

THE R&D MANAGEMENT CONFERENCE 2014

MANAGEMENT OF APPLIED R&D

CONNECTING HIGH VALUE SOLUTIONS WITH FUTURE MARKETS

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OPEN STRATEGY IN R&D

Session chair

**Prof. Sabine Brunswicker, Purdue University,
United States of America**

Industrial partner

**Prof. Johann Füller & Giordano Koch, Hyve AG,
Germany**

The term “open strategy” suggests that openness does not only relate to managing openness in an individual R&D project or in the idea-to-launch process. Open strategizing implies a more open approach towards managing the strategy and policy processes in R&D. There are two key dimensions that characterize open strategy making, namely (1) greater internal and external transparency as well as (2) greater inclusiveness of various actors in strategy-making, internal and external. Information systems and digital technologies afford novel means to engage a large number of participants in open strategy processes.

With this special session we call for papers that tackle open strategy in R&D and the strategic use of information systems in open strategy in R&D from different perspectives and theoretical lenses (e.g. network theory, micro-political approaches, theory of affordances). We are interested in advancing existing theory and strongly encourage empirical contributions that span both the private as well as the public sector.

Effective Strategy Making in Local and Regional Development

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This paper presents findings from a study that examined strategy making in the context of local and regional development. There are approximately 13,000 local and regional economic development organizations in the U.S. alone; and it is likely that at some point in the recent past or near future, a great many of them have developed, or will develop, a strategy for growing their economy. Little research, however, has been conducted to examine what makes one local or regional development strategy process any better or worse than another. The purpose of this research was to fill that gap in the literature, identifying factors that lead to effective strategy making in local and regional development and to provide civic leaders and development practitioners with evidence-based information to help them design and implement effective strategy-making initiatives.

This mixed-method study included both a qualitative grounded-theory component as well as a quantitative quasi-experimental phase. The theoretical foundation for the study came from the scholarly literature on social innovation from sociology, collaborative governance from public administration, and strategy formation from management.

Data were gathered from over 100 strategy initiatives from around the U.S. as well as from a panel of economic development strategy experts. The findings point to characteristics consistent with open strategy rather than the closed models often associated with traditional strategic planning. This paper will discuss eight specific characteristics of effective strategy making and shed new light on the application of open-strategy in local and regional development. Although the study examined strategy in the context of local and regional development, the findings will be of relevant to anyone interested in the development and implementation of strategy in open networks.

1. Introduction

The prevailing local and regional economic development paradigm over the last 30 years in the United States has been one of industrial recruitment in which a state or municipality incents firms to move or expand into a location within their geographic boundary of interest (Efendiev and Sorokin, 2013; Loveridge, 1996; Lowe, 2012). One of the management tools used to guide economic development during this era has been traditional strategic planning designed for hierarchical environments in which strategy and planning is a function of the top of the hierarchy and execution is a function of the bottom (Blackerby and Blackerby, 1995; Blair, 2004).

Globalization has changed the dynamics of industrial

recruitment making it much more difficult for U.S. communities and regions to attract new industry (Osgood, Opp, and Bernotsky, 2012). As a result, a new paradigm is emerging that is focusing on growing local and regional economies by encouraging growth of firms already within a geographic area. Many U.S. states, regions, and local communities are focusing on entrepreneurship, innovation, research and development, and human capital as areas where they can make put in place policies and programs to grow their economy (Chrisinger, Fowler, & Kleit, 2012; Feser, 2009; Nolan, Morrison, Kumar, Galloway, & Cordes, 2010; Rindermann, 2011; Wolf-Powers, 2012).

This new paradigm means that local and regional economic development must be much more inclusive and open than it once was, requiring networks of stakeholders from industry, government, and the nonprofit sectors to work together to develop and execute strategies to move local and regional economies forward (Olberding, 2009; Clark, Huxley, and Montford, 2010). This new paradigm also requires a different set of policy and management tools

to help foster and manage economic development. One of those tools, strategy, is still needed, just as it was in the early years of economic development, but the command-and-control nature of traditional strategic planning does not work well in this more networked, open, and collaborative environment (Morrison, 2012).

