We need to answer the first question of strategy *"Where are we going?"* by defining clear and measurable outcomes. We need to answer the second question *"How will we get there?"* by defining clear pathways and action plans. After nearly a decade of development, we have learned that participants in open, loosely joined networks can answer these two questions if we divide them into four. The first two questions are designed to define a clear outcome. The third and fourth questions define pathways, action plans and a process for making adjustments. By answering these four

questions, participants in a collaboration will generate all the components they need to develop a strategy.

The four questions:

- What could we do?

- What should we do?

- What will we do?

- What's our 30/30?

"*What could we do?*" The first question focuses participants on the tangible and intangible assets that are embedded in their network. These assets might be facilities, money, people, experience, knowledge or passions. In exploring *"What could we do?"* participants first listen to each other and learn about the assets that could form the basis of a new collaboration. In this way, they begin to develop a mental map of the assets within their emerging network.

Simply listing assets is not enough, however. Opportunities emerge when participants link these assets across organizational and political boundaries. So, for example, when regional leaders link a research university with a community college, new opportunities emerge to expand career pathways. When a chamber of commerce links to a library, regional leaders can start to see new ways to expand the support provided to small business entrepreneurs. When hospitals link to primary and secondary schools, new
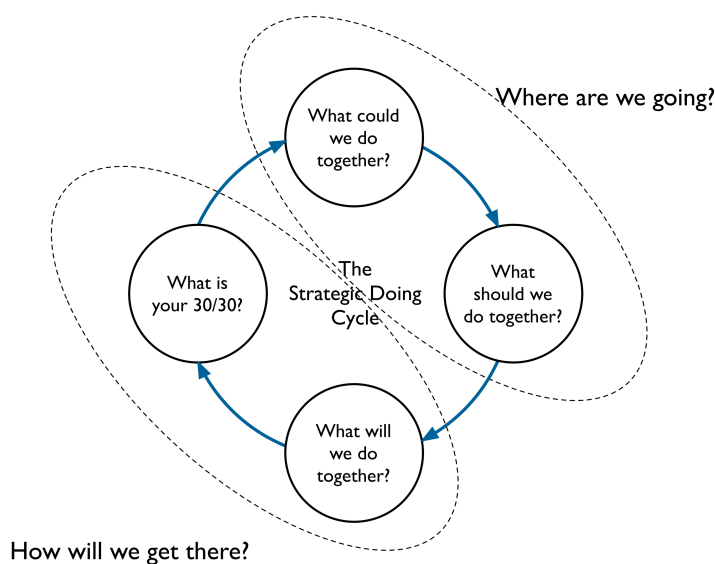
Figure 1: Strategic doing divides the two key questions of strategy into four questions. As emerging networks answer these questions they generate all the components they need for a strategy.

opportunities emerge to promote good habits of exercise and healthy eating. By exploring what they could do together, participants in an emerging network begin to see the contours of the new economy in which collaboration can generate greater returns. These positive returns represent a distinguishing characteristic of the knowledge economy (Arthur 1996).

"What should we do?" Strategy involves making choices, and the next question of Strategic Doing focuses participants on their most promising opportunities. Each high priority opportunity must be converted into a shared outcome. In traditional strategic planning, a "vision" provides the guiding light for a strategy. Unfortunately, visions do not work well in open networks. In most cases, a vision is too vague or impractical to move people. The bland language of visions statements does not move people emotionally. To engage people in networks, we need clear, concise and measurable outcomes. Clarity enables people to translate an outcome into their own mental model. They can then engage emotionally. People in a network need to have a clear picture in their mind of where they're going before they will commit to moving (Black and Gregersen 2002, 77-78).

Answering the question, _"What should we do?"_ involves defining a concise, engaging outcome with measurable characteristics. This approach sounds counter intuitive. It may seem that as people work together to define an outcome in specific terms, the probability that they would agree would go down. Based on our experience, however, the likelihood of agreement goes up. A strategic outcome represents a complex reality with a variety of different important dimensions. As members of the network explore these dimensions and determine how to measure them, they come to understand that the different characteristics of their outcome are not mutually exclusive. In designing their outcome, they strengthen their consensus and commitment to work together.

