

Technology Mapping

*A Workshop on (Open) Sources & Methods
for Identifying Commercial Opportunities
in Technology*

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Workshop Schedule

- *Data Sources*
- *Analytical Methods*
- *Case Study*
- *Lessons Learned*

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Data Sources

- *Open/ structured*
 - *Patents*
- *Open/ unstructured*
 - *technical literature*
 - *conference proceedings*
 - *web searches*
- *Grey*
 - *technical reports*
 - *resumes*

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Analytical Methods

- *Experts*
- *Classification Schema*
- *Network Analysis*
 - *people*
 - *words*
 - *citations*
 - *funding*

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Case Study

- *Experts establish gold standards*
 - *Identify people in a core technical competence*
- *Test #1: Adequacy of Database*
 - *Do people appear in firm patents (IPC database)?*
- *Test #2: Adequacy of Method*
 - *Do different algorithms cluster these people?*
- *Additional decision maker requirements*
 - *hidden capabilities*
 - *hidden competitors*

Source: Klavans, J. & R. Klavans, Validating Indirect Measures of Technical Competency. American Chemical Society Annual Meeting. April, 2001.

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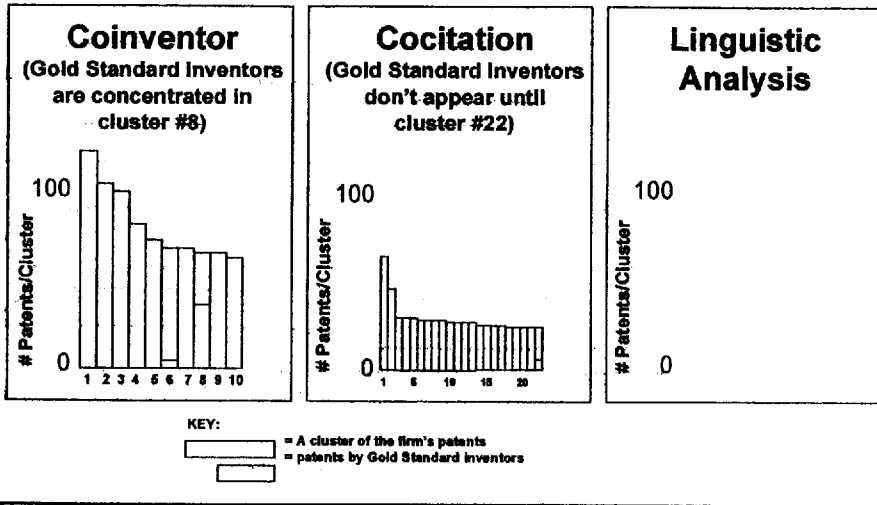
Test #1: Adequacy of Database

A large number of international patents (>750) were submitted by this firm over the past 5 years

>50% of people identified by the firm appeared as inventors in these patents

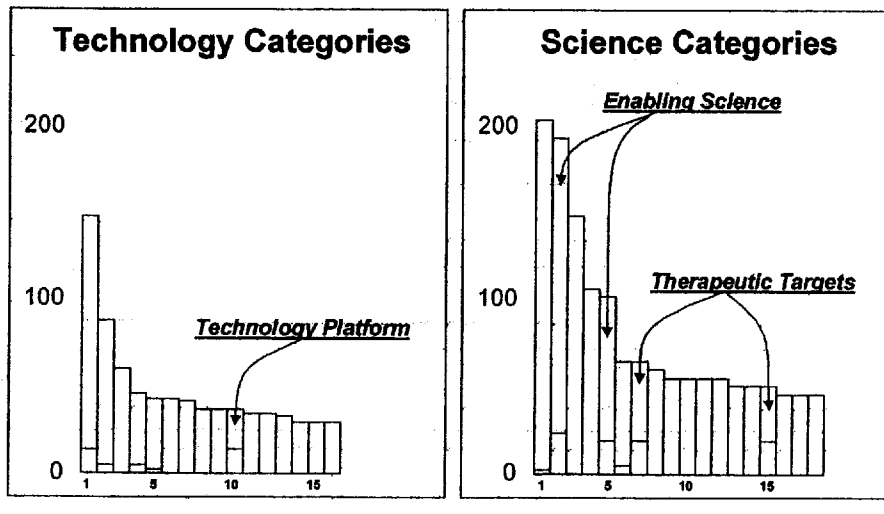
Test #2A:

Algorithms focusing on Internal Structure



Test #2B:

Algorithms focusing on External Structure



Findings from Case Study

- **Test #1: Database was adequate**
- **Test #2: Coinventor algorithm is superior**
- **Hidden Capabilities:**
 - coinventor cluster #8
 - science cluster #7 & #15
 - technology cluster #10
- **Hidden Competitors:**
 - Use technology cluster #10, science cluster #7 and science cluster #15 to identify hidden competitors & measure competitive position in subsequent study.

Lessons Learned:

(Where these Results Predictable?)

- ***Intentionality***
 - *exploring paths vs. seeking goals*
- ***Social Structure***
 - *individual vs. community*
 - *roles in a community (inventors)*
 - *self organizing vs. resource driven*

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Lessons Learned:
*(Sources/Methods for Identifying
Commercial Opportunities in Technology)*

- ***Newer Methods haven't been validated!***

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OSS '02 PROCEEDINGS "The New Craft of Intelligence: Brainpower, Webpower, & Ground Truth" - Link Page

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