

# Innovation Chain Master:

Location, Connections and Connectors to make  
a Future of Innovation happen

## INFU Mini-Panel – Feedback Report

By Drs Anna Trifilova & Bettina von Stamm



November 2010, London, UK

## Contents

1. Background	3
2. Approach	3
3. Findings	3
3.1. An innovation mindset	4
3.2 Skill requirements for new roles in innovation	5
3.3 Tools supporting innovation roles	6
3.4 Thoughts on the organisation of innovation	6
3.5 New and emerging roles in the field of innovation	6
4. Final Thoughts	8

## Additional information

Appendix I Workshops – Some Details	9
Appendix II Extracts from Workshop 1	11
Appendix III Extracts from Workshop 2	15
Appendix IV Extracts from Workshop 3	17
Appendix IV Paul Hissel's Innovation Chain Master	21
Appendix VI Robert Dew's Professional Innovator	22
Appendix VII Dwayne Spradlin's Citizen Innovator	23

## 1. Background

The main objective of this INFU Mini-Panel was to envision what new roles might emerge in the field of innovation. The discussions have addressed topics such as,

- who will be the players,
- where will they be,
- how will they connect, and
- what roles will emerge in the field of innovation?

## 2. Approach

To explore the above questions 3 workshops were conducted (for more detail see Appendices I-IV):

- 6<sup>th</sup> October 2010, dedicated workshop 'Exploring the Future of Innovation', as part of the 5th International Innovation Lab Conference, Nürnberg, Germany; 42 participants from 26 organisations
- 5<sup>th</sup> November 2010, as part of a 1-day MasterClass on 'The Future of Innovation', London, UK; 17 participants from 14 organisations
- 16<sup>th</sup> November 2010 (forthcoming) as part of a 1-day MasterClass on 'The Future of Innovation', Exeter, UK; 12 participants from 12 organisations

In each of the workshops groups of between 3-8 participants were asked to discuss the question what kind of new roles would emerge in the field of innovation; what kind of skills would be required and where would such people be located. Feedback from the group work was recorded and transcribed.

The following report presents the findings and propositions from the 3 workshops, including a number of new roles in the field of innovation that draw on the workshops as well as the *Future of Innovation* book and website (Gower, 2009; [www.thefutureofinnovation.org](http://www.thefutureofinnovation.org)) and the authors' own thoughts and insights.

Excerpts from the workshops transcripts can be found in Appendices II-IV, a number of new roles in the field of innovation taken from the Future of Innovation contributions have been included in Appendices V-VII.

### 3. Findings

While each workshop addressed fundamentally the same questions – what new roles will emerge in the field of innovation – the topic was approached differently in each workshop, partly by a deliberately different setup to experiment, partly by participants' reactions and initiative.<sup>1</sup> We feel it to be important to go with the energy of the participants, and think that as a result of that some rich insights have been generated. From the way participants described the roles some overarching insights have been generated on:

- An innovation mindset
- Skill requirements for new roles in innovation
- Tools supporting innovation roles
- Some thoughts on the organisation of innovation

What was really interesting was that people seem to assume that innovation will be globally distributed without any permanent geographical patterns of role distribution i.e. innovation happens where there is a need, in a way it is materialized from a global idea cloud, so there is no meaning in 'relocation' anymore. It is not about the 'where?' but about 'everywhere!' and 'how?' In other words, all imaginable scenarios are distributed across the globe.

Such starting point moves away from the concept 'who will earn the money' towards 'where will be the solutions'. In doing so, the main objective is to understand connections and connectors to make a Future of Innovation happen. This has been inspired by an idea (and a future need) of Innovation Chain Masters (Appendix IV) whose role is to build, adapt and optimize innovations locally and globally.

Indeed, if presumably tomorrow innovations are 'relocated', i.e. what if the bulk of innovation were to come from today's emerging markets? To elaborate, what if '90% of innovation' is relocated, i.e. what if innovation is directed at population living in poverty? In this imaginable future case, how we manage innovation, then?

Below some quotes from the discussions.

- "The users and players will come from where the needs are the strongest. We thought about need-driven players that suffer from certain circumstances. Most of these players will come from emerging markets' (Appendix II)
- "We spoke about the need for global networks, moving beyond the borders in terms of people as well as collaboration" (Appendix II)
- "We evolved over the last 30 years. We don't have G5 or G8 any more, it has been overtaken. The USA is no longer the major power of the world, China is; and in Europe – Turkey is the biggest economic power. The world economy changed. We have learned to share our ideas and to share our world. I am very happy about that' (Appendix IV)

---

<sup>1</sup> For more detail about the individual workshops please refer to Appendices I-IV.

We will elaborate on all four overarching aspects below, adding our own thoughts and insights to those generated by workshop participants. This will be followed by a tabular summary of possible new roles in the field of innovation.