A simple example explains the point. Assume a friend and you have had a long-held dream to buy a cabin in the woods that you could share for family vacations. Your spouse likes to fish and wants a cabin that is close to a river or stream. Concerned about having enough room for the extended

family, you also want at least one bedroom big enough for multiple bunk beds. Your friend, on the other hand, imagines a cabin with enough quiet room to write a great novel. Finally, your friend's spouse loves to cook and wants a large kitchen and eating area. You can see from this simple example that by designing a potential outcome in detail, members of a network can become clearer about where they are going. As the shared outcome becomes more defined, they tend to become more deeply committed to collaborating to achieve a shared outcome.

Too often, sadly, our civic discussions that surround regional development are not very deep, disciplined or focused. Our conventional civic conversations often represent a series of monologues, loosely strung together. Groups are not fully engaged in the deep thinking required to design compelling, shared outcomes. To break this cycle, a disciplined conversation to design at least one shared outcome becomes a critical step in aligning a network with "link and leverage" strategies.

"What will we do?" Translating ideas into action requires an initiative and an action plan. An initiative is a multi-step project that moves participants closer to their shared outcome. Members of a network may (and probably will) launch multiple projects to achieve their outcome, but they are best to start with just one. Like outcomes, projects or initiatives work best to move a network when they are can be described clearly and concisely. The easiest way involves designing the project to include two or three major milestones. Milestones provide some logical, practical evidence that participants can indeed move toward their outcome.

In answering *"What will we do?"* participants must also translate their initiative to an action plan that explains who does what by when. In Strategic Doing, an action plan serves three important purposes. First, it makes commitments transparent. This transparency helps members of the network learn who is reliable. Transparency helps build trust. Second, the action plan underscores the importance of shared, not delegated, responsibility. In an open network, the responsibility for translating ideas into action falls to each member of the network. In this way, members of the network

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align their actions to shared outcomes. Finally, a written action plan also enables members of the network to make adjustments quickly as circumstances change. Written action plans provide adaptability and flexibility to the network's strategy.
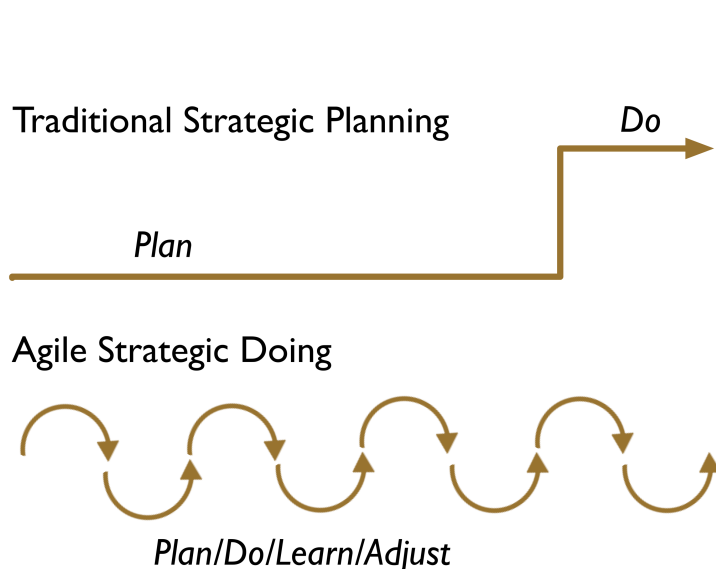
Traditional Strategic Planning

Plan → *Do*

Agile Strategic Doing

Plan/Do/Learn/Adjust

Figure 2: In contrast to the linear process of strategic planning, strategic doing is agile, iterative and flexible.

