Webinar: Marketing Your Region’s Brain Trust

How to identify your community’s greatest hidden assets
Intellectual Property

In this webinar you’ll learn how to:
• Identify intellectual property clusters,
• target opportunities to fill gaps in your region’s innovation system,
• attract high-tech businesses to your region, and
• unlock a potential impact of billions of dollars in additional payroll and revenue

Presenters

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Why IP matters

“The effect of patents on growth is roughly equal to that of having a highly educated workforce. A low-patenting metro area could gain $4,300 more per worker over a decade’s time, if it became a high-patenting metro area.”

Brookings Institute, *Patenting Prosperity: Invention and Economic Performance in the United States and its Metropolitan Areas*
In a metro area with a workforce of roughly 1 million that translates into $4.3 billion in additional payroll every year.
What is the next technology leap? Where is it coming from?
Getting to “Know” is Difficult

- 90% of the world’s digital data has been created in last 2 years
- 80% of the world’s digital data is unstructured
- US Federal Government produces 196,000 datasets annually
- 450 billion business transactions occur every day
- 6.1 billion smartphone users worldwide

Only .5% of the data collected today is even analyzed
“Big Data” Universe Defined

▶ Huge amounts of information, easy to obtain, but so massive that they challenge current computing technologies.
  ▶ Volume
  ▶ Variety
  ▶ Velocity
  ▶ Veracity
Most regions cannot answer two critical questions about their economy

- What are my region’s IP clusters?
- How do our region’s IP clusters compare to others across the nation and globe?
Poll question:
Have you identified your region’s IP clusters?
Poll question:
If you answered yes, did you do so based strictly on patent data?
Current statistical system designed to track industries not technologies

- NAICS do not exist for:
  - Bio Health
  - 3D Printing or Additive manufacturing
  - Nanosensors
  - Recyclable thermoset plastics
Limitations of Traditional IP Tracking Solutions

- Software that tracks a single IP channel such as grants or patents provides an incomplete and often “too late” picture of a region’s IP.
- Opportunities are gone before they are even identified!
- As a result communities are potentially leaving a lot of money on the table.
The IP Chain: It’s more than just patents

- Identify clusters based on technological innovation throughout the development and implementation process
  - Publications
  - Patents
  - Grants
  - Venture Capital
  - Start Ups/Corporate Expansions/Corporate Spinoffs
Case Study: 3D Printing is the next disruptive technology in manufacturing

- Which metros are leading in 3D Printing IP activity?
- What is the market potential for 3D Printing?

RESULTS: Using massive open data sources focused on IP provides better indicators of where the new epicenters of activity are located ahead of more traditional indicators of economic activity such as employment or occupational activity.
United States 3D Printing IP Activity
2005 to present
## Top Metros in 3D Printing IP

<table>
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<tr>
<th>Metropolitan Area</th>
<th>Grants</th>
<th>Publications</th>
<th>Patents</th>
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Patent activity is leading indicator of economic activity
U.S. Leads in 3D Printing Startups

# of 3D Startups Founded by Region

- Africa
- Russia
- Latin America
- Canada
- Middle East
- Asia
- Europe
- United States

The graph shows the number of 3D startups founded by region, with the United States leading significantly more than the other regions.
California leading start-ups
IP Density vs Number of Start Ups
(US Top 10 3D Printing IP Metros)

Higher IP Rank; Higher Start Ups

Lower IP Rank; Lower Start Ups

Boston
San Jose
San Francisco
Los Angeles
New York
Seattle
Philadelphia
Albany
Pittsburgh
Washington DC

Composite Rank (Boston #1 to Seattle #10)

Number of Start Ups
Number of Publications vs Number of 3D Start Ups
(US Top 10 3D Printing IP Metros)

- Boston
- Los Angeles
- New York
- Washington DC
- San Francisco
- Pittsburgh
- Albany
- Philadelphia
- Seattle
- San Jose

Higher Publications; Higher Start Ups
Lower Publications; Lower Start Ups
Number of Grants vs Number of 3D Printing Start Ups
(US Top 10 3D Printing IP Metros)

Higher Grants; Higher Start Ups
- Boston
- Los Angeles
- New York

Lower Grants; Lower Start Ups
- Washington DC
- Pittsburgh
- Albany
- Philadelphia
- Seattle
- San Jose
- San Francisco

Number of Grants vs Number of 3D Printing Start Ups
Number of Grants
Number of Start Ups
Number of Patents vs Number of 3D Start Ups (US Top 10 3D Printing IP Metros)

Higher Patents; Higher Start Ups

Lower Patents; Lower Start Ups

- Los Angeles
- Boston
- San Francisco
- New York
- San Jose
- Washington DC
- Albany
- Seattle
- Pittsburgh
- Philadelphia
IP Strategic Potential

- What are your community’s IP clusters?
- For those IP clusters, where is the competition for VC, start-ups, and M&A activity?
- How much money is your community leaving on the table by not knowing the answers to these questions?
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