

The Merrimack Valley Regional Innovation Network

Supporting economic growth and workforce development in the Green Technology Sector through innovative approaches to rapid product development and cross-industrial collaboration.

Proposal
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Highlights

- Leverage the momentum from the Green Chemistry Business Summit (GCBS)
- Brand the region as innovative and eco-friendly
- Attract and retain businesses and create opportunities for workforce Development
- Support cross-industry collaboration
- Support rapid product development in the area of eco-friendly technologies with initial focus on Green Chemistry
- Build on precedents already established in the Commonwealth

I. Overview: Building on Momentum of the Green Chemistry Business Summit

To leverage the momentum from the highly regarded Green Chemistry Business Summit held October 31st, 2007 at the Northern Essex Community College in Haverhill, this document recommends establishing The Merrimack Valley Regional Innovation Network (MVRIN). This network will have two purposes:

- 1) To support rapid product development in the area of eco-friendly technologies through Intellectual Property (IP) brokering and cross-industry and financial sector collaboration - with initial focus on Green Chemistry, and
- 2) To support robust communication among the larger pool of regional stakeholders including elected officials, regional planners, academia, business and engaged citizenry.

The long-range goal is to brand the region as innovative and eco-friendly and to attract and retain businesses that invent and develop emerging technologies, transform them into profitable, eco-friendly products and provide related services such as workforce development and retail.

Value propositions:

- To brand region as innovative, especially with regard to emerging technologies with an initial focus on green chemistry by successfully rolling out and executing MVRIN tool and conferences for broad collaboration.
- To attract and retain young knowledge workers to the Merrimack Valley by branding region and providing world class workforce development in emerging technologies.

II. "Open Innovation" & Rapid Product Development

The proposed network would employ the model of "Open Innovation" that is streamlining product development and breaking the traditional "silos" of corporate R&D departments. The network will facilitate the interaction of scientists, industrial executives, and financiers to co-develop profitable, eco-friendly products. An online emerging technologies marketplace complimented with face-to-face events and services will spawn corporate interaction and create investor opportunities. This approach is essential to keep the region viable as a center of clean technology industry for a global marketplace.

The Merrimack Valley Regional Innovation Network would tie into and build upon the precedents setting networks already established in the Commonwealth for multidisciplinary collaboration and technology transfer. These models, all of which were represented at the Summit, include: (1) The Green Chemistry and Commerce Council, (2) Massachusetts Technology Transfer Center (MTTC), and (3) InnoCentive and Yet2.com "Open Innovation Marketplaces".

Value propositions

- Help develop green chemistry and other emerging technologies to be catalysts for new industries by linking together broad stakeholders, including all levels of Government, academia, industry, financiers, customers and innovation brokers.
- Help change culture in DoD technology acquisition to enable small technology companies to directly market their next generation products and emerging technologies to DoD in small chunks (e.g. services) in addition to traditional acquisition through DoD system integrators.

III. Robust Communications

In addition to supporting rapid product development, the MVRIN will build a coalition of regional stakeholders committed to economic growth and quality-of-life improvements through a trusted network that facilitates purposeful collaboration, timely and germane

information sharing, and robust discussion. Topics from workforce development to international business management will be par for the course.

In addition to the emerging technologies marketplace, MVRIN will have two other key collaboration capabilities: 1. a subscribe capability to allow selected information from any participating web site to be sent to all other participating web sites that subscribe to the information with the appropriate privileges. The goal is to keep the MVRIN participants in sync by providing key information across the board; and 2. a Community of Interest (COI) capability to allow users with a common interest to share access, content and collaboration tools. Members would be invited to participate by the COI initiator and access will be password protected.

This regional stakeholder communications network can be a template for the rest of the Commonwealth. Using the Merrimack Valley as a model, subsequent networks can be established in 4 other principal economic regions in Massachusetts: Greater Boston, Southeast Mass, Central Mass and Western Mass.