"What's our 30/30?" This question asks the participants, "What did you do the last 30 days and what will you do in the next 30 days?" Although the simplest to answer, the 30/30 question is the most often neglected. Without having a clear commitment to reconnect, evaluate and learn what's working, participants in a network will fail in their strategy. The 30/30 question enables the strategy to adapt and evolve. Ordinarily, in the early stages of a Strategic Doing process, members of the network need to get back together within 30 to 60 days.

Deciding when to reconvene also opens the door to connecting over the Internet. Collaboration online can expand the productivity of the network. Answering the 30/30 question acknowledges that strategy is never done; it establishes a simple process of learning and adjustment, a "learning loop." Strategic Doing in open networks is a continuous process of adaptation, a process of learning by doing

A simple strategy map (and a theory of regional transformation)

Designing and guiding networks strategically takes place through focused, iterative conversations. But what kinds of networks are needed to transform a regional economy? If regional development is the process of accelerating collaborative investments to boost productivity, what types of collaborations does a region need? To answer this question, we turned to the idea of strategy maps.

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A strategy map is useful to sort out complexities (Kaplan and Norton 2004). It provides coherence, an important characteristic for strategy 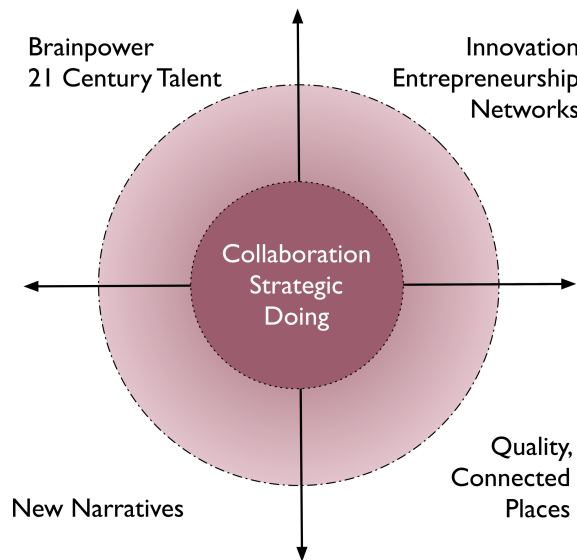in fast moving markets. Indeed, some have argued that coherence is now more important than vision in guiding strategy (Lissack and Roos, 2001). Within an organization, a strategy map explains how an organization creates value from a variety of different perspectives. The map outlines the strategic goals pursued by an organization and how they are linked. The same idea can be applied to regional economies, as well as regional innovation clusters.

Figure 3: Regional transformation involves designing and implementing a portfolio of collaborative investments across five key areas. This strategy map enables regional leaders to link, leverage and align their investments.

A strategy map for a regional economy or cluster consists of five components or focus areas, each representing a critical dimensions of investment for a generating wealth in a an economy driven by knowledge. These critical investments:

- Building brainpower;

- Creating support networks for innovation and entrepreneurship;

- Develop quality, connected places;

- Creating new narratives; and

- Strengthening collaboration.

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As we explore these different dimensions, we will see how they are linked to a clear explanation of how regional economies and regional innovation clusters move toward higher levels of productivity.

Building brainpower: As Lester Thurow noted over fifteen years ago, the global integration of markets places a premium on brainpower. "With everything else dropping out of the competitive equation, knowledge has become the only source of long–run sustainable competitive advantage, but knowledge can only be employed through the skills of individuals." (Thurow 1996, 74).

To be competitive in the 21st century, regions, clusters and companies must start with people who have 21st century skills. Higher levels of educational attainment are closely associated with higher levels of income (Gottlieb and Fogarty 2003). Brainpower investments include basic skills, improvements in STEM (science, technology, engineering and math) education and the development of career pathways that connect high school to postsecondary education.

Creating support networks for innovation and entrepreneurship networks: Prosperous economies support innovative firms and entrepreneurs with a wide range of interconnected initiatives. Responsive networks translate brainpower into wealth quickly by identifying and supporting high-growth companies and accelerating the formation of startup companies. These networks strengthen the resilience of regional economies; as market circumstances change, companies and individuals use these networks to move assets toward more productive uses (Saxenian 1996). Innovation and entrepreneurship supports include investments such as incubators, technology commercialization initiatives and angel capital networks.