### 3.1. An innovation mindset

First of all we feel it is quite important to point out that, above all, innovation requires a certain mindset. It seems to be mindset issues that are the main barrier to organisations embracing innovation more fully today – critically so at leadership levels.<sup>2</sup> There are structures, processes and skills that support and encourage innovation, but in the end it is a mindset, a set of values and behaviours, that will either support innovation or get in the way of it. Below a list of mindset issues that were raised by participants of the 3 workshops (in order of frequency / felt importance):

- **Authentic** – they are strong personalities that do not feel the need to bend their mind to please others; at the same time they are,
- **Open & flexible** – to other people's perspective and viewpoint, to possibilities and opportunities as well as the new and unexpected; this aspect also implies that they are,
- **Content with risk and ambiguity** – combined with showing persistence, courage and tenacity; a further aspect of their openness and flexibility is that they,
- **Thrive on diversity** – national cultures, different professional backgrounds etc; good at bridging different communities and acting as translators; this often goes with being;
- **Focused on collaboration** and / or facilitating collaboration – they understand that while an idea might originate with one individual there are very few people around who have all the skills required to move from idea through reality. While their traits so far might have been more on the reactive side they are also,
- **Good at asking questions** and not prone to rushing into solutions – we are not short of ideas (answers) but rather at questions that are worth answering; we also often rush into finding answers too quickly before establishing first whether our question is actually worth answering; this goes hand in hand with being,

---

<sup>2</sup> In most organisations those managers who deliver against the organisation's agenda - which has focused a lot on cost cutting and efficiency drives - rise to the top. A mindset that thrives on efficiencies and cost cutting is very different from a mindset that embraces innovation which, by its nature, involves risk taking, uncertainty and ambiguity. Hence, while most of today's leaders will understand and buy into the rational argument of innovation it is against their personal preference and comfort zone which means that they struggle to follow words with the actions and behaviours necessary to translate intent into reality.

- **Enthusiastic and good at inspiring others** – which means that they are good at getting buy-in as well as reducing fear and feeling threatened in others; they achieve this through being,
- **Visionary with a long term perspective** – which they convey through engaging stories and other ways to means to make the not-yet-existing tangible; part of the attraction of the vision they are offering is that it,
- **Reflecting a concern for all three aspects of the triple bottom line** – profit alone no longer satisfies people; they seek assurance that planet and people have equally been taken into consideration; this goes together with
- **Thinking at a global level** – rather than exclusively of the project, organisational or even national level

### 3.2 Skill requirements for new roles in innovation

- **Communication** – able to communicate with and appreciates a highly diverse audience (be they functions, organisations, nations) which requires them to be,
- **Up to date with latest technology** – to reach out and collect insights from across the world; and being
- **Multilingual** – in terms of national languages as well as ‘professional’ languages; this enables them to translate between different parties and interest groups; which also influences their ability to
- **Make the complex simple** – is part of their skill set; our already complex world will become ever more complex through a constant increase in the sheer number of players and their possible interactions; at the same time there is a need and thirst for simplicity in order for everyone to understand (and buy-in); helping them to this is the fact that they tend to be,
- **T – or  $\pi$  -shaped person** – meaning that they have ‘shallow’ knowledge in a lot of areas as well as deep expertise in one (T) or two ( $\pi$ ) areas; all the above combined with being diplomatic and (organisational) politically versed drives their predisposition to be,
- **Able to make connections** – between people, ideas, organisations, nations, people, etc. and thereby are fundamental in
- **Inspiring change.**

### 3.3 Tools supporting innovation roles

In order to live up to their full potential the emerging innovation roles need to be supported by:

- Ability to **measure** the impact of innovation for all three aspects of the triple bottom line;

- Have **technology** that allows virtual will ALL qualities of face-to-face meetings today;
- Tools for **managing ideas** (versus creating them) which means easy access to ideas, information and knowledge.

### 3.4 Thoughts on the organisation of innovation

Finally there were also some interesting thoughts on the wider infrastructure for innovation such as:

- **The United Nations of Innovation** – a global (in terms of representation as well as reach) council to address and solve specific global challenges, and make the world a better place;
- **Global governing body of innovation** – an institution to which ideas are presented; which finds resources for worthy ideas (worthy in the sense of the TBL); which ensures that ideas and innovation are shared with all of those to whom they might be relevant; which investigates possible 'dark side of innovation';
- **Innovation Dating Agency** – brings people together to develop ideas
- **Innovation Play School** – where children earn their money going into organisations asking 'why' questions as well as test and play with new products

And finally, the world's landscape of innovation is driven by authentic, inspirational and engaging leaders that are able to espouse solutions that well and truly, and equally, consider all aspects of the triple bottom line.

### 3.5 New and emerging roles in the field of innovation

From the **workshops**:

**Minipreneurs** – everyone has to be an entrepreneur.

**Compy-customer** – facilitated through the internet and emerging technologies everyone who wants to become a designer, manufacturer, producer can do so; customer and companies become one

**Chief Irritation Officer** – asking 'silly' and 'awkward' questions

**Organisational Destruction Officer** – is responsible for breaking up rigid structures, processes, ways of doing things

From **Anna & Bettina**:

**Innovation Baby Sitters** – are experienced in detecting early signals of 'innovation birth', mostly outside their organisation. They are looking after 'innovation pregnancy' in other organisations. Their role is to alert their own organisation to any disruptive innovations at the initial stage, when 'innovation babies' make their first movements in a competitor's womb.

