Summary

We believe that much more is possible with your vision of an IP Toolkit than just writing a set of standardized IP contract templates. If you allow yourself to think more innovatively, there is a larger perspective possible that will aid in formulation of better, more strategically aligned, short term actions. Without a comprehensive and systematic vision, short-term action could actually inhibit innovation by becoming inadvertently formalized as compliance rather than innovation.

Specifically, we propose the development and piloting of a software application and service that we call an “IP Policy Server”, that is, an intellectual property policy management system that can not only recommend standardized contracts, but also automate certain parts of public-private collaborations more effectively. So instead of static contracts, it’s a living, dynamic and operationally enabled set of digital applications.

So what exactly is an Electronic IP policy server? It is a core component of a digitally-enabled open innovation framework is based on the idea of a multi-enterprise collaboration framework.

An Electronic IP policy server should be able to do the following:

- Enables an automated processing system for managing intellectual property rights (IPR);
- Provide an audit trail for IPR policy changes;
- Provide an audit trail for compliance data;
- Provide an audit trail for spot checks that insure that confidential information is not misused;
- Tracks that they do not unreasonably prohibit any person or firm, in an anti-competitive manner;
- Provide an automated processing system for handling exportation prohibitions.

These tools would support functions including innovation project tracking and measurement, social workflow, enhanced idea search, intellectual property policy servers, digitally-enabled external idea incubation, self-optimizing innovation team formation, powerful visualization systems for managing the flow of innovation, and external networks of innovation portals and hubs across multiple companies and industries. In fact, the connection of multiple digital innovation hubs would enable the emergence of an “innovation smart grid,” which could enable much higher performance for the innovation efforts within a company or industry ecosystem.

In terms of the larger vision of a national innovation smart grid; there are many benefits possible through the development of such a system:

- The system would allow internally-focused corporate innovation platforms to evolve toward secure and open innovation platforms;
• It would enable disparate corporate innovation applications to communicate and interoperate;
• It would facilitate intelligent, fine resolution entitlement capability to insure that confidential information is not divulged inappropriately;
• It would foster the formation of more effective innovation teams and partnerships within and across organizations, and increase licensing of technologies from academia to industry along with improvements to the communication of user needs back;
• It would allow participants to gather and analyze more meaningful metrics for innovation and best practices;
• It would enable an open "appstore" approach to easily creating compatible innovation applications;
• Enterprises would be able to provide ideas to partners and customers, and have their implementation and value realization tracked dynamically, facilitating the development of innovation ecosystems;

Open innovation holds great promise for re-invigorating the enterprise, but fulfilling its full potential requires equally great vision in its design, deployment and management. Current techniques around open innovation are grounded in the thinking and procedures used in previous generations of technology. Tomorrow’s market requires a new kind of openness that is possible only with multi-enterprise collaboration frameworks that will allow organizations to connect with customers and partners to collaborate in new ways, for example, with IdeaXML and social workflow.

These frameworks will someday enable digital innovation hubs that could transform current corporate innovation processes by enabling advances like non-binary trust models, transactionalized idea search, intellectual property policy servers, persistent object models for idea metadata, and self-optimizing, cross-industry innovation team formation between not only universities and private ventures, but between ventures as well.

Questions

1. What features do you think should be included in the Australian IP Toolkit for Collaboration?

Designed correctly, the IP Toolkit could enable computerized enterprise applications to interoperate over an intelligent and secure framework for collaborative innovation. The objective is to enable the exchange of useful information without compromising protection for intellectual property, enabling new and more powerful forms of both intra-and intercompany collaboration.

In current practice, ideas are either “shared” or “not shared.” Sharing means total transparency, while not sharing means total opacity. What’s needed is the ability to share partially in a much more nuanced way to support progressive discovery of collaboration opportunities without prematurely disclosing confidential information, but also without unnecessarily withholding the information that could enable a productive collaboration to occur. This is essentially creating a "non-binary" model for permissioning confidential information. The IP Toolkit could enable this to become a global reality.

