Measuring and Monitoring Innovation

Part 2 – Benchmarking 101: Introduction to Benchmarking/Dashboards & Products in the Marketplace

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Terminology and Scope

• Terminology
  – Benchmarking
  – Score Cards/Report Cards
  – Community and Economic Indicators
  – Dashboards
  – Metrics / Indicators / Markers
  – Measures
  – Data-information-intelligence

• Scope
  – Content / Focus: social, environmental, quality of life, economic, etc. (This workshop is focused on the innovation/entrepreneurial economy)
  – State, regional, community
History and State of the Art

• 1970s: “2nd War Between the States”
  – Fantus Consulting
  – Grant Thornton “General Manufacturing Business Climate” (1979)
    o Focus on state business costs and taxes, esp. as affecting manufacturing
History and State of the Art (cont.)

- 1980s
  - Growing interest in high-tech (e.g. Atari Democrats)
  - Counter-reactions to scorecards
    - Corporation For Enterprise Development (CFED) “Taken for Granted” critique of Grant Thornton (1986)
    - Development Report Card of the States with focus on social equity
  - Large metros develop their own plans (Philly, SF)
History and State of the Art (cont.)

- 1990s:
  - Impact of the “New Economy”
    - Recognition of long term structural change
    - Rising interest in science, technology, innovation -- overlooked economic engines.
  - New reports focused on aspects of the New Economy
    - Milken Institute: State Technology and Science Index (1992), followed by metro version.
    - Beacon Hill: Metro and State Competitiveness Reports (2001)
2000-2015: Current State of the Art

• Reports now coming out fairly regularly, include all states (some metro areas) and provide a composite assessment of the whole economy.
  – CFED, Milken, ITIF, Beacon Hill, GrowthEconomics, MAC Index, Gold Guide
  – Many new metro scorecards, often functionally specific
  – Many popular magazines: “Best places for . . .”
  – Locally generated, especially at regional level.

• The Big Data Revolution
  – Dashboards
  – StateStat, CitiStat, etc.
What is Benchmarking?

“A systemized methodology for stealing the smartest practices from competitors and comparators.”

A process of “borrowing shamelessly.”
What is Benchmarking? (cont.)

The Process

The Basics

- A **process**: not a set of numbers;
  - Measurement is a means to an end.
  - Qualitative and quantitative.
- A **strategic function**.
- Primary outcome is **change**
  - Measured by one or many metrics
What Does Benchmarking Do?

- Helps Leaders to Assess:
  - What is “best in class.”
  - How to make quantum leaps in improvement.
  - What outputs & outcomes matter
  - What are potential key causal factors

- It is a continuous improvement process not a one-off “study” or report.
The Process of Benchmarking: Key Steps

1. Select issues of critical importance (must have goals and strategy that drive benchmarking, at least implicitly).
2. Select reliable, regular indicators / metrics of desired outcome and performance.
3. Compare to others on these indicators.
4. Determine who the leaders are.
5. Case study why they are leaders.
6. Make changes to be among the leaders.
Some Simple Tests

• **Does it Bench?**
  – Selectively compare to “best in class” (not to state /national averages!).

• **Does it Mark?**
  – Choose metrics because of strategic focus (not a hodge podge of metrics!).

• **Does it Steal?**
  – Study best practices, in depth.
  – Make change.

• **Does it Engage (leaders and the public)?**
  – A strategic leadership tool.
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Part 3 – Benchmarking 101: Introduction to Benchmarking/Dashboards & Products in the Marketplace

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EXISTING PRODUCTS & TOOLS: A REVIEW

• Generally they are user-friendly
• Provide access to raw data
• Includes explanations for what measures mean and why they were chosen
But. . .

• Timeliness of data is questionable
  – Esp. with Federal Sources

• Difficult to work at non-state level
  – Especially for rural regions
  – Data comparability is key

• Business data hard to access
  – E.g. Firm growth rates over time
Some Examples: Milken Institute

- [www.milkeninstitute.org](http://www.milkeninstitute.org)
- Includes large and small metros
- Outcome-Focused
  - Job performance is key
- Strong business emphasis
- Good internal analytics
State New Economy Index

- [www.itif.org](http://www.itif.org)
- Heavy focus on technology/digital economy
- State version updated each year
  - Metro version no longer updated
Corporation for Enterprise Development

- www.cfed.org
- Uses Report Card Format
- Comprehensive View of Development
- Assets & Opportunity Scorecard
  - Replaces old Development Scorecard
Kauffman Index of Entrepreneurial Activity