**Met Innovation Officers** – are undertaking an ‘innovation weather forecast’ to prepare an organisation; for example, for ‘innovation rain’ from the west coast or ‘innovation tsunami’ coming from the east. Apart from innovation baby sitters who search locally, Met Innovation Officers take a global look across industries and experiences. They inform their own organisation about changes in innovation climate; they bring global innovation news around product, process and service innovations to their organisations.

**Innovation Police Officers** – use Innovation Scales, Innovation Magnifier (Lens), Innovation X-ray to measure the weight, scope, guts of the innovation pipeline. Innovation Police Officers look after ‘responsible behaviour’ of the organisation towards the planet. They are ‘local free-will agents’ of the ‘Global Innovation Interpol’. Mostly, their role is to inform organisations of the new rules in legislation and new tools opening for organisation to measure side-effects that might be caused to the environment and the society by any new product launch.

**Innovation Therapist** – is someone from the outside of the organisation who can come and help when there is, for example, a high temperature symptom across innovation process in companies. Such therapy might be needed when companies feel that their innovation process is not running well but they can’t solve the problem, can’t diagnose the reason from the inside. Innovation Therapist can advise on remedies or suggest serious surgery where necessary.

**Keeper of the essence** – too many ideas that start radical and very different are reduced, step by step, on their journey from conception to realisation; it is the role of the keeper of the essence to ensure that this does not happen.

**Second hand idea sales person** – idea contests / open innovation initiatives create countless good ideas but only a few tend to be selected to be taken forward; second hand idea sales people – proactive as well as reactive – find buyers for those

**Innovation connection officer** (organisational, regional, national global) – innovation happens through the connection of different bodies of knowledge. Some companies are starting to employ people who look across their organisation and or business units to identify connection points. There is definitely scope to make this role more popular, and for it to be implemented beyond the organisational boundaries.

## 4. Final Thoughts

It seems that the field of innovation would benefit from the emergence of a whole host of new roles. It is now that we need the courage of educators to pick up the new skills sets, and to prepare for the much needed future innovation roles.

However, we believe that the challenge needs to be addressed at three levels simultaneously:

### Education

- Educational institutions need to develop courses that are more aligned with future business and social needs. This poses a challenge not least because it will initially be difficult to find those who can teach what no one has taught them. Some universities have started on this journey; many seem insecure in the path they have chosen as it means that they are not featuring on the traditional league tables. From our experience teaching at some of the more 'unusual' MBA programmes we find that they actually do attract some amazing people, people we need more of.

### Business

- Businesses already seem dissatisfied with what universities deliver to their doorstep; many organisations are setting up their own universities, have in-house training programmes for those joining from university. While they seem dissatisfied with the current offering we are not entirely sure they truly know what they should be asking for. Helping them understand the 'mindset challenge' might be one way to direct energy in a fruitful direction.

### Prospective students

- Students seeking education with a difference find it hard to find educational programmes with a difference. It is not that they do not exist, but they are few and far between. It also seems that even if they find such courses, a lot of personal conviction and strength are required as such courses do not seem to carry the same weight (with peers as well as employers) as the more traditional and often high-reputational universities.

**To sum up**, courage is needed from all three parties. Courage to be the one to take the first step, and to put the head above the parapet. Yet the biggest challenge for all of us is, what can *we* – can and will – do to lead the way?!

**P.S.** The future of innovation will not happen to us. We, the people, will make it happen, turning ideas into facts and those into attitudes, and it begins now.

## Appendix I Workshops – Some Details

Total number of participants in 3 locations: 71 from 52 organisations; for more information of the individual workshops, including the participating organisations see the table below.

Location	Nürnberg, Germany	London, UK	Exeter, UK
<b>Group size</b>	Tables had up to 8 participants	Participants worked in groups of 4-6	Participants worked in groups of 3-5
<b>Cross fertilisation</b>	Participants remained in their groups for the duration of the workshop	Participants changed tables several times during the workshop	Participants changed tables several times during the workshop
<b>Task</b>	<p>Each table was given 2 out of the following topics to discuss</p> <ul style="list-style-type: none"> <li>• What kind of players / who / will be part of the innovation landscape in 2030?</li> <li>• Where will the players in the innovation landscape come from / be located?</li> <li>• How will the players in the innovation landscape communicate / connect / collaborate?</li> <li>• What (new) roles will emerge to enable a smooth running in the landscape of innovation?</li> </ul>	<p>The question given was 'Building on the insights of the 7 Stations of the Future of Innovation, which new roles do you see emerging in the field of innovation? Think about skills, experiences, connections and other characteristics to build a rich persona. Use the picture cards provided to further enrich the description' These personas were presented back to all participants.</p>	<p>It was planned to run the same exercise as in London (though without the cards); however, when the question to consider future roles in the field of innovation was given one of the participants jumped up to share a future role in the field of innovation that had come to her mind. It felt wrong to stop the initiative and enthusiasm so everyone followed her example!</p>
<b>Number of participants</b>	42	17	12
<b>Companies represented</b>	<ul style="list-style-type: none"> <li>• Aalto University School of Science and Technology</li> <li>• DATEV</li> <li>• Energieberatung Lang</li> <li>• Fraunhofer IAO</li> <li>• Friedrich Alexander University</li> <li>• Grenible EDM</li> <li>• Hochschule Ingolstadt</li> <li>• Leuphana University Lüneburg</li> <li>• Linner GmbH Werkzeugfabrik</li> </ul>	<ul style="list-style-type: none"> <li>• British Gypsum</li> <li>• Favelafabric</li> <li>• GSK</li> <li>• Imperial College</li> <li>• Infineum</li> <li>• InnovationXchange</li> <li>• Kent City Council</li> <li>• Mars</li> <li>• NHS Innovations South East</li> <li>• Open University</li> <li>• Osborne</li> <li>• Roehampton University</li> </ul>	<ul style="list-style-type: none"> <li>• AkzoNobel</li> <li>• Gearing Up</li> <li>• Lark Consulting</li> <li>• Learn2Learn</li> <li>• Mars</li> <li>• Met Office</li> <li>• Portfolio Directors</li> <li>• Progenta</li> <li>• RWENpower</li> <li>• Warwick Insight</li> <li>• University of Exeter</li> </ul>