The purpose of this two-phase, sequential study was to develop and test a new theory of strategy-making effectiveness in the context of local and regional economic development. The first phase was a qualitative search for the factors associated with strategy-making effectiveness by collecting data from a panel of experts. The findings from this qualitative phase were then used to develop and test a set of hypotheses about strategy-making effectiveness by collecting and analyzing data collected from a survey of individuals who have participated in local and regional economic development strategy initiatives. Although the specific setting of this study was local and regional economic development, the finding may be of interest to other scholars and practitioners engaged in strategy that involves multiple organizations working together in an open collaborative network.

2. Literature Review

The full literature review for this study looked at the changing nature of economic development in the U.S. from the pre-institutional era prior to World War II, the period when local and regional economic development became institutionalized (1950-1990), and 1990 to today when many institutions have economic development interests. Next the literature review examined the increasing complexity of economic development as a phenomenon and the additional complexity that results when multiple stakeholders are engaged. The literature review also explored the evolution of the management tools used in economic development from the introduction of strategic planning adopted from industry (Blair, 2004) to the evolution of those models (Bryson and Roering, 1987; Hein, Cole, & Ayres, 1990) to the recent emergence of new strategy development models (McNamara, 2010; Merkel, 2010; Hutcheson, 2008; Hutcheson & Morrison, 2012; Walzer & Cordes, 2012).

This examination of the history and evolution of economic development in the U.S. pointed toward a need to better understand the strategy development process, the nature of collaboration, and the phenomenon of economic development as social innovation. To do so, the theories of strategy formation, collaborative governance, and social innovation were consulted.

In weaving together the history of economic development, the examination of the introduction, later evolution, and recent emergence of strategic planning models; and the consideration of the contributions from the theories of strategy formation (Feser, 2012; Johanson, 2009; Lindblom, 1959; Mintzberg, 1978; Parnell, 2008; Rindova,

Dalpiaz, and Ravasi, 2011; Sminia, 2012; Tapinos, Dyson, and Meadows, 2011), collaborative governance (Ansell and Gash, 2008; Chiclana et al., 2013; Clarke, Huxley, Mountford, 2010; Emerson, Nabatchi, and Balogh, 2012; Gibson, 2011; Johnston, Hicks, Nan, and Auer, 2011; Kwon, Berry, and Feiock, 2009; Merkel, 2010; Olberding, 2009; Ospina and Saz-Carranza, 2010; Pammer, 1998; Poister, 2010), and social innovation (Bland, Bruk, Kim, and Lee, 2010; Bouchard, 2012); Mulgan, Ali, Tucker and Sanders, 2007; Neumeier, 2012; Oliveira and Breda-Vazquez, 2012), five distinct strands of observations emerged from the literature review

2.1. Organizational Structure

One of the factors identified in the literature was the structure used in organizing the strategy-making initiative. Local and regional Economic development began without much structure at all. In most communities a small group of wealthy and powerful businessmen made decisions that greatly impacted their economy. It was the period between 1950-1990 when institutional structure began to emerge, evolving further into a multi-institutional structure of today. These early inter-organizational structures were quite hierarchical in nature and more recently network structures have emerged. Recent scholarship pointed toward networked organizational structures as being more effective than hierarchical ones in developing and implementing multi-organizational strategies.

2.2. Frameworks

Another factor that emerged in the literature was the overall framework or orientation of strategy initiatives. In economic development strategy two primary frameworks are evident, those that are oriented mitigating deficits (high unemployment rates) or building on assets (unique skills of the workforce). The models and processes that emerged during the evolutionary era of economic development strategic planning indicated that the asset-based framework is more effective than those focused on liabilities. Scholarship from all three contributing theories, strategy formation, collaborative governance, and social innovation, confirm the effectiveness of this asset-based orientations and frameworks.

