The Importance of Cluster Development Strategies

Economic development plans based on clusters have been adopted by cities across the nation in recognition of the important role clusters play in driving economic growth. Clusters also offer a powerful lens that can be used to understand and organize economic development activities. However, despite clusters’ conceptual and pragmatic importance, the strategies being used to support cluster growth in many metro areas are vague and lack well-defined objectives (see The Missing Link). Without explicit strategies in place to support the development of targeted clusters, the effectiveness of cluster-based economic development plans will be compromised.

Although numerous books and articles cover cluster theory and cluster case studies, surprisingly little practical guidance exists on how to activate cluster growth. Accelerating Cluster Growth fills this critical information gap by providing a playbook for city leaders that includes actionable strategies and advice and case studies of successful cluster initiatives in the U.S. The report’s insights were informed by an in-depth analysis of successful and emerging cluster initiatives in Chicago, Houston, Indianapolis, New Orleans, New York City and San Diego.

Clusters Versus Cluster Initiatives

Economic clusters are best described as sets of closely related and interconnected industries operating within specific geographies. Industries are included in a particular cluster if they are connected by a shared workforce or supply chain or shared technologies. Every cluster includes core businesses and industries, and companies that support them, which form a mutually beneficial business ecosystem. Clusters occur organically and reflect the unique assets and core competencies of a given region that create unique competitive advantages for certain industries. The Entertainment cluster in Hollywood and the Automotive cluster in Detroit are relatively intuitive examples.

While clusters occur organically, cluster initiatives are created to support or accelerate the growth of clusters. Successful initiatives “leverage the region’s unique competitive strengths across geographies and identify and develop networks for business financing, business-to-business sales, education, and workforce development as well as opportunities to expand into markets nationally and internationally.” The Accelerating Cluster Growth report focuses on strategies to develop successful cluster initiatives.

Cluster Growth Strategies

Based on research that included interviews with city leaders, leaders of cluster initiatives, and cluster development experts, we identify several strategies that are key to driving cluster growth.

1. IDENTIFY YOUR CITY’S COMPETITIVE ASSETS

The success of any cluster initiative depends first and foremost on whether the cluster(s) actually represents a city’s competitive advantages. With the explosion of high-tech sectors, city leaders may be tempted to replicate the success of other cities and try to become, for example, the next Silicon Valley or the “Boston of the South.” Unless their cities share the same assets as those they are trying to replicate, however, the cluster initiative will not be able to deliver the same degree of job creation. Cluster initiatives are likely to fail when they are not aligned with competitive assets.

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As a result, effective cluster initiatives require starting with a comprehensive analysis of the region’s strong and emerging clusters. The relatively recent release of publicly available cluster data, such as the U.S. Cluster Mapping Tool in 2014, should make this task more feasible. The U.S. Cluster Mapping Tool “is a national economic initiative that provides over 50 million open data records on industry clusters and regional business environments in the United States to promote economic growth and national competitiveness.” It identifies cluster portfolios for every metropolitan region.

Launching a cluster initiative requires targeting a subset of clusters through a prioritization process. In the cities we studied, we found cluster initiatives focused on one to six clusters, although numerous strong and emerging
clusters are present in those markets. This focus on a limited number of clusters seems to be an important marker of success, in part because it helps cities aggregate scarce resources and align activities.

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2. ENGAGE DIVERSE STAKEHOLDERS
In some of the cities we examined, the private sector took the lead in establishing a cluster initiative, building on existing partnerships or perceived market opportunities. In other cities, however, the private sector did not step forward and mayors played an important role in the development of cluster initiatives. Their visibility and cross-sector relationships make them well positioned to act as an initial convener for cluster stakeholders, especially when no cross-sector collaboration or nascent efforts exist. A mayor can leverage the City’s connections with universities, large corporations and other organizations to bring the “right” mix of stakeholders to the table. The Chicago Mayor’s Office, for example, works closely with World Business Chicago to convene and bring together private sector representatives to support cluster initiatives.

Representatives from the business community, especially large corporations, may be difficult to engage because of concerns over competition. They often need to be convinced that cluster growth will expand economic opportunities for all the businesses within the cluster. Cluster initiatives that connect their broad objectives to company objectives such as R&D, workforce or supply chains are able to sustain the support of corporations. The success of the cluster initiatives we studied depends on the willingness of the stakeholders within the cluster, including those in competitive industries, to work together. Building coalitions has been essential, especially with highly rivalrous industries and with mature firms. Older firms are not used to collaborating and don’t have established networks for collaboration.

3. DEVELOP STRONG PUBLIC-PRIVATE PARTNERSHIP ORGANIZATIONS TO LEAD CLUSTER INITIATIVES
The organizations that manage cluster initiatives in the U.S. represent a wide range of models. In the cities we studied, cluster initiatives were managed by economic development organizations, most of which are public-private partnerships, independent nonprofits, and university based centers. In Indianapolis, the cluster initiative is organized at the state level, but the cluster organization partners with local organizations such as Develop Indy, an Indy Chamber program focused on economic development in Marion County (where Indianapolis is located). The common denominators among the organizations are stability, mature networks, and a long-term commitment to the growth of the cluster(s). In some cases the organizations already existed as a neutral cluster leader (e.g., the university centers), but when one did not exist cities established new, independent nonprofit organizations to play that role or leveraged their economic development organizations.

