

The Future of Innovation

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GOWER



Foreword

Our Debt to Innovation: Past, Present and Future

Gary Hamel

Inspired souls from around the world mapping the future of innovation – that's the idea behind this book, and I love it. It's hard to imagine a topic that could be more important for human beings, after all ...

We Owe Our Existence to Innovation

Our species exists thanks to four billion years of genetic innovation. Since time immemorial life has been experimenting with new genetic combinations, through sexual recombination and random mutations. As human beings, we are the genetic elite, the sentient, contemplating and innovating sum of countless genetic accidents and transcription errors. Thank God for screw-ups, for if life had adhered strictly to six sigma rules, we'd all still be slime. Whatever the future holds for bipeds like us, we can be sure that happy accidents will always be essential to breakthrough innovation.

We Owe Our Prosperity to Innovation

Most of us do more than subsist. From the vantage point of our ancestors, we live lives of all most unimaginable ease. Here again we have innovation to thank. A thousand years of *social innovation* has given much of humanity the right to self-determination. We are no longer vassals and conscripts. We live in democratic societies where we are free to think and do as we wish – essential prerequisites for innovation. Repeated bouts of *institutional innovation* – including the invention of central banks, stock markets, company law and patent protection – also paved the way for economic progress, by facilitating trade, capital formation and entrepreneurship. Humanity's giant leap into the modern age was powered by a hundred years of unprecedented *technological innovation*. The steam engine, the electric motor, the automobile, the airplane, the telephone, fertiliser, antibiotics, plastics, the integrated circuit – each breakthrough extended human capabilities and spawned millions of subsidiary inventions. And finally, it was *management innovation* – the invention of new ways of mobilising human beings to productive ends – that turned all this potentiality into widespread prosperity. If you have a car or two in the garage, a digital device in every pocket or a refrigerator full of food grown by someone else, you owe an enormous debt of gratitude to those early management pioneers who mastered the challenges of efficiency and scale.

We Owe Our Happiness to Innovation

As human beings, we are the only organisms that create for the sheer stupid pleasure of doing so. Whether it's laying out a garden, composing a new tune on the piano, writing a bit of poetry, manipulating a digital photo, redecorating a room or inventing a new chilli recipe – we are happiest when we are creating. Yes, we innovate to solve problems, to make money and to get ahead. But for most of us, innovation is not a means, it is an end. To innovate, we don't need a commercial or practical justification. We innovate because we were born to – we have no choice. From Mihalyi Csikszentmihalyi to Tal Ben-Shahar, the experts agree: human beings are happiest when they're exercising their ingenuity. Sadly, throughout history millions of human beings have had little opportunity to exercise their creative gifts – because they lived in an age when the tools of creativity were prohibitively expensive, because they were geographically isolated and lacked contact with other innovators, or because they worked in organisations where they were viewed as semi-programmable robots. Our generation, by contrast, is blessed. We have access to dirt cheap tools (a \$100 video editing program, for example); we can connect with our creative fellows around the world and are able to share our innovations with any and all (thanks to the Web). Moreover, millions of us now work in organisations that are truly hungry for new ideas. Forget the Renaissance, the Enlightenment and the Industrial Revolution – ours is the golden age of innovation, and we should take delight in that fact.

We Owe Our Future to Innovation

It's lucky for us that the fires of innovation are burning more brightly than ever. Today, human beings confront a daunting array of problems that demand radical new solutions. Climate change, global pandemics, failed states, narco crime, terrorism, nuclear proliferation, environmental degradation – meeting these challenges will require us to invent entirely new innovation *systems*. We need to learn how to solve problems that are multi-dimensional and multi-jurisdictional. In the early years of the 20th century, Thomas Edison and General Electric invented the modern R&D lab, and with it a set of much-imitated protocols that would help to generate a century's worth of technological progress. Today, humanity's most pressing problems aren't merely technological; they're social, cultural, political – and transnational. That's why, like Edison, we must reinvent innovation. What's needed are new meta-innovations (like idea markets, crowdsourcing and folksonomies) that will facilitate innovation across disciplines, borders, institutions and ideologies. This is the only way we'll solve the make-or-break challenges now facing our species. Our future, no less than our past, depends on innovation.