There are many features and components for such a system:
First, we need IdeaXML, which is a proposed set of open standards for automating the information sharing, using a specific set of XML tags which create a set of meta-information that enables sharing of information to be much more nuanced than is presently possible. The information contained within IdeaXML repositories would then enable many innovation methodologies and approaches to flourish by creating a unified approach to the underlying taxonomy of innovation and ideation.

This would allow ideas and team formation data to cross between disparate applications and systems.

New types of applications could thus be developed and deployed over this framework, and even sold through an “innovation appstore”. IdeaXML could also embed contextually meaningful geo-location and time information, as well as insure and preserve ownership information about incremental ideation in all data records.

**Non-binary trust models.** Non-binary trust models simplify the management of intellectual property to build win-win culture where everyone benefits in equal measure – management, employees, partners, customers and shareholders. The key to digitizing innovation is an electronic IP policy server, and the key to enabling openness is to deploy an enterprise social extranet. This is the most compelling part of the open innovation promise, to fundamentally change the nature of enterprise social networks to allow everyone to more reliably locate better talent to ensure success.

**Electronic IP policy servers.** The cost and overhead for intellectual property policy is quite significant in open innovation practices, notably when crowdsourcing and open source communities are at stake. Networks of intellectual property policy servers containing automated confidentiality and IP ownership logic determine how confidential ideas will be secured, shared and collaborated on.

**Social workflow.** As we have noted above, social workflow can be effectively managed by applying an “action requirement tag” to messages, which thereby transforms them into work requests, work commitments, and work tracking data. Hence, messaging generated in a social network is transformed into workflow, which makes complex collaborations trackable by measuring tasks per user, work required to complete tasks, and selection of work by individuals within a group. This extends the Agile development approach, which uses “on schedule” or “behind schedule” notifications to monitor progress. Most innovators would think only of implementing social workflow within the organization, but the true power and potential for such systems lie between organizations.

**Innovation Collaboratories.**

In high technology research it is sometimes costly and burdensome for large firms to manage relationships with university researchers because confidentiality and intellectual property constraints often make it impossible to freely disclose internal discussions without significant managerial overhead. An interlinking social network, with managed transparency of intellectual property, can simplify and empower the management of external researchers in the aid of a company’s efforts to reveal applications for internally developed intellectual property or emerging technology to exploit. We call this a collaboratory, where researchers outside of an organization could more easily collaborate with researchers inside an organization.
The collaboratory enables automated entitlement and tracking of idea origination to ensure that confidential information is not divulged. Paired with partial transparency searches, the system would allow for research teams to search for likely participants, releasing confidential information only under explicit circumstances.

**Transactionalized Idea Search.** By pairing an IP Policy Server with partial transparency searches, people can easily search for collaborations and potential project team participants while retaining the capability to release confidential information only under specific, assured circumstances. In other words, search can become a transaction that can benefit companies that are seeking resources and ideas. Blind searches are easy, enabling trusted development companies to query inventor offerings to locate promising ideas for license or purchase.

Thus, idea creators who want to license or sell their work could set the privacy level as a function of the position and trustability of searchers, also turning search into a transaction for their benefit. Thus, creators of protected ideas could enable an automated process to unveil the confidential data incrementally to prospects, based on their identity and trustability.

The Idea XML standard for open innovation would be a first step to enabling this entire vision. This has the potential to become a significant enabler, particularly for very large companies with disparate divisions that host different idea collections systems and processes.

Through the deployment of IdeaXML, enterprise innovation resource management tools could become extranet collaboration solutions, in which people from outside the organization could safely (in terms of intellectual property rights) participate in confidential product development discussions. IdeaXML could enable an intelligent, fine resolution entitlement capability to ensure that confidential information is not divulged inappropriately.