Value propositions

- Help partners find new product ideas, principles, practices, and problem-solving methods that give them a competitive advantage for rapid expansion into new markets by exposing them to multidisciplinary, cross-industry and cross-region collaboration;
- Reduce new product and services failures by providing timely feedback from broad stakeholders;
- Share essential business services across region (e.g. conducting business in China is both an art and science - many small companies do not have resources/infrastructure to navigate China's unique "local" culture and business practices) by partnering with regional companies that provide specialized business services;
- Help companies in the Merrimack Valley reduce the cost of doing business by providing an industry dating service to "match" complementary physical infrastructures, raw materials and byproducts in addition to products and services.

IV. Change Mindsets

One of the key takeaways from the GCBS was the immediate need to change CEO mindsets to think of the environment from the start of product design. At the Summit, Technology Forecasters identified several tools to help change the culture at corporations in the United States to think about the ecology at the same level as profit. One goal of the

MVRIN is to change corporate mindsets in the Merrimack Valley to Design for Environment (DfE) and develop and share best practices.

Value proposition:

- Help all levels of Government, industry and non-profits acquire green Information Technology (IT) and other solutions by providing a template, collaboration tools and CEO mindset change campaign;

V. A Coalition of Local Stakeholders

The MVRIN will be formed in close collaboration with the stakeholder agencies that played an instrumental roll in the Green Chemistry Business Summit and that are at the cutting-edge of Green Chemistry and economic innovation in the Commonwealth. These are:

- The Merrimack Valley Economic Development Council
- The Merrimack Valley Venture Forum
- The Greater Haverhill Chamber of Commerce.
- The Warner-Babcock Institute of Green Chemistry
- InnoCentive
- Yet2.com
- Massachusetts Technology Transfer Center
- The Green Chemistry and Commerce Council
- Beyond Benign Foundation
- The Merrimack Valley Planning Commission

VI. Next Steps

Immediate next steps include (1) Developing and launching the MVRIN on-line emerging idea marketplace and collaboration web site; (2) Planning emerging technologies conference for Spring 2008 (3) Create the business model - how are revenues and IP shared?

VII. Appendix – Open Innovation and Regional Stakeholder Network Architectures

Diagram 1 below illustrates the Open Innovation elements of MVRIN. It shows the relationships between they key players in the “open marketplace” of intellectual property. There are three levels of access from “Web” – the public – to “Broker” and “Partner”. All the key players, from the Financiers to the Academic Researchers view content through the search engine subject to the rules of their participation.

Diagram 2 below illustrates an enhanced networking architecture for regional stakeholder agencies to support robust communications for objectives other than intellectual property

trading. A regional communications network using Open Source collaboration tools, such as CivicRM (and evolution of DeanSpace and Drupal), can greatly expand collaboration opportunities for regional stakeholders while improving the agility and cohesiveness of regional branding campaigns. This network can support the automatic propagation of news, events, resource, and forums among participating agencies. This will also serve as the basis for the more focused IP sharing network.