Hence this book. Each one of us has a critical stake in 'the future of innovation' – and each one of us can help to invent it.

Editor's Foreword

The Story Behind the Story of the Future of Innovation



Dear Reader

We are inviting you to join us on a most amazing journey – a journey to discover ‘the Future of Innovation’. For this journey we offer you a compass – the book; a map – the website (www.thefutureofinnovation.org); and some companions – the community.

The idea for this expedition came quite unexpectedly and serendipitously – as much innovation does – and has been most captivating and engaging from the start. To pre-empt any questions you may want to ask about the beginnings of our journey, we decided to tell our story now. We would like to share some of the stages we went through, and outline some of the insights we gained during this experience – the experience of taking a peek into the future of innovation.

1st Stage: The Beginning

Let us hear Anna’s story of the beginning: ‘On an eve of the summer holiday, rather in a rush, I was writing a conference report on International Society for Professional Innovation Management or ISPIM (www.ispim.org) 2008 for the Russian journal *Innovations*. As part of it, I decided to interview two of that year’s keynote speakers, John Bessant and Bettina von Stamm. Without any hidden agenda and inspired by the title for ISPIM 2009, “The Future of Innovation”, I addressed one question to both of them: “What are your thoughts on the future of innovation?”

‘To my great surprise, John and Bettina each described innovation rather differently. I wondered, how others would see it? It seemed intriguing, curious, fascinating and delightful to explore what leading thinkers from business, government, consulting and academia might consider the future of innovation to be. What would they consider the role of innovation to be? What would they define as its essence, chief constituent, primary element, vital part? I was intrigued as to what would come straight from their hearts when asked about the future of innovation. What would they put on just one page? In other words, I wanted to explore the global thinking on the future of innovation!’

This is where Bettina picks up the story. ‘I was delighted to be contacted by Anna whom I had met at the ISPIM conference, and who had asked me to share my thoughts on the future of innovation. We had a great meeting and when I thought we had discussed all we had set out to talk about Anna introduced the idea of a book on the future of innovation. (Will you be surprised to hear that it was in a café? Best place for cooking up great ideas.) Having unknowingly been one

of the triggers of the amazing venture, I was immediately taken by the idea of inviting people from around the world to share their thoughts on the subject. Hence it took little convincing, and a decision to pursue this joint project was made on the spot.'

So the seed was planted at the ISPIM conference in June 2008, showing its first shoots at our meeting in September, and began vigorous growth when we starting inviting contributions mid November. Now you see before you the beautifully grown, richly flowering results.

Little did we think at the time that the book would be an innovation in itself! Think about the following:

- For the first time in the development of innovation management large parts of its global community were asked one and the same question; a deceptively simple question that nevertheless involved a significant challenge for each contributor because their answer was limited to only 500 words.
- The invitation went out to a community of leading thinkers of diverse backgrounds: business, government, consulting and academia.
- As far as we are aware, this book creates a unique opportunity for readers to communicate directly with the authors: for each and every contributor a photo and contact details are provided in addition to their statement on the future of innovation.
- The book is not the destination in itself but rather a catalyst for further discussion, exchange, analysis and research – as well as offering insights and understanding on the future of innovation, gathered from people from around the globe.
- The project represents a real opportunity to create a road map for the future of innovation; a map platform for networking and collaborating on the global scale.

So, the book is an innovation in itself, and its journey shares many aspects with other innovations that, we are quite sure, many of you are only too familiar with: innovation starts with an idea; it needs diverse skills; it has to draw on a large network to make it happen; and it needs the critical help of a generous sponsor.

