SUMMARY OF NIIGATA CONFERENCE

Time: May 10, 2008

Place: Niigata, Japan (followed by May 8 meeting at Imperial Hotel, Tokyo)

Introduction:

Focus on the challenges and opportunities of innovation for the new millennium.

THEMES:

1. Agreement on a broad vision of innovation
   - not just technological innovation
   - but systemic / general – infrastructures
   - a large component of it relates to entrepreneurship at all levels, including social entrepreneurship
   - must include both developed – developing world

2. Agreement that we are facing unprecedented Grand challenges :as first pointed out by Komatsu San (Cannon): globalization, sustainability, survival and progress of mankind, peace, development etc..

   As reminded by David Strangway, the 8 Millenium Development Goals must be kept in mind as crucial challenges in front of us. Our universities and systems so far have been doing a poor job. We need major change.

   The 21st century must be the century of integration (Strangway, Andrews). Need to think of issues in long-term and strategic way. Need to address cultural issues.

   The key link to answer those challenges is innovation. With it comes entrepreneurship. The current paradigm shift requires accelerated innovation.

3. **Lots of shared experiences on the novel sources of innovation - a few lessons stood out:**

a/ Innovation through encouragement of private space – an interactive process where incentives and platforms are offered for free entrepreneurial spirit:
Judith Cone has argued that the key is to be responsive to someone who has an idea, shape incentives and rewards, cross-fertilization.

b/ Innovation involves an element of fun (Ron Dore)

c/ Most great ideas come where disciplines interact and overact (Monte Cassim)

As shown by Todai president Kamiyama, in an era of complexity of knowledge, we must find tools and ideas to break compartmentalization and bring people together around the key challenges for humanity: sustainability, climate change, energy, health, development etc..

Innovation arises from interdisciplinary, multi-level changes. It involves a systemic application of knowledge (Mr. Chambers)

d/ Creativity must be compassionate. Education system is here to help develop the idea that self-interest is best served through compassionate behavior (several people – Judith Cone, Mr. Chambers, Monte Cassim)

4. **Supporting Structures Matter a lot, including the government:**

Governor Izumida highlighted in his speech the important role of government, both at central and local levels, in changing the structure and leading by example.

Judith Cone emphasized the importance of incentives and rewards

David Strangway argued that regulations and public policy are a key driver of innovation

Mario Cervantes reminded us of the key role of government in providing signals and incentives and funding public research. Mr de Souza

demonstrated the role of government leadership in launching innovative institutions in Brazil.

Yves Tiberghien argued that the challenge for government is to move toward enabling governance and unleash multi-level competitive leadership.

One key aspect of course relates to education policy. We have heard a lot of criticism of government policy toward education in several countries. There was a broad call toward breaking disciplinary boundaries and setting cross-cutting goals that can act as a glue.

5. Cooperative Innovation – Role of Education and Academia

A key theme in the conference is the importance of multi-actor cooperation around education.

a/ Education has to be the most important thing for any place that seeks innovation.
(Bill Purcell). Stephen Johnson has argued that the transformative power of education is the best tool for the progress of humanity. It is the key link for development of human capacity.

b/ Education can now only be conceived in terms of partnerships, partnership between universities and companies, but also with individuals, civic organization, other educational organizations. Also global partnerships. Vice President Matsushige of Kyoto University demonstrated a great example of new culture creation through business-academic cooperation. Kyoto University has developed several ways to transfer technological innovation to the private sector. Also Saito san.

We need mechanisms to encourage the flow of knowledge from universities to the private sector and bring back universities to the core of society. Need to solve issues of IP and breaking down the walls (Saito san)

Creating space for industry-university cooperation.

c/ Universities must break boundaries (Todai, Kamiyama san)
Universities must reinvent curricula and teaching methods. Universities must be not just loci of teaching and research, but public spaces for network creation (Prof Tanabe). Universities must cooperate with society and interact with society (V-P Matsushige of Kyoto U).

Need collaboration among universities as well (Arinobu san).

d/ Importance of a broad education, liberal arts and critical education. Fostering grand minds and risk taking, breaking limits (Komiyama san). We want to foster creative mindsets, a culture of OK to fail (Strangway, Lawrence Walker)

Ron Dore's question: how do we turn brightness into sheer creativity?

e/ Changing reward systems in universities (Nagata san and others)

f/ Toyota, Cannon, Nippon oil, and Nokia, four corporate examples that demonstrate the critical role played by training and education. The Hitachi example showed the incredible capacity of technological upgrade and innovation within companies.

f/ Leading by example (Komiyama san)

6. Engaging Youth in all initiatives –keep them in mind

Youth in school system

Youth in ideas

Youth as employees and their expectations

Youth as travelers

(and don't forget engaging old age as well – making them most of them as a resource)

7. Social Entrepreneurship and non-metropolitan regions

We have heard about lots of examples of regions and non-metropolitan cities coming up with amazing innovations, be they Niigata, Nashville, Milan, Manchester, or Queensland, Australia.

Innovation and the new information age provide great opportunities for the revival of non-metropolitan regions. Small towns can become centers of

innovation (Robert Lieberman). The revolution of information science can make things move forward for local areas.

Yet, regions must learn to build social capital and make themselves attractive through innovative governance. Enhancing quality of life to be competitive nationally and internationally.

Creating opportunities for exchange of ideas- create space (Mizono san)

Competition among regions becomes an important factor as well.

Challenge for Local areas: Turning a disadvantage into an advantage (Nagata san)

Revitalizing developing areas through win-win solutions (Yonekura san, Peter Andrews in Queensland).

8. Businesses

Private energies are crucial to the spread of innovative thinking.

Prof Yonekura emphasized the growing importance of non-government actors, including private actors and social entrepreneurs.

Great possible contribution to technological development and solutions to environmental problems (Hitachi, Kyoto University spinoffs).

Robert Lieberman reminded us that small businesses have been a driving force in innovation and technology in the US, driving the technological frontier and innovation in solving social problems.

9. Dealing with Consequences – messier world?

Decentralizing and unleashing entrepreneurial spirits also may lead to rising inequality between rejuvenated areas and laggard areas, between empowered individuals and others. This can lead to social tensions.

We need to find ways to encourage innovation and entrepreneurialism, but also to diffuse the gain of innovations and retain social fabric.

One idea that came up is sharing intellectual property. This could be one of mechanisms for diffusing the benefits of innovation.

One more mechanism mentioned by Prof. Fukushima (Niigata) is the linkage between large universities and smaller community colleges. Even partnerships to other schools.

Lawrence Walker: technology until now did not reduce warfare, but augmented it. We need to change that and hope that technology and innovation will contribute to peace.

Part of the innovation revolution must include a change of consciousness.

10. Conclusion- Looking Ahead- What next:

Build a dynamic process to keep the focus on the grand challenges and the need for systemic innovation

A Website? A clearing house?

Other conferences?

Publication?

A research center on the topic that has multiple locations and breaks boundaries (disciplinary boundaries, university-corporate boundaries)

By Yves Tiberghien and Fiona Wood