The implications could be vast. For example, scientists in academia and in corporations would be able to work together more easily, through the automated orchestration of complex collaborations that are normally daunting and laborious to initiate and manage. IdeaXML could also enable a greater diversity of participants in the innovation process, using IP Policy Servers to allow innovation to flow more easily through corporate data membranes and social networking technologies to help form more optimal teams.

Finally, the system would enable automatable data collection for the study of cross-organizational collaboration, industrial psychology, entrepreneurship, communication sciences, and group decision sciences. Fully implemented, it could spur development of a next generation "global innovation smart grid" that could enable powerful new business models and functionality to emerge, that will enable the effortless formation of vibrant innovation partnerships between academia, government and industry, and that will dramatically increase global innovation capacity and competitiveness.

2. **We are proposing to include a model term sheet in the Australian IP Toolkit for Collaboration (see the Attachment to this paper). Is the proposed model term sheet suitable?**

The proposed term sheet, while commendable for its streamlined approach, needs strengthening in several areas. In addition to our experience with similar agreements, we have excellent connections with top legal professionals with expertise in this area.
3. We are proposing to include model agreements in the Australian IP Toolkit for Collaboration.

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4. Have you any experience with a similar Toolkit or resource?

Our team has extensive IP licensing experience, as well as experience and expertise in developing global e-commerce standards and technologies. More detail is available in the next section.

5. Do you have any additional comments on the proposal?

As we transition into the world of 21st century business, it is possible to develop something we call “IP meta-coordination”. IP meta-coordination involves using a higher order of strategic intelligence to bring greater coordination to complex business processes, like intellectual property management. Consider, for example, the problems faced by the current patent system, which has fallen far behind the pace of innovation. Originally designed to protect the independent inventor, the patent system is being severely stressed. Some business analysts estimate that almost a third of the United States IP portfolio is under attack and the number of patent infringement actions filed annually in the U.S. has increased close to 300 percent over the last two decades.

By adopting a meta-coordination approach to collective intellectual property, new strategies can evolve to support a more complex model of managing a multi-enterprise consortium. When a trustable third party sits at the hub to drive and adaptively target the innovation capacity of all consortium members, it will be possible to generate an “adaptive patent pool” for that consortium or country.

This could go a long way toward addressing the plague of “patent trolls” – non-practicing litigation entities – that are a growing burden on the IP system. For a country, the trusted hub partner could be a governmental agency, such as MITI, Japan’s Ministry Of International Trade And Industry. Armed with a predictive forward IP landscape model, that the trusted entity could make valuable recommendations to individual participants, that would in aggregate help to optimize the performance of the entire country’s innovation ecosystem.

Such techniques have in fact already been used. Patent defense companies and consortia have been formed to counteract the problems caused by patent trolls in the high technology industry. In 2008, a group of 11 high-tech companies, including Cisco Systems, Ericsson, Google, Hewlett-Packard, and Verizon formed Allied Security Trust with the goal of identifying and obtaining key patents and preventing them from falling into the hands of the trolls. Also in 2008, RPX Corporation introduced the RPX Defensive Patent Aggregation service to help e-commerce, financial services, hardware manufacturing, networking, software, and wireless companies reduce the risk of NPE [what is NPE?] assertion and litigation by purchasing patents on the open market.

Looking forward, it’s clear that through technology-enabled metacoordination of collaboration, which is also the next generation of Agile management, we will achieve a quantum leap in productivity and fulfill the promise of intelligent openness.
There many benefits are obvious. First, the proposed frameworks would allow internally-focused corporate innovation platforms to evolve toward IP-secured open innovation platforms that can exploit entire ecosystems of super-smart players.

Second, these frameworks would allow disparate corporate innovation and collaboration applications to begin to interoperate, and this would lead to safe interoperation outside of the enterprise firewall.

Next, the use of IP policy servers would facilitate intelligent entitlement capability to securing confidential information, enabling functions like idea search to be transactionalized. This is, in effect, “Google for IP management.” This would in turn foster the formation of more effective innovation teams within and across organizations, and increase the effective licensing of technologies from academia to the market.