	<ul style="list-style-type: none"> <li>• Johnson &amp; Johnson</li> <li>• Marks &amp; Spencer</li> <li>• Nokia Siemens Networks</li> <li>• Orange Hills</li> <li>• Philips Research</li> <li>• Roche Diagnostics</li> <li>• Siemens</li> <li>• Teagasc</li> <li>• Technical University Munich</li> <li>• University of Erlangen Nürnberg</li> <li>• University of Exeter</li> <li>• University of Newcastle</li> <li>• University of Limerick</li> <li>• University of Padua</li> <li>• University of Twente</li> <li>• UnternehmerTUM</li> <li>• Voithturbo</li> </ul>	<ul style="list-style-type: none"> <li>• Royal Mail</li> <li>• Technology Strategy Board</li> <li>• Worcestershire Mental Health Partnership</li> </ul>	
--	---	---	--

## Appendix II Extracts from Workshop 1

6<sup>th</sup> October 2010, Nürnberg, Germany  
 A dedicated workshop 'Exploring the Future of Innovation'  
 At the 5<sup>th</sup> International Innovation Lab Conference  
 (42 participants from 26 organisations)



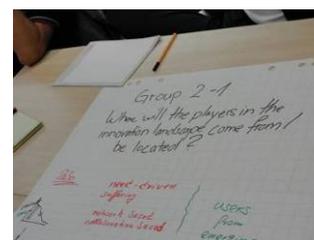
Below excerpts from the feedback from the group work

### Group 2-1: What kind of players / who / will be part of the innovation landscape in 2030?



☞: "We started with drawing a picture of the landscape, making assumption about how the world would look like; we talked *about*:

- how people could have more and more information,
- how different countries would get involved into having the access to information;
- with the increase of population (India, China) and lack of resources, how we can keep resources in the world getting so big;
- how we are going to keep the sustainability issue going.



In these circumstances any individual, any organization can be an innovator.

The innovation process, after being difficult initially, it is becoming more and more flexible, moving more into the background. The role of individuals is becoming more important. We foresee that innovation processes will focus around "idea management" rather than "idea generation" because we will have access to a great many ideas. The question then is how do we manage those ideas? With so many sources of ideas – how do we make sure that those ideas are appropriate for the markets? As a result of this we see a role for "Innovation brokers", people who specialise in taking ideas from people and marrying them to organisations.

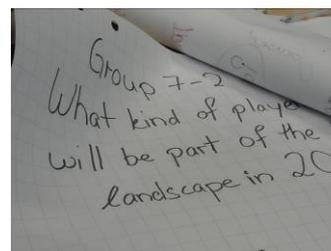
Additionally, we felt uncertain what kind of market might emerge, what new market opportunities might be. But we feel that markets in 20 years time it would be incredibly different not least because of the rising of the Asian, South American and African nations".



**Group 7-2: Where will the players in the innovation landscape come from / be located?**



☞: "We make it brief, like an abstract, by only saying that the users and players will come from where the needs are the strongest. We thought about need-driven players that suffer from certain circumstances. Most of these players will come from



emerging markets".

**Group 3-2: What kind of players / who / will be part of the innovation landscape in 2030?**



☞: "The emerging markets were mentioned, but there could also be a strong impact of leading companies and individual leaders such as Steve Jobs, whom everybody is following. We will experience a "systematic information engine" where people will be convinced less by companies but with a strong accumulative influence. We should take seriously leading influences, and that everyone can make a difference".



**Group 1-1: What kind of players / who / will be part of the innovation landscape in 2030?**



☞: "We also have thought of the "innovation broker" or the "knowledge broker"; then we have "mini-preneur" in a way that everyone has to be an "entrepreneur".