Developing quality, connected places: Smart people and innovative companies can locate anywhere. They will choose places that are secure, healthy and connected. "Place-making" investments include the basket of activities that civic leaders undertake to remake the places in which

they live and work. These place-based investments create "hot spots" that are healthier, more innovative, more creative and more connected.

With place-making investments, communities and regions can remake themselves to attract and retain the brainpower and innovative businesses needed to power an economy forward. Investments in quality, connected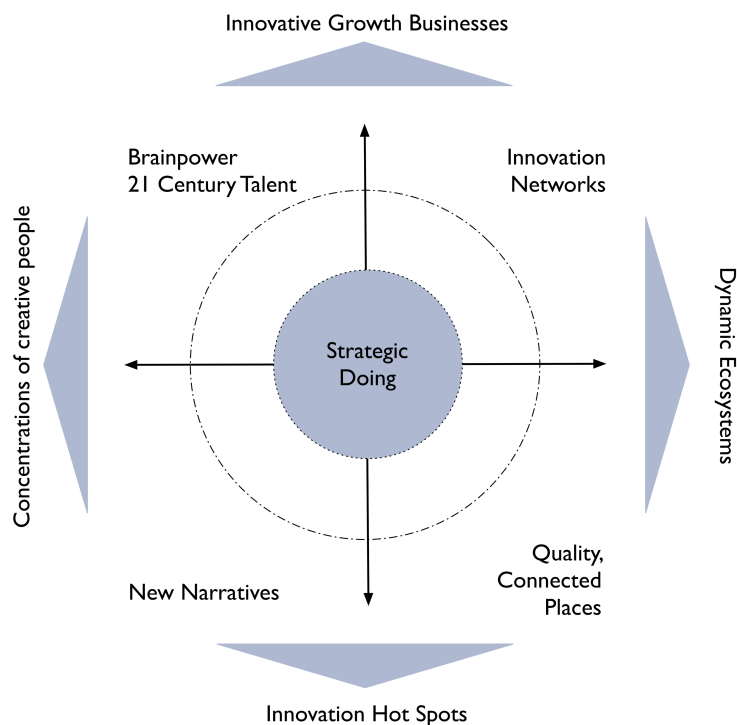 places include physical development, such as expansions of broadband; mixed-use development in downtown districts and around university campuses; the development of connected public spaces, such as parks and libraries; and the preservation of natural resources. These investments also include activities designed to promote healthy, safe and creative places to live and work.

Figure 4: As civic leaders focus on collaborations that drive underlying investments, more complex characteristics of an regional innovation economy emerge: concentrations of creative people, innovative companies, dynamic ecosystems, and innovation hot spots.

Creating new narratives: To transform an economy, civic leaders need new narratives to guide the transformation. These narratives provide coherence, and in complex, shifting environments, coherence facilitates alignments (Randall & Harms, 2011). Command and control management styles do not work effectively in the "civic space." On the other hand, stories can move loosely joined networks in new directions. These networks can be explicitly designed and guided (Rosen 2000; Gladwell 2002; Denning 2005). New narratives both connect to the past and chart a pathway to a more prosperous future; they provide both meaning and a sense of direction.

Strengthening collaboration: Effective collaboration requires new leadership skills. Guiding a complex project among a loose network of people requires skill to inspire participation, sharing and commitment (Crislip 2002). As these skills develop and become more widely shared, the capacity of the network to take on more complex tasks grows. Initiatives to build collaboration skills involve learning experiences in which leaders can improve their collaboration skills.

This simple strategy map helps regional leaders figure out quickly where they stand. With this map in hand, they can map the strategic focus of the major organizations, initiatives and investments within a region. They can quickly identify potential partners for collaboration. In addition, the strategy map opens the door to some important questions about how well assets within the region are linked, leveraged and aligned. So, for example:

- How well are different organizations connected and aligned?