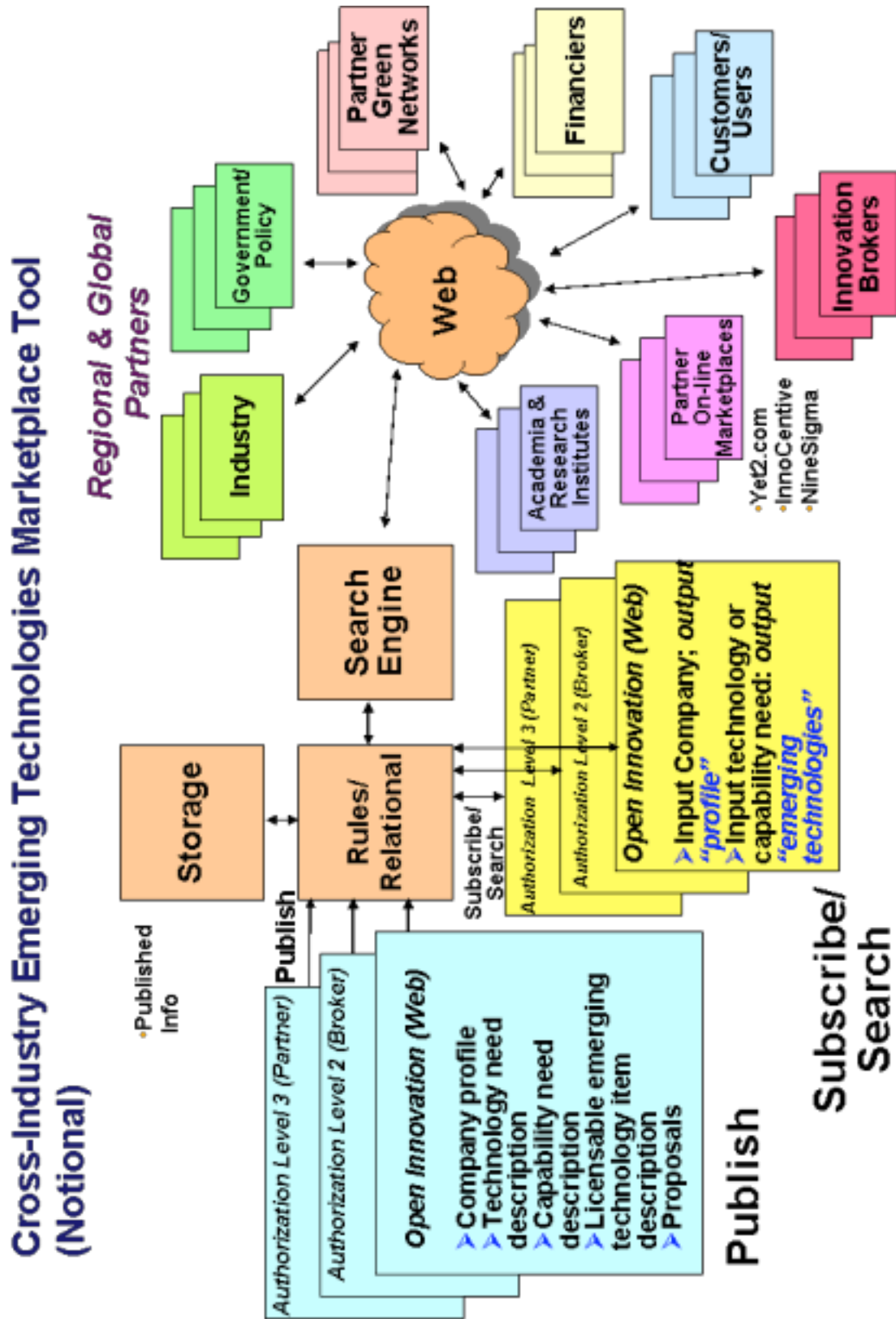


Diagram 1: "Open Innovation" Architecture

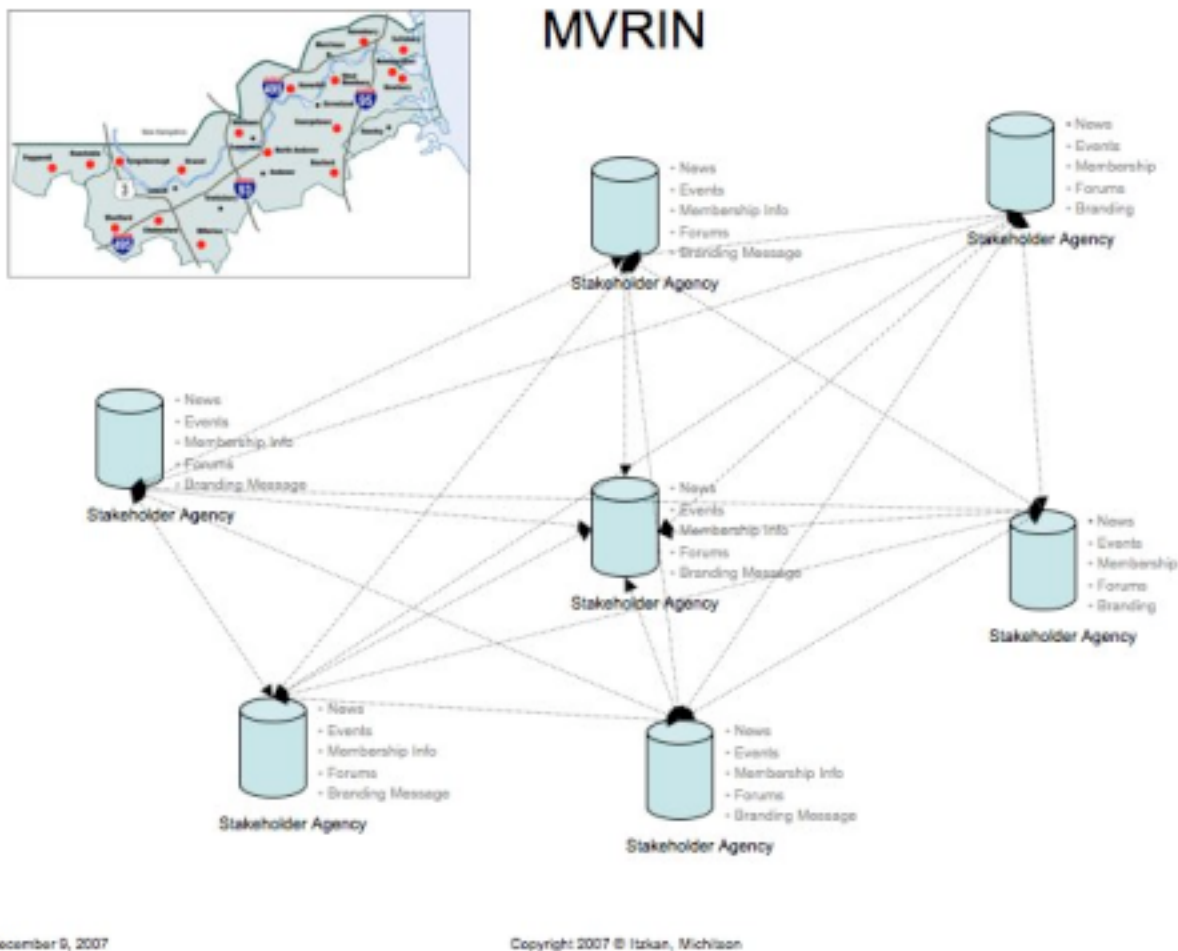


Diagram 2: Networking of Regional Stakeholder Agencies

Currently, most regional stakeholder agencies operate their web-presences as separate “silos”. This gives a disjointed regional appearance to an outside observer. MRVIN proposes to create a regional network of linked stakeholder agency sites that automatically propagates germane information among participants. Such propagating information would include news, events, resources, forums, and even, for example, business directories. For example, a News event posted by a “trusted” agency would automatically show up in the News section of all the other agency sites. Thus, the agencies would share in a facile network that enhances business development and “branding” objectives. The network would be achieved using state-of-the-art Open Source collaboration tools, such as CivicRM. This stakeholder network can become the foundation for the Open Innovation network mentioned above.

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CivicRM Constituent Relationship Manager, civicrm.org

The MVRIN can be built in part using the Open Source collaboration tool, CivicRM. CivicRM evolves from the DeanSpace program that was instrumental in launching Howard Dean's Internet-driven presidential candidacy in 2004. DeanSpace set the standard for Internet based "constituent management", and has today transformed into a robust networking platform for the civic sector in general. It can still be used for constituent management, but it is much more than that.

Today, CivicRM supports collaborative networking among civic groups of every nature. Content such as events, forums, resources and membership information can be automatically propagated between nodes in a region or around the world.