Then for 2020, we have "professional connectors" within companies that are connecting different processes, different people for a common goal. We also thought of a 'community of difference' that does not contain people with the same ideas but is rather embracing people who

have different ideas, different patterns of thinking; using diversity and creativity from different people is used to create innovation.

For a distant future of 2030-2040, we thought of "copy-customers" – meaning that the borders between companies and customers, like in the open innovation paradigm, are eliminating. Company and the customer are almost the same.



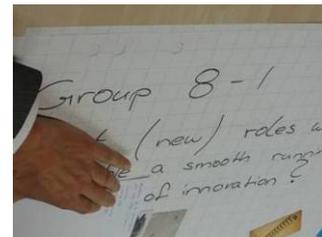
Bettina: Such blurring of boundaries exists today already; for example, customers can create digital designs on their computer, and send them off to 'printed' on a 3-D printer. So, it is not really that far in the future!"

**Group 8-1: What (new) roles will emerge to enable a smooth running in the landscape of innovation?**



☞: “We came up with a role of “translator” between different knowledge levels and also between knowledge brokers. The next role we identified is “empowered people” increasing the awareness of people. We had also different themes like “flexibility”, “diversity” and special content “chameleons” – in a positive sense of being highly adaptable to any particular context. Innovator needs to change its colours depending on the groups they are working with, customers or organisations, colours create via bringing different things to different people.

We also thought of people in “content organisations” that may focus on the bottom line but the real bottom of the line may forget things like carbon credits, environmental sustainability in order to create new value. Creating new values in companies means that innovators are looking at a longer terms; companies make investments that yield future returns in this area. We need pioneers, we need people who nurture our innovators so that they will not get lost along the way”.



**Group 4-1: What (new) roles will emerge to enable a smooth running in the landscape of innovation?**

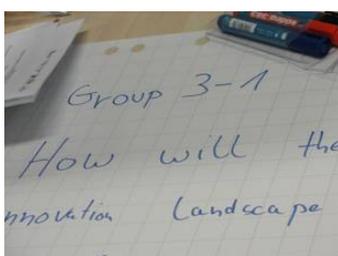


☞: “We thought about classic things such as “translators” between communities and brokers, but quickly we changed our mind and thought of the “global problem officer” instead; this would be someone inside the company, taking care of everything with a global approach, a systems approach.

Then we thought about the prophecy from the Aztecs who do not say that the end of the world is near but that there will be a new beginning. We thought that we should be able to communicate with our open minds, we just share our minds and see what other think about. And if it happens – and it is supposed to happen – we don’t need translators, brokers we will have ideas going very fast in the humanity and everybody will be sharing it very quickly. We don’t need translators”.



**Group 3-1: How will the players in the innovation landscape communicate / connect / collaborate?**

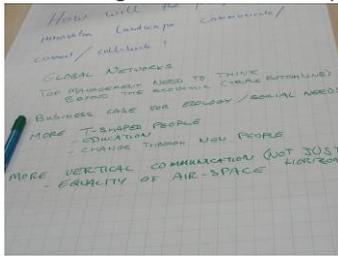


☞: “We simultaneously looked at economic, ecological and societal needs and how companies can do that and took examples from big, more successful companies – how would they do it? From the environmental needs, the point of legislation has been put into place; companies might look at it from the positive or negative perspective but more innovative companies are viewing it as an opportunity to innovate, to develop new businesses

and new approaches; that's what we probably need to apply to social needs and environmental issues as well as – looking at it as opportunities, and it needs to start with top managers. They should think beyond the economics and look more at the triple bottom line, taking environmental and social needs more seriously. To facilitate that, we need more business case studies of innovation for environmental and socially needs. That's happening already certainly in environmental terms, and we will see more of it in the future.



We spoke about education and that it should produce people with broader knowledge as well as expertise in a particular area. Companies will need new skills, and people who embrace the triple bottom line; they would employ younger people, renewing their work force like for example Google. We spoke about the need for global networks, moving beyond the borders in terms of people as well as collaboration. Finally, we said that we need more vertical communication between organisations rather than people communicating only top-down".



## Appendix III Extracts from Workshop 2

5<sup>th</sup> November 2010, London, UK  
 As part of a 1-day MasterClass on 'The Future of Innovation'  
 (17 participants from 15 organisations)



Below excerpts from the feedback from the group work

### Group 1: What kind of new roles will emerge in the field of innovation

- United Nations of Innovation – to address and solve specific global challenges, and make the world a better place
- Multifaceted
- Tenacity
- Diplomat
- Not rushing into solutions
- Asking the right questions
- Issues around diversity making you feel uncomfortable



### Group 2: What kind of new roles will emerge in the field of innovation



- Well-travelled
- Connecting ideas to people
- Connected virtually with the world
- Passing ideas on to the most suitable people
- Very young – not experience but techno versed

### Group 3: What kind of new roles will emerge in the field of innovation

- Knowledgeable, extremely connected in the world,
- Very collaborative, very diverse, long sighted, can look into the future
- I am political, I am a mover, I work among people; facilitator, able to pick winners, trade people ideas, take them to the global governing body of innovation; make money, for everybody (for me...)