2.3. Processes

Planning and implementation are two different components of the strategy making process and two different processes. According to the literature, a process that integrates planning and implementation iteratively rather than those that have a more sequential process in which a clear planning phase is followed by a clear implementation phase is more effective. This integrated approach is noted in most of the emerging models of local and regional economic development planning and confirmed in the social innovation literature as more effective than linear processes in which a planning phase is followed by an implementation.

2.4. *Timeframe*

Some strategy-making efforts tend to focus mostly on longer-term goals while others stress the importance of shorter-term wins. The scholarship of collaborative governance points to the importance of short-term wins, and the emerging models of local and regional economic development also point to this approach as a priority and as a predictor of effectiveness.

2.5. *Implementation*

When it comes to moving into action, the literature indicates that strategy initiatives in which tasks are shared among a wider group of stakeholders is a more effective approach than when implementation tasks are held by a smaller group. Both the pre-institutional era of economic development as well as the early institutional period had implementation centralized within a small group or a single organization. Although the evolutionary models called for more democratic participation, that broader involvement was primarily evident in the planning phases rather than the implementation phase. Social innovation theory urges decentralized implementation as a key to effectiveness.

3. **Methodology**

These five observations from the literature review helped form the lines of inquiry explored in the qualitative phase of the study. In this phase semi-structured interviews were conducted with a panel of ten economic development strategy scholars and practitioners. Coded excerpts served as the data from this phase and it was analyzed using the data analysis spiral framework (Creswell, 2010, pp. 150–151).

The results of this analysis were then used to form the basis of the second phase of the study, a quantitative, quasi-experimental, contrasted-group survey of individuals who had participated in economic development strategy making efforts. In this phase participants were randomly assigned to two contrasting groups: those who had experienced strategy initiatives they deemed as effective and those who had been involved with initiatives they described as ineffective. A random sample of 300 was drawn from the mailing list of a national economic development group's mailing list of 9,000.

In order to widen the sample beyond just these 300, a variation of the snowball sample (Wasserman, Pattison, & Steinley, 2005) was also employed. Primary recipients of the survey are invited to forward the survey onto other individuals who meet the stated criteria (i.e., those who have participated in a strategy development process within the

last 5 years) and who are affiliated with their own organization or with another relevant organization. The total number of survey respondents was 109. Spearman's rho was used to examine the strength of the relationships between the variables.

Drawing on the observations from the literature, a set of open-ended interview questions were developed. For instance, one question asked about the optimal organizational structures for a local or regional economic development strategy initiative, giving hierarchies and networks as examples. The observations from the literature were also used to develop the following five contingent hypotheses to be finalized after the qualitative phase.

3.1 *Organizational Structure*

H0: There is no correlation between strategy initiative effectiveness and network organizational structures.

H1: There is a positive correlation between strategy initiative effectiveness and network organizational structures.

3.2 *Frameworks*

H0: There is no correlation between strategy initiative effectiveness and asset-based frameworks.

H1: There is a positive correlation between strategy initiative effectiveness and asset-based frameworks.

3.3 *Processes*

H0: There is no correlation between strategy initiative effectiveness and iterative-based processes.

H1: There is a positive correlation between strategy initiative effectiveness and iterative-based processes.

3.4 *Timeframe*

H0: There is no correlation between strategy initiative effectiveness and short-term wins.

H1: There is a positive correlation between strategy initiative effectiveness and short-term wins.

3.5 *Implementation*

H0: There is no correlation between strategy initiative effectiveness and decentralized implementation.

H1: There is a positive correlation between strategy initiative and decentralized implementation.

These hypotheses were used to develop the survey instrument used in the quantitative phase. Questions were phrased to give respondents a choice of two statements for each of the eight factors of effective strategy initiatives.