- What outcomes are different organizations pursuing?

- Can these outcomes be measured and communicated easily?

- How do these metrics reinforce a broader regional narrative?

- Are we balancing short term and long term outcomes?

- Are there significant gaps in our portfolio of organizations and initiatives?

- Do our collaborative investments reflect our strategic priorities?

- What is the appropriate balance of investment across our portfolio?

Strategic Doing in practice

Strategic Doing has evolved over the past two decades. The journey started in Oklahoma City and continues today. Here is a brief overview of some significant milestones along the path.

Transforming Oklahoma City: The development of Strategic Doing for regional development began in Oklahoma City in 1994. In a coordinated strategy between the City and the Chamber of

Commerce, Oklahoma City transformed its regional economy over seven years using early versions of Strategic Doing. Now, Oklahoma City is regarded as a leading region for regional economic development (Thompson 2010).

Building an entrepreneurial ecosystem with the Charleston Digital Corridor: In 2001, the Charleston Digital Corridor launched using the disciplines of Strategic Doing. Led by a city employee, the Corridor used the strategy map presented earlier in this paper to design a portfolio of investments designed to support emerging high growth technology companies. Now Charleston joins Austin and Oklahoma City as one of the Nation's leading regional economies for supporting these emerging firms (Seale 2011).

Accelerating workforce innovation in North Central Indiana: In 2005, a collaboration led by the Purdue Center for Regional Development received $15 million from the federal government to accelerate innovation in workforce development. The collaboration focused their efforts in four areas: talent development, entrepreneurship development, cluster development and regional leadership. In three years, the Strategic Doing process led to over 60 initiatives in these four focus areas. Remarkably, over 80% of the initiatives continued past the initial funding. The federal government established ambitious goals for its investment, and the collaboration exceeded these goals by nearly a factor of three.

Building a water cluster in Milwaukee, Wisconsin: In southeast Wisconsin, economic and workforce development professionals used Strategic Doing to help launch a fresh water technology cluster. In July 2008, the Milwaukee Water Council conducted a Strategic Doing workshop to identify opportunities to become a global leader in fresh water technologies. The workshop enabled participants from business, higher education and government to come together and identify four focus areas within which to launch strategic initiatives. Today, the Water Council based in Milwaukee has become a global leader in fresh water technology.

Launching a clean energy cluster on the Space Coast: In October 2010, civic leaders in Brevard County, Florida civic leaders confronted the termination of the NASA shuttle program. To develop a strategy for transformation, leaders turned to a series of Strategic Doing workshops as a way to identify "reengagement networks". The dislocations that arose from changes taking place at NASA swamped the capacity of the public workforce system to adjust. Developing new reengagement networks enabled civic leaders to realign quickly and move toward new opportunities. Out of these Strategic Doing workshops, a new cluster of clean energy companies formed.

Building an aerospace cluster in Rockford, Illinois: In 2011, civic leaders used the disciplines of Strategic Doing to form the complex collaborations needed to strengthen a cluster of aerospace companies. In the first year of this collaboration, Rockford leaders, led by Northern Illinois University, formed the Joint Institute for Engineering and Technology – Aerospace (JiET-A), an innovative partnership among aerospace businesses, higher education institutions and students for the advancement of the aerospace industry workforce.

Rebuilding neighborhoods in Flint, Michigan: In 2011, Michigan State University began using the disciplines of Strategic Doing to rebuild the devastated neighborhoods of Flint, Michigan. Using networks that mobilized the assets of neighborhood residents, the new network — Neighborhoods Without Borders — has focused on practical steps to regenerate these neighborhoods with the assets at hand. This shift in focus has fundamentally altered the way in which participants in the network view their work. Rather than appeal to outside funders for help, the network partners are innovating with their own resources.