**Group 4: What kind of new roles will emerge in the field of innovation**

What the person looks like and how they feel

- A bit like a dolphin – fresh, popping up everywhere, enthusiastic
- Can deal with diversity
- Chameleon – positive, not deception, but flexible and open

How they behave:

- With integrity,
- Can deal with ambiguity;
- Can accelerate change;
- Can translate ideas into reality;
- Can make complex ideas accessible;
- Like to have fun,
- Networkers;
- Ready to stick their neck out;
- Have creative vision;
- Can lead people with confidence;
- Can lead others to become leaders;
- Broad perspective;
- Into exploration and innovation,
- Can see into the future;
- Can make you feel part of the team and at the same time very special.



## Appendix IV Extracts from Workshop 3

16<sup>th</sup> November 2010, Exeter, UK  
 As part of a 1-day MasterClass on 'The Future of Innovation',  
 (12 participants from 12 organisations)



### Participant 1: New roles in the field of innovation in 2030



I am building of the **Dream Catchers** of American Indians. In 2030 there will be people creating dreams, releasing them into the world in the shape of butterflies; you can stand still and let the butterflies land on you, and be inspired by the dream they carry. The butterflies represent the beautiful, the natural and the good. It is the Golden

Age of inspiration for open minded people. It almost becomes part of the human DNA, resulting in imaginative children that are inspired and carry inspiration forward with them. There is a happiness and well-being that never been experienced.

### Participant 2: New roles in the field of innovation in 2030

I am a company's CIO – you might think it stands for Chief Innovation Officer but in fact it stands for **Chief Irritation Officer!** The reason for that is that we have learnt over the past 20 years, since 2010, that an important part of innovation in our organisation is having the courage to ask odd question, to challenge conventional wisdom; we used to call it 'thinking out of the box'. We realised that the 'box thinking' is not a good idea. So we decided it would be good for somebody to ask irritating questions, to prompt people to think of different ways to look at things and to stop people being too comfortable and cosy. We feel it is important to get people out of their comfort



zones; get them to work in that top right hand corner of the 2-by-2 matrix that looks at technological uncertainty along one axis and market uncertainty at the other.

Dealing with unfamiliar markets, unfamiliar technologies, unfamiliar customer groups – that is a scary place none of us like to be – but where we ought to go occasionally. We have learnt that having someone who has permission to ask odd questions is a great enabler. For all the years before there wasn't anyone willing to ask odd questions. Asking odd questions used to be regarded as a career limiting move; asking odd questions meant rocking the boat. But, we have learnt since then that having a Chief Irritation Officer in organisation whose job is to have odd questions is essential.<sup>3</sup>

### Participant 3: New roles in the field of innovation in 2030



My name is Millie and I'm 8 years old. I'm one of a number of children who belong to the **Innovation Play School**. Here we are employed to fund our future education. We earn some money by helping business through asking them lots and lots of why-questions. We play with their products, their food, we tell them what we like and we ask them questions.

### Participant 4: New roles in the field of innovation in 2030



My name is Emma and I am CIO of an **organisation full of followers – and I follow them**; they determine where the organisation is going. We have a common goal in terms of which broad direction we are heading for but they are free to change things along the way, develop and innovate; they are empowered, and I follow their path. I practice 'followership' no 'leadership' to make sure they want to follow me. Occasionally I meet with Millie and she tells us which way we need to go. Some time it is them telling us as board which way to go, creating context and connections that we need to move us to the future. So, it is a complete upside down way from what it was 20 years ago.

### Participant 5: New roles in the field of innovation in 2030



I was inspired by what we discussed about education. Education makes us what we are, it underpins us, unlocks the doors, it creates understanding between people, creates qualities, gives balance, it is inspirational as well. Education has to apply some thinking of today around recognising differences, celebrating differences, admitting that there is no one way of thinking.

<sup>3</sup> In a famous movie "The Big" with Tom Hanks doing the leading role, the main character was also asking odd questions in a company like "I didn't get it" when the new products were discussed. It was irritating for the audience but it resulted in a better product launch – Addition of the Report Authors.

Participant 6: New roles in the field of innovation in 2030

I am an **Organisational Destruction Officer**. My job is to wonder around looking for habits-forming and for process being cemented in too firmly; I will find anything that is becoming solid or in any way static, and my job is just to bust it.

Participant 7: New roles in the field of innovation in 2030

It is a story. A few years ago my stepson discovered sex. He is a sort of person that is a geek living entirely in front of his screen and an intellectual sponge. He absorbs information from everywhere and has an amazing ability to make connections. In 2030 I employed all his children, all siblings and put them into the New Things Department to see what they come up with. But my crowning achievement was to employ a '**Cat Herder**' to control directions in which all these thinkers go. From that we made progress; so far it has worked.

Participant 8: New roles in the field of innovation in 2030

I am Maria and I am running an **Innovation Dating Agency**. I get people together working on two principals. 1. You meet someone with whom you have a lot in common; you get on really well and from that lots of new ideas blossom. 2. We also work on the principal 'opposites attract'; we are looking for people with completely different views of the world, that's where the synergy works when 1+1 gets really 3. So, join the Innovation Dating Agency today.