These choices were carefully worded so that no value would be assigned to either phrase. For instance for the question about organizational structure respondents were asked which statement: (1) hierarchical, with a clear top and bottom or (2) network, with a clear hub and spokes best described the strategy initiative they have in mind. Also, to further measure effectiveness and ineffectiveness respondents were asked to rate how effective (completely effective, significantly effective, somewhat effective) and how ineffective (somewhat ineffective, significantly ineffective, completely ineffective) the strategy initiatives they had in mind were.

4. Findings

The findings of the qualitative data confirmed the original five a priori observations from the literature review. An additional three observations emerged. The following is a summary of the eight observations about effective strategy initiatives.

4.1. *Organizational Structure*

Organizational structure was one of the a priori observations. There was strong evidence in the literature that the way in which a strategy initiative is organized plays a fundamental role in whether or not the effort is effective (Gibson, 2011, p. 5; Merkel, 2010, p. 6,519; Neumeijer, 2001, pp. 54–55.) The data gathered during the qualitative phase of the research confirmed the importance of this factor. Two dominant structures emerged including hierarchies and networks, specifically whether the structure was primarily hierarchical with a clear top and bottom, or more networked with hubs and spokes. The qualitative data gathered about organizational structure confirmed the initial hypothesis that networked organization structures are likely to be more effective than hierarchical ones in the context of economic development strategy making.

4.2. *Frameworks*

Frameworks was also an a priori factor identified in the literature review. There was strong evidence in the literature that an asset-based framework led to effective strategy making (Merkel, 2010, p. 6519; Neumeijer, 2001, pp. 54–55.) This was confirmed in the qualitative data. In terms of both volume of discussion and richness of content in the interview data, this theme ranked on top with 43 excerpts coded as contributing to this theme. Excerpts related to asset-based frameworks represented far more content than did deficit-based. The discussions about deficit-based approaches included a warning about using that as a primary framework, “the ones that have been less successful are the

ones that start with a ‘what’s wrong?’,” indicated one of the interviewees. The qualitative data gathered in relation to frameworks confirms the hypothesis that asset-based frameworks are likely to be more effective in the context of economic and development strategy making.

4.3. *Processes*

Processes was also an a priori factor that emerged in the literature, specifically that iterative planning and implementation processes were more effective than were sequential processes in which a distinct planning phase is followed by a distinct implementation phase (Rindova, Dalpiaz, & Ravasi, 2011, p. 422.) This was confirmed in the qualitative phase of the study. The data on processes focused on the interplay between the planning and implementation phases of a typical economic development strategy initiative. Twenty-six excerpts were coded as being relative to this theme and the child code of “iterative” had a 100% co-occurrence with processes. The qualitative data gathered related to processes supports the hypothesis that iterative planning and implementation processes are likely to be more effective than sequential processes in the context of economic development.

4.4. *Implementation*

Implementation was an a priori theme that emerged in the literature review and specifically the notion that to be the most effective, the responsibilities for implementation of an economic development strategy should be shared among multiple organizations rather than centralized among a single organization (Mulgan, Tucker, Ali, & Sanders 2007, p. 10.) This notion was confirmed by the qualitative data. In total 19 excerpts were coded as “implementation” with 17 of those were also coded as “dispersed.” Several of the interviewees noted that role of economic development, in general, is shared among many groups like “local government,” “nonprofits,” and “volunteer organizations.” The qualitative data gathered regarding implementation support the hypothesis that implementation disseminated among several organizations rather than centrally with one organization is likely to be more effective.

4.5. *Timeframes*

Timeframes was an a priori theme that emerged out the literature review. Specifically that short-term wins are a predictor of effectiveness in economic development strategy making (Gibson, 2011, p. 5; Markey, Connelly, & Roseland, 2010, p. 8). This notion was confirmed in the qualitative analysis but the volume of discussion about timeframes of strategies was less than the other a priori themes, there was less unanimity among interviewees, and the relationship

between short-term wins and longer-term goals was not necessarily perceived as an either/or proposition. Instead, most interviewees saw the need for both. In total, 18 excerpts were coded under the parent code of “timeframe” with 14 also being coded as “early wins” and 4 as “longer-term goals.” The qualitative data gathered related to timeframes supports the hypotheses that implementation timelines that include shorter-term small wins are likely to be more effective than those that only have longer-term goals.