With the exception of New York City, in the cities we analyzed, the mayor’s office did not continue to direct the cluster initiatives once they were established. Mayoral leadership can be problematic for various reasons. Mayors desire results (e.g., job creation) during their tenure and often want “quick wins” when they are newly elected. In cities with term limits, City leadership and priorities may change frequently. Cluster initiatives, however, may take a decade or more before their full impact is realized. In addition, mayors are focused on initiatives and outcomes within their city boundaries. The clusters that create jobs within a city may, however, include businesses located outside of city boundaries. Cluster boundaries rarely conform to political boundaries, implying that effective cluster initiatives should not constrain their focus to specific geographies. As one expert stated, “You can’t draw a line around a part of a city and create cluster development in that area. It just won’t work.”

4. UTILIZE CLUSTER DIAGNOSTICS TO DEFINE CLUSTER GROWTH STRATEGIES
The industry and firm composition of clusters can vary depending on the region. The Financial Services cluster in New York does not have the same characteristics as the Financial Services cluster in Dallas. A formulaic approach, therefore, will be less effective than strategies tailored to the unique circumstances of a cluster based on an in-depth analysis of its strengths and weaknesses. In the cities we studied, the strategies being employed by cluster initiatives were developed in response to cluster vulnerabilities. In New Orleans, for example, research showed that developing a skilled local workforce was critical to the success of the Advanced Manufacturing cluster. In response, New Orleans Business Alliance works with local colleges and universities to develop appropriate training programs. Each cluster may call for several strategies to accelerate growth. As one expert noted, “Cities are often not intentional enough in terms of supporting cluster growth. They need to understand what is needed to drive growth and execute numerous strategies, not just one.”

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**COMPONENTS OF A CLUSTER DIAGNOSTIC TOOL**
A cluster diagnostic that includes the following cluster and ecosystem components will help guide the development of more effective growth strategies:

- Industry composition within the cluster
- Firm composition (size and age) within the cluster
- Workforce requirements within the cluster
- Existing workforce within the city
- Sources and incentives for innovation within the cluster and city
- Sources of capital within the city
- Land use patterns in the city
- Local, state and federal policies and regulations that impact the cluster

Cluster initiatives provide a framework for organizing disparate public policies and public investments directed at economic growth.

5. **USE CLUSTER INITIATIVES TO REPLACE SCATTERED, DISCONNECTED APPROACHES TO ECONOMIC GROWTH**

As cities struggle to spur economic growth, grow businesses and create jobs, public and private sectors have launched numerous initiatives that may not be coordinated or complementary within the city or region. Our research findings support the theory that a cluster perspective and cluster initiatives help to organize a city’s economic development policies and interventions. The launch of several cluster initiatives under former Mayor Bloomberg, and the realignment of New York City’s economic development efforts, is just one example. Cluster initiatives create a mechanism, which often does not previously exist in a city, for constructive cross-sector, regional discussions and collaboration.

In several of the cities we studied, we found mayors actively leveraging various economic development tools to support cluster growth. They invest in infrastructure and develop policies that support small business and industry growth and remove barriers (e.g., regulation, transportation issues). The cluster focus helps align scattered, disparate economic development initiatives within the City and maximize impact.

6. **MOVE CLUSTER INITIATIVES TO SELF-SUFFICIENCY**

One of the biggest challenges faced by the cluster initiatives we studied is establishing sustainable funding streams. Public sector funding is often used to support the first years of operation, but organizations need to develop a sustainable business plan. In the cities we analyzed, the San Diego Regional Innovation Cluster, the San Diego Imperial Valley Renewable Energy Generation Cluster and the Smart Grid Cluster in Chicago each received significant funding from the SBA, but ultimately that support needs to be replaced. Organizations that invest in clusters often want to invest in products and services, but initiatives need basic operating support. In the full *Accelerating Cluster Growth* report, we cover various business models adopted by the cluster initiatives and their success to date.

**Final Thoughts**

*Accelerating Cluster Growth* captures important insights and lessons learned from our in-depth analysis of a diverse set of cluster initiatives to help inform city leaders who are exploring the possibility of launching cluster initiatives to accelerate economic development. Using case studies, the full report highlights the importance of building initiatives around a comprehensive analysis of cluster portfolios and cluster composition, instead of trying to replicate successful initiatives in other cities. Different clusters will require different strategies in order to develop successfully, and cluster initiatives should reflect that reality. Recognizing that this can be a daunting process, the report provides a roadmap for city leaders, offering guidance for initial planning through establishing sustainable business models.

**ENDNOTES**

5. It is housed at the Institute for Strategy and Competitiveness at Harvard Business School, where it is led by Professor Michael E. Porter. The U.S. Cluster Mapping Project’s key partners and funders are the U.S. Department of Commerce and U.S. Economic Development Administration.