Participant 9: New roles in the field of innovation in 2030

You all heard of a Tooth Fairy. Well, I am a bit like it; I'm called the **Nookey Fairy**.<sup>4</sup> What I do is I fly anywhere around the world at the speed of light; I find any leader – of an organisation or otherwise – who has failed to do something seriously good for the planet; I then fly to his (or her) partner and a whisper their ear that those leaders who have not done any good cannot have 'nookey' that night!

---

<sup>4</sup> 'Nookey' is a colloquial English expression for 'sex'.

**Participant 10: New roles in the field of innovation in 2030**

It is 2050 and I'm a happy man; actually I'm a very successful man. There are 9 billion people on our planet today and we have a 'happiness index' – a measure of performance which is used globally instead of GDP. The important thing is that over 20 years the happiness index has been climbing steadily. Nobody today lives on 2 dollars per day as 40 years ago, we don't have this category. We don't have G5 or G8 either, it has been overtaken, is outdated. We evolved over the last 30 years. The USA is no longer the major power of the world, China is; and in Europe – Turkey is the biggest economic power. It is these countries that have created new ways of doing things – low costs, low resource; sustainable ways of doing things. The world economy changed. We have learned to share our ideas and to share our world. I am very happy about that.

## Appendix IV Paul Hissel's Innovation Chain Master

[http://thefutureofinnovation.org/contributions/view/603/the\\_future\\_of\\_innovation\\_is\\_for\\_the\\_innovation\\_chain\\_master](http://thefutureofinnovation.org/contributions/view/603/the_future_of_innovation_is_for_the_innovation_chain_master)

### The Future Of Innovation Is For The Innovation Chain Master

**Paul Hissel**



Innovation in the future will be far more global and based on multi-party collaboration than today. The main benefits are clear: providing more flexibility to build, adapt and optimize the Innovation Chain together with other (unique or very capable) parties (the virtual Innovation Chain) instead of having all competences in house (the integrated Innovation Chain) and sustaining them on world class level.

The concept of Open Innovation points in that direction, but is insufficient as the integrating and leading element is missing. Somehow bringing innovation partners together does not automatically result in effective and efficient innovation: on the contrary! Future Innovation Chains will have to be linked together incl. the (strategic) alignment of the entities in the chain, similar as in a full Value Chain.

How promising virtual Innovation Chains may look, there are some serious flaws that have to be taken into account. Additional (and certainly not trivial) efforts are required for:

Building the innovation chain (scouting, selecting and involving the innovation partners), linking the entities and sustaining the chain;

Managing of the processes in the innovation chain: these will run less smooth and efficient compared to integrated chains because of differences in: processes, terminology, culture, systems, and the element of mutual trust.

Management of the alignment and stability of the chain as all entities will have their own agenda and might participate on a quite opportunistic basis. Besides negotiation will be required for coordination and management of the chain instead of hierarchical control.

Taking the lead to boost the output of the chain: the 1+1=3 effect. Virtual chains in itself lack clear internal coordination and so an entity that takes the lead is necessary. It is obvious that this entity and its role will have to be accepted by all parties involved.

Rewarding value appropriation. In integrated Innovation Chains all entities contribute in a coordinated way to the total innovation output. Value appropriation (sharing) over the contributing entities is no issue because the value is consolidated at the integrated chain level. But when the jointly created value including IP will have to be shared over the virtual chain, collaboration can get tougher! Concepts for rewarding value appropriation will be needed, taking into account: the value and uniqueness of the contributions, dependencies and independencies (substitutability of entities), level of risk taking.

Virtual Innovation Chains will work more randomly: sometimes it will work and sometimes it will not meet up with expectations for the total chain or for any of the entities.

In the future there will be a clear need and opportunity for Innovation Chain Masters, consciously taking care of above points. The Future of Innovation is for the Innovation Chain Masters.

Without this role virtual Innovation Chains might be less successful in the end as fully coordinated integrated chains. In this respect it is interesting to observe the Toyota model and the relation with its suppliers: a virtual implementation of a fully integrated and tuned Innovation Chain (under undisputable leadership of Toyota).

Article © 2009 Mr Paul Hissel. All rights reserved.

## Appendix VI Robert Dew's Professional Innovator

[http://thefutureofinnovation.org/contributions/view/619/the\\_future\\_of\\_innovation\\_beyond\\_traditional\\_boundaries](http://thefutureofinnovation.org/contributions/view/619/the_future_of_innovation_beyond_traditional_boundaries)

### The Future Of Innovation ... Beyond Traditional Boundaries



#### Dr Rob Dew

In the future companies will not remain the main unit of innovation in our society. Increasingly nation states in the third world will innovate to resolve problems like poverty, infrastructure, famine and civil unrest. In the first world nation states will innovate to reduce healthcare costs, improve public service sector effectiveness and reduce governance complexity. More supra-national groups like the EU may also emerge.