4.6. Social Capital

This was not one of the a priori themes that emerged in the literature. It was revealed, rather, in the analysis of the qualitative data. Several different terms, phrases, and stories were told that reflected the qualities of people, both individually and collectively, in effective economic development strategy initiatives. Characteristics like “servant leadership,” “integrity,” “champion,” and “people committed to the ‘common good’ were among the terms used to describe individual characteristics. The collective aspects of social capital were primarily embedded in two terms: “trust” and “readiness for change.” In total there were 17 excerpts coded as contributing to this social capital theme. There were very different opinions about social capital expressed among the interviewees. One noted that, “social capital is important but it is an abstract concept that does not lead to action.” Another was emphatic in his assertion that, social capital characteristics were the “necessary component before anything else happens.” Where agreement existed, it was primarily related to the issues of trust and readiness for change. Although the word “trust” was used only a few times, it was an underlying notion of much of the discussion about social capital. One interviewee pointed out that the need for building trust is especially important when a strategy initiative brings together a group of individuals with “no history” of working together. Several other interviewees pointed out that multiple groups have to be willing to share resources and that this, of course, requires a certain level of trust.

The notion of “readiness for change” was expressed in a number of ways as well. One interviewee pointed out that not much research has been done on “community readiness for change” and that most of the scholarship on that topic has been related to individuals, specifically in alcohol and drug abuse. He pointed out, “changing behavior is really, really hard. It’s hard for you, it’s hard for me.” He saw parallels in communities, with many people being resistant to change. Another was very matter-of-fact in his words about readiness for change, “some people don’t want to change. You can either live in the past or you change. If you don’t change, sorry”. Two additional social capital hypotheses were constructed.

Social Capital – Trust Among Participants

H0: There is no correlation between strategy initiative effectiveness and high levels of trust among participants.

H1: There is a positive correlation between strategy initiative effectiveness and high levels of trust among participants

4.7. Data and Metrics

Data and metrics was not one of the a priori themes from the literature. It emerged, rather, in the course of the data collected in the interviews. A total of 14 excerpts were coded as being part of this theme, including interesting insights into the role data and metrics play in effective economic development strategy initiatives. That role was summed up by one of the interviewees as, “attitudes toward metrics needs to change. Metrics become a learning tool rather than an accountability tool. You need data to tell you what is working because you can’t forecast this stuff.”

Another interviewee pointed out that data and metrics are “most often associated with evaluation. I guess maybe that’s a limited or narrow way to think about metrics.” He also noted that, “I think data are really important for informing, on an ongoing basis, the planning and the doing.” Still another pointed out, “It’s not to measure whether you have accomplished something; it’s to measure along the route to make sure you can accomplish something.” The role of data as a learning tool was reflected in this comment, “In many ways, the sophistication of a group moving toward an innovating network can be measured by how it deals with the question of metrics. Sophisticated innovating networks embrace metrics as a learning tool.” One additional hypothesis was constructed related to data and metrics.

4.8 Metrics

H0: There is no correlation between strategy initiative effectiveness and data and metrics used as a learning tool.

H1: There is a positive correlation between strategy initiative effectiveness and data and metrics used as a learning tool

Just as the five a priori hypotheses were used to develop survey questions for phase two, questions were also developed for these three additional hypotheses. The survey was sent to 300 individuals with a response of 108. Since there was a snowball component included in the sampling strategy a true response rate is difficult to determine. The total n, however is 108.

Group 1, those who considered an effective economic development strategy initiative as they answered the questions, included an n of 57. The mean response of the question related to the level of effectiveness for the considered initiative was 4.95. The “significantly effective” response was coded as a 5 with completely effective as a 6 and “somewhat effective” as a 4. The standard deviation for this question was .666.