When we started uncertainty was rather high as we did not know what response we would get: we did not know whether we could attract contributions, we did not know whether a publisher would be interested – and we still do not know whether it will be a success in terms of units sold.

Soon after we started our initiative **Chin Hoon Lau**, State Assemblyman for Pemanis in Malaysia, emailed us with the following, 'Thank you very much for your kindness and invitation to contribute. This wonderful effort is like a giant fire cracker in the presently cloudy global financial sky. Yes I would like to send you my thought after finish re-visiting and reading my heart.' **Mariana Ferrari**, CEO of PROCESOi in Spain, wished us a 'great success with such an interesting initiative. Really, it's one of the best innovation initiatives I've heard so far ... Congratulations!' **Dr Mohamed Mamdouh Awny**, Head of the Technology Management Department at Arabian Gulf University in the Kingdom of Bahrain, thanked us for our 'invitation to contribute to brainstorm on the future of innovation. Your initiative is an innovation in itself.'

We were amazed, touched and completely encouraged in our adventure, there was no holding us back now!

Speaking of selling, in some ways (and to some audiences) selling it was easy, with other audiences we struggled a little more. Well, thinking about it, that's to be expected with something

like this which has never been done before! And, like all good innovations, it inspired many of those who came in touch with it, engaged them and made them part of the journey.

The first insight for you, dear reader, from our experience into the future of innovation is to keep an 'open heart'. The concept of 'open innovation', based on the understanding that innovation can come from anyone, anywhere, is not new, but it is nice that we received so much supporting evidence for it. We can confidently state: 'You never know when and where innovation might come from.' So, do not keep your ideas hidden inside you; no one will ever know about them unless you talk about them, as you will never know the value of your thoughts unless you share them. The innovation community cannot but open up to the concept of open innovation, an open spirit and an open heart, if it is to survive. Declare your ideas, and find your peers. Open up your heart and mind, and take delight, even if it is not you but someone else who takes your insights forward.

2nd Stage: Early Progress

We were aware of the tight schedule we had imposed on what was a global project. We were in doubt, a bit scared, but only initially; the speed and enthusiasm of the early responders justified our original assumptions.

Our journey into the future of innovation has attracted more than 350 contributions from over 50 countries. Who are they, and where exactly do they come from? Here we can name but a few – in the alphabetic order – to give you a flavour:

Companies: Aerospace, Fujifilm, IBM, InnoCentive, Jaguar and Land Rover, Kodak, Kraft Foods, Nokia, Nortel, Pfizer, Philips, Siemens, Smith and Nephew, Virgin Atlantic Airways, Unilever.

Consultancies: Atos, I-Nova, IDEO, Innovaro, McKinsey, PricewaterhouseCoopers, WhatIf.

Well-known authors: B. Joseph Pine II, Joe Tidd, John Bessant, JT Lawrence, Rob Atkinson, Praveen Gupta.

Journal editors from: Creativity and Innovation Management, Manufacturing Technology Management, Product Innovation Management, R&D Management.

Representatives of foundations: Information Technology and Innovation Foundation; Grundfos Foundation, Technology Partners Foundation, The Arab Science and Technology Foundation, South African Creativity Foundation.

Public sector representatives: Danish Technological Institute, Government of India, Max Planck Institute of Economics, NHS Institute for Innovation and Improvement, The R&D Society of Iranian Industries and Mines.

Technical universities: Delft University of Technology, Karlsruhe Institute of Technology, Lappeenranta University of Technology, Tshwane University of Technology.

From around the world: Australia, Austria, Belgium, Barbados, Bahrain, Brazil, Canada, Chile, China, Croatia, Cyprus, Denmark, Egypt, Estonia, Finland, France, Germany, Hong Kong, Hungary, Italy, India, Iran, Israel, Ireland, Japan, Jordan, Kazakhstan, Korea, Latvia, Lithuania, Luxembourg, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Nigeria, Norway, Occupied Palestinian Territories, Pakistan, Poland, Portugal, Philippines, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Turkey, UK, USA, Ukraine, Venezuela.