Teaching Strategic Doing through a national network: Since 2005, the Purdue Center for Regional Development (PCRD, which has incubated the Strategic Doing practice, has conducted workshops in over 30 states and Australia. Based on the demand that these workshops have generated, PCRD introduced a certificate course for Strategic Doing. The Center is also forming a

national network of universities teaching this discipline. The initial partners in this network include Michigan State University and The University of Akron. In November 2013, PCRD conducted its first off campus certification training at the University of Alaska.

What we are learning: How regions evolve toward open innovation

The transformation of regions toward agile strategy takes time. Strategic Doing is a collective discipline that must become widely shared before it is effective. The transformation in Oklahoma City took about five years. The transformation in the Charleston Digital Corridor took about as long. Building and refining a discipline around Strategic Doing should collapse the time for regional transformation. We are only beginning to map this process, but a clear pattern is emerging. As regions build the discipline, they appear to cross five horizons.

In the first horizon, the critical mass of civic leaders begins to move forward with new conversations about collaboration. In many communities and regions, the civic conversations are stuck on old topics that lead nowhere. Transformation begins when enough people decide to change the prevailing conversations. So, for example, young professionals in Youngstown, Ohio, began a new series of conversations about the future of their industrial city.

In the second horizon, civic leaders reshape their thinking from hierarchies to networks. They move their attention from vertical relationships to horizontal connections. In doing so, they discover different hidden assets that are embedded in networks within their community or region. They learn the importance of intentionally building relationships to strengthen their networks and connect these assets.

Network thinking differs from hierarchical thinking in some fundamental ways. A strong network has a dense core of relationships and porous boundaries. The dense core enables the network to accomplish complex tasks. The porous boundaries encourage new members to join and for learning

to continue. A porous boundary enables a network to adapt to new circumstances. In contrast, hierarchical leaders spend much of their time marking and defending their boundaries.

In the third horizon, civic leaders develop the skills to guide their networks strategically. As they master the disciplines of Strategic Doing, they learn to guide conversations to address strategic issues. They learn that answering these questions generates all the components of their network's strategic action plan. They experience strategy in networks as a fast, iterative process, in contrast to ponderous strategic planning.

In the fourth horizon, civic leaders begin the search for pilot projects that can be transformative. In this search, they apply a simple, but rigorous process to identify initiatives that induce new investment, "link and leverage" assets and offer the promise of transformation. Only initiatives that are replicable, scalable and sustainable hold the potential for transforming a regional economy.

Finally, in the fifth horizon, civic leaders focus on expanding the successful pilot projects they have identified. As these initiatives expand, the transformation takes hold.

What we are learning: Strategic Doing, complexity and big messes

Strategic Doing appears to be a promising approach to addressing complex regional development challenges. These challenges involve a high degree of components coupled with a high number of interactions (Sheffield et. al. 2012). For the most part, regional development involves defining collaborative strategy in the context of these complex, highly interactive systems, or what some have called "messes."

The Strategic Doing design team

To assist Purdue in developing Strategic Doing as a discipline for handling complex messes, we convened a "Strategic Doing Design Team" composed of practitioners from around the country. The

design team, which has a floating membership of between ten and fifteen, meets every six months to

design the next set of priorities for developing the discipline. The work started in 2008. In 2011, the

Design Team adopted a set of beliefs, a credo, to guide the development of the discipline.

Strategic Doing Credo

1. *We believe we have a responsibility to build a prosperous, sustainable future for ourselves and future generations.*
2. *No individual, organization or place can build that future alone.*
3. *Open, honest, focused and caring collaboration among diverse participants is the path to accomplishing clear, valuable, shared outcomes.*
4. *We believe in doing, not just talking – and in behavior in alignment with our beliefs.*

Strategic Doing Design Team
Turkey Run State Park, Indiana
October, 2011

Where we are heading: Some predictions

Developing new models of strategy appropriate for open, loosely connected networks

represents a new frontier for regional development. In the years ahead, we will likely see the practices

of Strategic Doing both spread and develop. Here are some predictions:

1. A growing number of colleges and universities will embrace Strategic Doing as part of their

   engagement mission. Higher education is built around three core missions: research, teaching

   and engagement. With a move toward a more open, network-based economy, the engagement

   mission offers colleges and universities exciting new roles to play in regional economic

   transformation. Strategic Doing provides a convenient, simple platform for higher education to

   convene and develop more extensive networks within their regional economy.