Seven of the eight factors represented in the other questions had mean scores of over 7 on a scale of 1-10. One code was between 6 and 7. Beginning with highest to lowest, the means were 7.825 toward readiness to change,

7.820 toward high levels of trust, 7.714 toward asset based frameworks, 7.608 toward metrics used to learn what works, 7.526 toward network organizational structures, 7.411 toward iterative planning and implementation processes, 7.123 toward dispersed implementation, and 6.464 toward near-term, easy-win goals. Standard Deviations ranged from 1.960 (role of metrics) to 2.612 (implementation).

The composite picture of an effective economic development strategy initiative, based on the means, is one that has a network organizational structure and involves a group of actors that are ready for change and have a high level of trust for one another. The initiative is framed primarily around building on the community's existing assets, and the planning and implementation processes are iterative. Implementation includes some short-term easy-win goals is and the responsibilities for implementation is centralized among multiple organization. Metrics are used to learn what is working and to make adjustments along the way.

Group 2, those who considered an ineffective economic development strategy initiative, included an n of 51. The mean response of the question related to the level of ineffectiveness for the considered initiative was 2.12. The "completely ineffective" response was coded as a 1 with "significantly ineffective as a 2 and "somewhat ineffective" as a 3. The standard deviation for this question was .785.

All eight factors represented in the other questions had mean scores of less than 4.2 on a scale of 1-10. Beginning with lowest to the highest, the means were 3.254 toward metrics used for accountability, 3.520 toward readiness for change, 3.570 for low levels of trust, 3.755 toward sequential planning and implementation processes, 3.900 toward long-range timeframes, 4.00 toward deficit-based frameworks, 4.02 toward centralized implementation, and 4.04 toward hierarchical organizational structures. Standard Deviations ranged from 1.931 (role of metrics) to 2.767 (implementation).

The composite picture of an ineffective economic development strategy initiative, based on the means, is one that has a hierarchical organizational structure and involves a group of actors that are not ready for change and have a low level of trust for one another. The initiative is framed primarily around addressing the community's deficits and the planning and implementation processes are sequential. Implementation is focused mostly on long-term goals and the responsibilities for implementation are centralized with a single organization. Metrics are used as a mechanism for accountability.

In this study "effectiveness of economic development strategy initiatives," served as the dependent variable. As explained earlier, half the respondents were given a question prompting them to consider an effective scenario and the other half an ineffective scenario. Each group was given three choices to describe the level of effectiveness. When these two three-point scales are put together, they present a six-point continuum of effectiveness ranging from completely effective to completely ineffective. In the correlation analysis, effectiveness was observed as a single

six-point ordinally measured variable. In order to analyze both groups together on a full six-point continuum the two sets of responses were merged, allowing for correlation coefficients to be run using this 6-point continuum of effectiveness with an n of 108.

Correlation coefficients were calculated pairing the effectiveness continuum with each of the eight independent variables, measure on a 10-point scale. Spearman's rho was used to measure significance. The results of the correlation analysis for this study are presented in Table 1 showing that all eight correlations were significantly significant with the highest level of significance between trust and effectiveness (.745) and the lowest (yet still significant) with .473 timeframes and effectiveness. Therefore, all eight null hypotheses were rejected.

Table 1. Effectiveness Continuum Correlation Coefficient Using Spearman's rho

	N	Correlation Coefficient (2-tailed)	Significance
Effectiveness Continuum and Organizational Structure	108	.628**	.000
Effectiveness Continuum and Frameworks	107	.635**	.000
Effectiveness Continuum and Processes	105	.723**	.000
Effectiveness Continuum and Implementation	107	.491**	.000
Effectiveness Continuum and Timeframes	106	.473**	.000
Effectiveness Continuum and Metrics	100	.717**	.000
Effectiveness Continuum and Readiness for Change	103	.660**	.000
Effectiveness Continuum and Trust	106	.745**	.000