At the same time lower business transaction costs from new technologies and a trend towards contracted, temporary labour arrangements will accelerate individual level innovation. The nature of work will change – earning money from several different sources will replace a job with a single firm. New business models, a new employer-employee psychological contract (more like a client-supplier relationship) and increased boundary spanning behaviour will result. This will make firms more transient and act as a virtuous cycle to further increase individual innovation. New careers like the following may emerge:

Professional innovators (counterparts to accountants, engineers and lawyers);

Cognitive coaches (mental fitness trainers offering therapy and technology);

Network entrepreneurs (profiteers who connect previously separate groups);

Consumer assistants (who guide consumers through market 'confusopolies')

The economic changes above will cause and be caused by education designed to develop innovation capability. First world education systems will deemphasize left brain development and linear thinking to enhance lateral thinking skills and creativity. Education will also fragment more, with many just-in-time type courses emerging to displace undergraduate and post graduate degrees as the premier method of formal knowledge transfer.

The system changes listed above will both cause and be caused by key innovations:

Innovations in pure maths will improve our understanding of networks, emergence, turbulence and dynamic evolving systems. This will result in innovations for traffic management, disease response, weather prediction and market failures.

Cross disciplinary research will become the norm. Consider how fluid dynamics might help with economics, how neural networks could be applied to creative works of music and fiction for increased commercial appeal and how clinical trial protocols could support venture capital investment decisions.

Products that combine hardware, software, chemistry and biology will enable us to augment our bodies, minds and children for improved health, sporting ability, mental capability and beauty. These products will also replace legal and illicit drugs and may be bundled with other devices. Imagine buying a video game console designed to release mild hallucinogens and stimulants for more intense game play. The business gives away the hardware and software, but charges for the pharma consumables (super Coke meets Xbox).

Communication innovations will make internet access as ubiquitous, mobile, reliable, fast and inexpensive as wearing a watch to tell the time. Users will wear technology that unobtrusively enables them to be online constantly. Interface innovations will affect in real time conversations to change experiences like work, driving and dinner.

These innovations will mean that geographic diversity will be less relevant than cultural diversity and innovation managers will need better tools for diversity management. What a time – I wouldn't be dead for quids, and if I can just hang on long enough I should be able to buy a lot of longevity from Walmart, Google or Monsanto!

Article © 2009 Dr Rob Dew. All rights reserved.

## Appendix VII Dwayne Spradlin's Citizen Innovator

[http://thefutureofinnovation.org/contributions/view/676/the\\_future\\_of\\_innovation\\_open\\_innovation\\_the\\_citizen\\_innovator](http://thefutureofinnovation.org/contributions/view/676/the_future_of_innovation_open_innovation_the_citizen_innovator)

### The Future Of Innovation ... Open Innovation & The Citizen Innovator

**Mr Dwayne Spradlin**



I would like to briefly address two related topics: open innovation and the Citizen Innovator.

The most successful organizations in the 21st Century will be those that realize that real sustainable advantage is not a product of the inventions themselves, it's in building organizations that know how to repeatedly harness innovation inside and outside their organizations, and on a global scale, regardless of its source. We call the practice of systematically supplementing internal innovation efforts with access to the world's vast reservoirs of creative, intellectual, and inventive talent "Open Innovation".

Requiring organizations to think very differently about the innovation process, internal rewards systems, organizational structures, and intellectual property, this approach represents a step change improvement over the hundred year old innovation status quo of today.

For businesses burdened by increasingly costly innovation efforts and high failure rates, this means new ideas, faster solutions, and cost efficiencies. For foundations and government, channeling the world's innovation capacity towards important problems means an unprecedented opportunity to impact public good.

Organizations with the courage and discipline to embrace this change will fundamentally change the effectiveness and efficiency of their innovation efforts, some becoming the new innovation leaders in their spaces. Much more than an extension to the "business as usual" innovation approaches of today, it is in fact a fundamental rethinking of innovation and is vital to all our innovation futures.

This brings me to a term I used earlier this year: the Citizen Innovator. Highly creative and inventive individuals have had monumental impacts throughout history, the likes of Leonardo da Vinci, Benjamin Franklin, and Sir Isaac Newton. Often considered giants in their day, these are the archetypal Citizen Innovators, often the beneficiaries of great patronage, with resources and substantial freedom to roam in creative circles, these individuals have inspired many ... they were also few in number.

With the convergence of technology (internet, social networking, communications), increases in standards of living and education, and a more global awareness than at any time in history, I believe there are now legions of Citizen Innovators around the world ready, willing, and able to invest their relevant experience, knowledge, creative talents and hunger for problem solving toward the important challenges of our time. Some will engage simply to make a difference, others for financial gains. But make no mistake, they are changing the way we innovate, from corporate research and product development to improving the human condition and reinventing government. This is an empowerment movement and represents the most democratic of ideas: that we as individuals have a necessary and vital role to play in shaping our world – and in some cases an obligation.

In closing, Open Innovation and Citizen Innovators are principal actors in the structural evolution of innovation as we know it from the status quo of the past to an open, global, and vibrant innovation platform for the future. Whether it's the need to get new products to market sooner, improve medical treatments, or address climate change, this approach changes everything.

Article © 2009 Mr Dwayne Spradlin. All rights reserved.