And finally, these frameworks would allow participants to gather and analyze key metrics for innovation, improving measurement and thus management. The evolution of such frameworks would serve as a blueprint for any country to build a national innovation grid.

As a result, some day in the future scientists in academia and in corporations will be able to work together more easily through the automated orchestration of complex collaborations that are normally laborious to initiate and manage. The system would also enable a greater diversity of participants in the innovation process, and allow innovation to flow more easily through corporate data membranes.

Fully implemented, the innovation smart grid could enable powerful new business models and functionality to emerge, facilitating vibrant innovation partnerships between academia, government and industry, and increasing global innovation capacity.

About FutureLab

The FutureLab Team is an extraordinary group of leaders and thinkers who have achieved significant business accomplishments in their own careers. The FutureLab consultancy provides an integrated approach empowers a structured pathway to innovation management and organizational transformation, customized to fit the specific processes and culture of your organization. Innovation will become one of your strongest core competences, enabling competitive differentiation, and empowering market leadership. You can find out more at:

http://FutureLabConsulting.com

Moses Ma is technology visionary praised in Time Magazine, the New York Times and other publications, and has enjoyed a rich and diverse professional life spanning academia, science, technology, philosophy and business. Over the years, he’s been involved in the forefront of many exciting technologies – he was a legendary games designer who created two of the world’s best selling computer games, including SpectreVR, which literally invented the category of networked games; took an uncapitalized software startup and built it into the 97th largest, 7th fastest growing, and 11th most profitable in the country; he co-developed with IBM the first specification for universal identity on the Internet; and at the CommerceNet think tank, he invented the concept of eMarkets and helped to establish the foundational guidelines for the semantic Web. He is currently
a partner at FutureLab Consulting and at NextGEN Ventures, a boutique high tech venture accelerator in San Francisco, with startups in the arenas of enterprise software, digital media and wireless technology.

Doug Glen was CEO of Imagi Studios, Chief Strategy Officer of Mattel Toys, General Manager of LucasArts Entertainment, and Group Vice President of Sega of America. As a business strategist, he combines the perspectives of an MIT engineer, a Northern California venture capitalist, and a consumer product innovator. He has extensive experience in trademark licensing and invention licensing for Lucasfilm, Mattel and other companies.

Dr. Ian Bennett is a successful inventor with 30 patents issued by the U.S. Patent Office, Japanese Patent Office and the European Patent Office in distributed speech recognition, natural language processing, semantic decoding, distributed search architectures, interactive training systems, solid state device physics, and ultrasonic imaging. He was cofounder of Portacom Technologies where he led the development of the first Windows Accelerator graphics cards that received the 1992 PC Magazine's Editor's Choice Award. He was responsible for the systems integration of the Poqet computer, the first pocket-sized MS-DOS computer developed by Fujitsu Personal Systems. He has also consulted in computer networking and E-commerce software, market research, product and technology analysis to IBM, AT&T, Allied Signal, Hughes Electronics, Hitachi, Fujitsu, and NEC among others.

Langdon Morris is one of the world's leading thinkers, writers, and consultants in innovation. Working around the world with a fascinating variety of clients, from UNICEF to Total Oil, France Telecom, Bayer, Gemalto, and many others, Langdon helps these organizations implement world-leading innovation systems. Formerly Senior Practice Scholar at the Ackoff Center of the University of Pennsylvania, he has taught strategy at universities in Europe and South America. His recent innovation books The Innovation Master Plan and Permanent Innovation are two of the most widely read innovation titles of the last five years.

Dr. Po Chi Wu is an Adjunct Professor with joint appointments in the School of Business and Management and the School of Business at the Hong Kong University of Science & Technology. A highly successful international venture capitalist and entrepreneur, he has lived and worked both in the United States and in Asia, and brings a unique perspective and the rich context of more than 30 years of experience and insight into the challenges of innovation and entrepreneurship.