** correlation is significant at a 0.01 level

5. Discussion

The purpose of this study was to develop and test a new theory of strategy-making effectiveness in the context of local and regional development. Although the study did not attempt to prove causation, the findings indicate that there is a set of factors that, when present, are significantly correlated to the effectiveness of economic development strategies. The research was conducted to fill both a gap in the scholarly literature and, by extension, the gap in research-based information to assist individuals make better-informed decisions and take more-confident actions related to growing their local and regional economy. Prior to this study, there was no scholarship related to the factors that lead to effective strategy making in local and regional economic development. This study not only fills that gap;

but also offers a grounded theory that can guide other researchers to add to the scholarship in this field.

There are several limitations of the study including the difficulty in making generalizations from grounded theory research, the validity and reliability of the quantitative instrument, and the absence of a traditional means of control. Several strategies were employed to mitigate these limitations - member checking to address the instrument issues, and quantitative design that included a creative means of assigning participants to two contrasting groups. Even though these limitations were adequately addressed and no additional issues of limitations, generalization, and trustworthiness arose, the study, like all studies, is not without some lingering limitations.

Although issues of generalization of the grounded theory approach were addressed by adding a qualitative component, generalization or transferability of the final results is still limited. Those who responded to the survey, for instance, were all affiliated in some way to a single national economic development organization since the sampling strategy began with a random sample of 300 from the contact database of 9,000. An affinity variation of the snowball sampling technique was added to the sampling strategy in an attempt to draw in other respondents who were not directly affiliated with organization that provide the contact list. First, there was no way of knowing if any of the respondents actually included any of these once-removed individuals and even if some of them were among the respondents, the very notion of their affinity with the first group of 300 could mean that they are all predisposed to some common experiences and understanding related to economic development strategy.

This study break new ground in the understanding of why some economic development strategies are effective while others are not. The addition of a quantitative phase lays down the first few foundation blocks on this soil. It will take others to add to the foundation and eventually build something that will have significant impact on the understanding of this phenomenon. This study can help frame a number of new research questions. The following are a few recommended ones that could add some of those additional foundation bricks.

First, would the same findings result if the survey were to be administered to another population sample with no affiliation, either directly or once-removed, from the organization that provided the contact list? Secondly, knowing that these eight factors correlate with effectiveness is helpful but is there causation? Does trust among participating organizational representatives predict an effective strategy process or is there something about an effective strategy process the builds trust among the participants? Third, just because there is now some evidence that these factors are correlated with effective initiatives, and even with assumptions of causation like a networked organizational structure leads to more effective strategy making initiatives, questions arise like what sort of networked structures are most effective? Lastly, we are left

with questions that may be of most interest to the scholar practitioner - how do we go about assuring that these factors are present in a strategy making initiative? How, for instance, would a local economic development professional assess readiness for change? This study answers a few question but helps surface many, many more.

The findings of this research could also help inform public policy at the local, state, and federal levels. Perhaps not from this one study alone, but if the findings of this research were to be replicated and expanded upon, it could potentially change the way in which government agencies invest in economic development.

6. Conclusion

The findings of this research results in some specific recommendations for the practice of economic development and potentially for anyone engaged in open strategy. Practitioners can test this theory, and apply its principles wholesale or in pieces and parts. They can try positioning themselves as a hub in a network rather than somewhere in a hierarchy. They can see what happens when they build a new economic growth strategy by linking and leveraging their assets rather than starting from a perspective in which their deficits are the organizing principle for a strategy. They can adopt a more iterative approach to planning and implementation and disperse the responsibilities among multiple stakeholders. They can see if setting and achieving a progressive series of shorter-term, easy-win goals will eventually lead to transformation. They can use metrics to see what works and make adjustments along the way. They can take specific steps to build trust among partners and assure that those partners are ready for change. They will ultimately be the ones to prove whether or not these approaches will lead to more effective strategies.

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