And this truly is just a small fraction of the background information we could give you. If you'd like to know more there is always the website!

Within the extraordinarily short time span of only two months we not only managed to invite a large yet select community to contribute, we also managed to convert most promises into deliveries! But, as pointed out before, in so many cases it was a rather easy sell: **Mónica Moso**, responsible for the programme of Networks and Alliances in the Basque Innovation Agency in Spain, shared with us: 'Well, I really wish to read this book as it is a great idea. I think that we need to dream collectively about the future, and this is a fantastic way to do it.' **Dianka Zuiderwijk**, Oil and Gas Business Assurance Manager at Lloyd's Register in the Netherlands, sent to us this comment 'Thank you for the opportunity to share my passion on this subject. I look forward to challenging my views with colleagues around the globe.' **Francisco Pinheiro**, Global Innovation Director at Atos Origin International in Spain, commented on:

this wonderful 'journey' to give so many people the opportunity to be on board and contribute to the transformation of the present and the future. I would like to share the following statement which I like very much (and which can be applied to innovation and collaboration, and of course to the Future of Innovation journey): 'If you go alone, you go faster. If you go together, you go further'.

Venky Rao, Senior Vice President and Head of Innovation and Leadership Enablement at Satyam in India, concluded, 'Certainly this book will be influential in shaping the future through thought leadership from so many contributors. It is indeed a pleasure to contribute to such an exciting and important book. I wish to congratulate you on taking up such initiative and thank you for giving me an opportunity to share my thoughts.'

Dear reader, what you might want to take away as a lesson from this second stage is, don't shy away from ambitious targets, unless you reach for the moon you will never catch the stars. And don't let other people tell you 'it can't be done'. Use such comments to fuel your passion and fire, and show them that, indeed, it *can* be done.

3rd Stage: Gathering Momentum

The book in itself is only a start; it is rather static, while the future is always dynamic. We consider this book to be a root, giving life to a growing tree.

As a little encouragement and persuasion to continue and invite others to the journey, here some voices of those who have commented on their experience: **Ray Buschmann**, Principal and Owner of Solving the Impossible Pty Ltd, Australia, comments: 'You certainly had to be very disciplined to fit into the 500 words quota but I believe that is one of the brilliant concepts you have come up with: contributors are forced to be crisp and controversial.' **Miloš Ebner**, Director of R&D at Trimo d.d. in Slovenia, echoes him: 'Usually, because of the lack of time, I do not participate in such initiatives, but your approach was so different and innovative that you somehow easily convinced me.' **Jennifer Ann Cordon**, CEO of Cool Breeze Marketing, LLC in the USA, remarks 'I've been pondering, tilling my thought soil, planting little seeds. What a wonderful project!' **Debra M. Amidon**, Founder and CEO of Entovation International Ltd. in the USA, adds 'Your instructions to write something straight from the heart created something quite novel and relevant. You two have started something ... wonderful!' **Mark McBride**, Vice President of UTEK Corporation in the UK, concludes, 'Very frustrating that it was only 500 words as there is much background (justification maybe) that I would have liked to have added, but I guess that it will be one of the strengths of the book as it will deal in conclusions rather than waffle!'

Our choice of organising the contributions has invariably had an impact on which ones were finally selected for the book and which ones we had to leave for people to discover and enjoy on the website, much to our regret. Of course, *all* of the contributions can be found on the website.

The third insight into the future of innovation from our experience, for you, dear reader, is the belief that any good idea will find its recipient. We have already managed to persuade you to open up and cooperate globally; now we would like to inspire you to have the trust and confidence to continue that journey.

4th Stage: Full Steam Ahead

When we started reading through the contributions we were awed. Awed by the thoughtfulness and honesty, and the level and depth of insights people shared, at their passion and desire to contribute, to this book, towards the future, towards change. Not just any change but change for the better, change towards a better future. It was also the belief that creating that better future is in our hands that warmed our hearts and gave us hope. Particularly in times where every news bulletin brings announcements of more redundancies, a default reaction to economic crisis, and, in our view, not a particularly effective one as it demotivates even those left behind, and fundamentally disables the ability to innovate.