• Focused only on business data
  – Good on Entrepreneurship
  – But no assessment of other data
• Tracks percentage of population starting a business each month
  – Provides State-level and other demographic breakdowns
• Available at www.kauffman.org
Youreconomy.org

- Uses the National Establishment Time Series database
  - Based on Dun & Bradstreet data
- Allows for longitudinal tracking of firms
- Data available at county and MSA levels
- Helpful data on growth and company size
  - Less useful for industry composition
Other Benchmarking Reports

- Small Business Survival Index ([www.sbecouncil.org](http://www.sbecouncil.org))
- Cyberstates ([www.techamerica.org](http://www.techamerica.org))
- Tax Foundation ([www.taxfoundation.org](http://www.taxfoundation.org))
- ALEC: *Rich States, Poor States* ([www.alec.org](http://www.alec.org))
- Community Indicators Consortium
- Other rankings produced by *Site Selection* and other professional journals
DASHBOARD 2030
Tracking North Carolina’s progress in economic development, business climate and innovation.

EXPLORE INDUSTRY DATA & STATISTICS
- DEMOGRAPHICS
- TALENT
- ECONOMICS
- QUALITY OF LIFE

Demographics
- Population: 33.7 million
- Median Age: 34.8 years old
- % Population under 18: 27.2%
- % of Population over 65: 23.4%
- Median House Value: $59.5 thousand

Talent
- Population with Bachelor’s degree or higher: 12.7%
- Population with Advanced degree or higher: 1.9%
- College Graduates w/ Advanced or Engineering degree: 51.4%
- % of Population Multilingual English Speaking Population: 20.6%

Economic
- Labor Unemployment Rate: 7.0%
- Gross Domestic Product: $172.6 billion
- Export Value: $17.4 billion
- Jobs per 1000 Workers: 2.3
- Venture Capital Dollars Raised: $1.1 billion

Quality of Life
- Per Capita Income: $46.8 thousand
- Parachute Rate: 3.8%
- Median Home Price: $421.3 thousand
- Hours of Economic Activity: 24.1
- Work Hours: 3,055 hours

EDUCATION & TALENT SUPPLY
- Increase in BS graduates in NC: 6.1% 2008-2009
- Increase in STEM graduates in NC: 12.8% 2008-2009

COMPETITIVE BUSINESS CLIMATE
- Median sales per worker: $20,675 per year
- Business startup survival rate: 61.4%

ENTREPRENEURSHIP & INNOVATION
- Number of patents granted: 4,296
- Number of venture capital deals: 213

INFRASTRUCTURE & GROWTH LEADERSHIP
- Construction permits issued: 120,000
- Number of new jobs created: 200,000

STRENGTHS & OPPORTUNITIES
- Strong education system
- Diverse workforce
- Strategic location

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY
- Region 2000 Local Economy Dashboard
- New Business Starts: 5,000
- Stage II Establishments: 1,200
- Small Business Innovation Research (SBIR) Grants: 10
- STEM Employment: 81%
- Broadband Access: 95%
- Churn Rate: 5%
Other Local Examples

- Small Business Assn. of Michigan: Entrepreneurship Scorecard
- Minneapolis Creative Vitality Index
- NE Ohio: What Matters to Metros (Fund for our Economic Future)
- Economy RI (Rhode Island)
- 2015 Silicon Valley Index (CA)
- Index of the Massachusetts Innovation Economy
- OTHERS TO SHARE??
International Benchmarking

- Global Competitiveness Report (World Economic Forum)
  - www.weforum.org
- Global Innovation Index (Cornell, INSEAD, WIPO)
- World Competitiveness Yearbook (IMD)
- European Union Innovation Scoreboard (EU, 2001-2014):
  - 25 metrics, 34 European countries.
- Global Cities Index (Foreign Policy/AT Kearney)
- World Bank Doing Business Reports (www.doingbusiness.org)
- OECD, Financing SMEs and Entrepreneurs, 2015.
- Global Entrepreneurship Monitor (www.gemconsortium.org)
- Global Entrepreneurship Index (thegedi.org)
Final Thoughts

• No product can answer all your needs
• Prepare for long haul
  – Don’t do one-time snapshot
• Supplement data with qualitative information
• Be Prepared to Do It Yourself
• Timing
  – When to do it?
  – Before / during / after strategic plan development?