2. Communities and regions will use Strategic Doing to adapt promising practices. For a number of

   years, researchers have been compiling promising best practices in regional development. The

   challenge comes in adapting these practices to different circumstances. Trying to apply a case

study without modifying the local conditions is like trying to plant cut flowers: it does not work. Strategic Doing provides a convenient, low cost approach to adapting promising practices to local circumstances.

3. Within regions, the lines among economic, workforce, community and rural development will continue to blur. In Strategic Doing, networks matter more than boundaries. Participants volunteer their assets to the network and then work to define new opportunities by linking and leveraging these assets with others. Boundaries do not disappear, but they become more porous and less controlling.

4. Civic leaders in regions will intentionally develop their "civic spaces." A democracy demands complex thinking among its citizens. Yet, we have let our civic spaces deteriorate to the point where most communities and regions do not have established places and routines for addressing the complex challenges of economic transformation. A civic space designed for Strategic Doing is an open, welcoming physical location bounded by clear rules of behavior. In the years ahead, we will likely see civic leaders understanding the strategic importance of maintaining these civic spaces in colleges and universities, libraries, community centers and other locations where people can feel safe to have complex conversations.

5. The next generation of national development policies will be more productive, open and flexible. With Strategic Doing as a framework, national governments can move toward a more uniform approach of investing in open innovation networks within regions. In the U.S., the current approach of bolting together different agency programs does not work very well. These programs — each designed separately decades ago — cannot meet the needs of today's competitive regions. New approaches will be far more productive by leveraging networks. Purdue has already demonstrated how these policies can be structured.

6. Strategic Doing will lead to a tighter integration of online and in person "open innovation." We are still at the early stages in our understanding of the power of the Internet. As people become more comfortable with the interactive and collaborative tools available, we will see a migration of regional development activity towards the Web. This migration will, in turn, create opportunities for regions to connect far beyond their borders. The organizational and political boundaries that so carefully define the current scope of regional development activity will become less relevant.

7. Organizational forms for regional governance will shift. Virtually every regional organization follows the organizational form of a tight hierarchy: a board directors and a staff that is organized along functional departments. Increasingly, we will see new organizational forms that will blend hierarchy with network-based organization and more flexible teams. These new organizational forms will be more agile and less costly. All of these developments will lead to new forms of collaborative leadership. The leadership of open networks is distributed and shared. Leadership responsibilities and roles shift as circumstances change. Exploring collaborative leadership will take us to an understanding that each of us should be prepared to be both a leader and a follower. Our journey will deliver us a deeper understanding of how our democracy can innovate to meet the challenges ahead.

8. Nonprofit leaders and local governments will find that Strategic Doing helps forge new collaborations to address mounting social challenges amidst increasing fiscal pressures. Fiscal and operational pressures are increasing on non-profit organizations and local governments. To address these challenges, they will need to form collaborations more quickly and monitor their progress carefully. These new arrangements will enable them to make better use of funds and to move them more directly to shared and measurable outcomes. Strategic Doing provides a simple discipline to forge these partnerships.

9. Businesses will find Strategic Doing an attractive alternative to strategic planning; business schools will begin adjusting their course work to move toward agile strategy disciplines as a way to manage "open innovation." Open innovation leverages innovation assets outside an organization (Chesbrough 2003). As businesses move toward more open, networked business models, they will move toward more sophisticated collaborations within their regional economies. They will become more active players in regional development. Using Strategic Doing as a discipline to form and guide these collaborations, they will find new opportunities to create "shared value" (Porter and Kramer 2012).

The discipline of Strategic Doing will continue to evolve in the years ahead, as we learn more about how to form and manage innovation in open, loosely connected networks. This much is clear: Our approach to strategy will never be quite the same.

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