There would have been many ways to structure the book and to organise a flow. When we received the over 350 contributions, we were delighted and ... overwhelmed. Having had a first glance through them, the challenge was to make sense of the complicated and intriguing jigsaw puzzle that they represented.

We realised that the contributions were effectively three-dimensional scenes, rather those pictures full of apparently random dots, 'autostereograms'. Autostereograms are 3D images that are initially invisible to the eye before the hidden picture starts to emerge.

Once we had decoded the overall shape of the contributions, we decided to use them to tell a story, to take you on a journey, one destined to illustrate the overwhelming benefits, power and indeed beauty of the future of innovation.

We will share a story of the need for innovation, and about what drives such need. We will give voice to those who argue that the future of innovation will have to be different from the past, and those who warn of its dark side – not least because we, as humanity, seem to have reached our eleventh hour, and the way we have innovated has played its part in getting us there. This means that governments and education have important roles to play. Whichever way we look at it, in the end it is all about people, and it is about mindsets. If we can create the right conditions for people to get together, inviting innovation from everyone everywhere, and develop the ability to communicate our ideas in ways that others can understand, ideas that are based on real needs, creating real value, then we can truly come up with solutions that are all that we ever wanted. We will share stories from particular industries, and perspectives from particular countries or geographies.

Our contributors share our understanding of the value of this book:

- *'The result will be an important summary about the world's thoughts about the future of innovation and become a must-have book for everyone in the field of innovation.'* **Michael Dell**, CEO of RATIO Strategy and Innovation Consulting gmbh, Austria.

- *'The book is a really nice idea. Bringing together a snapshot of different viewpoints will be great to invigorate the debate on innovation.'* **Claudia Eckert**, Senior Lecturer of Design Group at The Open University, UK.
- *'The book will be useful for innovations in the future, including thinking, changes and activities needed.'* **Kari Sipilä**, Managing Director of Future Innovations (Management Consulting), Finland.
- *'I can't wait to see the result. With so much talent condensed, the outcome is going to be really something amazingly rich and diverse.'* **Ignacio Villoch**, Marketing and Communication Manager at BBVA Innovation Centre, Spain.

So our fourth takeaway for you is: cast your net wide, and trust that something will emerge. Don't try to force things, put your wish out to the universe – or to a group of wonderful people – and have the patience to watch a pattern emerge. Read up on complexity theory, it is a great guide to innovation!

The 5th Stage: Reaching Audiences

Dear reader, this book has something for each of you: for academics the book will provide insights into where to concentrate future research agendas; for people from industry it provides starting points for their innovations and models of innovation; for consultancies it describes the fields in which to develop expertise; for the public sector it raises awareness of cutting-edge advancements and thinking that might be important for the development of policies, infrastructure and support.

Read this book to find consolation, read this book to find inspiration and read this book to find out how you can embrace innovation to help shape a wonderful, exciting and worthwhile future.

This book is the result of our passion for innovation and has reassured us that there is a future for innovation. This book has also made us aware of how much there is to be done to create a desirable future. The contributions have helped us understand that in order to make the future of innovation bright and shiny, green and gold, human and social, proactive and supreme, we have to ensure that we draw on thinking from around the globe, and seek to achieve results that reach across the globe. This book is a manifestation of hope as well as a warning. You do not need any further evidence; this book is all you need to realise that the time for innovation is now, and that we need innovation in innovation. We need a new understanding of innovation management that draws on the concerns, insights, dreams, visions and hopes of the global innovation community.

Having thus set the scene, without further ado, let us now commence to convince even the last doubting Thomas that innovation is no longer a nicety, but a necessity.

Let us pick up the thread, and let the play begin ...

