

BETTER BY DESIGN CEO SUMMIT 2008



Some of the worlds leading thinkers and practitioners in Sustainability and Design came to New Zealand for the world-class Better By Design CEO Summit in early September 2008 including Michael Braungart, Ray Anderson, Janine Benyus, Alex Steffen and Lee Weinstein.

Intersect, with the help of Interface NZ and Better By Design made sure that 5 young people made it there too. Here are their write ups on each of the speakers as well as their personal reflections on the event.

5 YOUNG PEOPLE.
FRESH PERSPECTIVES



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PROF MICHAEL BRAUNGART

By Damon Stenhouse-White

“WE DON'T NEED TO DO THINGS DIFFERENTLY, WE NEED TO DO DIFFERENT THINGS”

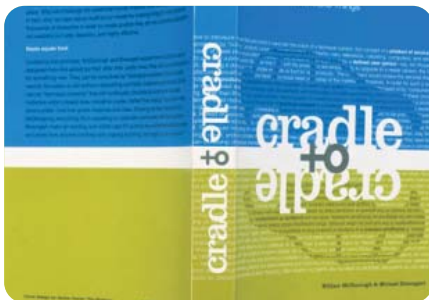
As the first key note speaker to address the CEO summit, Prof Dr Michael Braungart addressed an electrified gallery representing an impressively large proportion of influential New Zealand business people. Prof Michael Braungart is the co-author of Cradle to Cradle: Remaking the Way we Make Things. Which has had worldwide acclaim since it was published in 2002.

Prof Braungart appeared as a synergy of science genius, passion and benevolence.

TOXICITY

He led in with alarming and powerful insights about the toxicity of our living environments. He demonstrated a chemical analysis (chromatogram) of gasses coming off of a Mattel children's toy, often to be sucked and chewed, there are over thirty different chemicals on the graph appropriately represented by sharp spikes, effectively chemical weapons Prof Braungart jests. Other plastic toys such as Lego and Fimo express no harmful gasses and Prof Braungart pointed the finger at Mattel for choosing sick design.

Prof Braungart digs deeper into this ethical void with the even more malevolent proposition that companies are addressing "green" issues by replacing one toxic chemical with another to label their products with "no" this and "free" of that. Asbestos free brake pads were recently marketed acrimoniously



by Volkswagen even though they now contain the even more harmful chemical antimony - but who knows what antimony is? We would be much better informed knowing what is in products rather than what is not.

Biological and Technical Cycles

The theories of the “Cradle to Cradle” philosophy are simple and elegant. Prof Braungart explains the framework which consists of two material cycles with in which materials are nutrients. These are the biological cycle (bio-sphere) and the technological cycle (techno-sphere). He demonstrates that as long as we feed the components and materials that we use back into the appropriate cycle without cross contamination we are free to carry on improving our lives by design whilst turning our impact on planet earth into a good thing.

BIO-SPHERE

To good to be true? Apparently not! He sights examples in nature such as deciduous trees creating food out of inefficient mass shedding of leaves, the inefficiency is translated to a “celebration of abundance.” This of course occurs in the bio-sphere which we should be feeding anything which when consumed will degrade beneficially into the environment by eating, burning or composting. This starts with the need to be designed properly from the beginning. Prof Baungart went on to present some impressive present day examples such as the textile brands Climatex® and Lifecycle™. Off cuts and returned product are effectively composed to grow more resource, these are designed with a careful choice of synthetic dyes and fabrication techniques to make this not only possible but profitable.



TECHNO-SPHERE

Prof Braungart maintains that it is not possible for us to make complex products like electronics without toxic and rare substances so this is where the technological cycle comes in. We need to design our components to be completely disassembled and separated. We already design for manufacture, design for disassembly is simply the next step forward. For technical nutrients to stay within the techno-sphere the chosen materials must stay within products and not leach into the environment to be digested by animals, plants and humans. Once again examples were plenty such as the Mira office chair, shown disassembled, with more parts than I could count, it can be disassembled in thirty two seconds, perhaps there is viable business in chop shops after all. Technical materials are often rare and expensive, it goes without saying that businesses can benefit from recovery.

With companies effectively benefiting from the good use of returned materials the whole product system shifts to a paradigm where people buy the use of a product until its expiry date. For example the Model U Ford is a concept where you buy the car with maintenance and insurance included. After use Ford will buy back and disassemble.

IMMEDIATE POSSIBILITIES

The Cradle to Cradle framework is already being successfully implemented by many companies internationally with the Netherlands leading the way. The Dutch Government has jumped on board and declared commitment to Cradle to Cradle in their policy decisions and choice of suppliers.

As Prof Braungart delivered his presentation, a strong contrast began to emerge between the “Cradle to Cradle” framework and the more conventional environmental strategy of reduction and sustainability. Prof Braungart dives head first into this controversial arena by aptly pointing out that reduction, avoidance, minimisation and prevention just sound like bad business. Lets increase, support and optimise our business systems. Lets “make a big footprint that becomes a wetland” Prof Braungart suggests. An emotional comparison is

drawn between benefit driven business and guilt management, and of course the catchy distinction between doing good, not doing less bad.

But what about all these fancy new materials? Prof Braungart assured us that the current materials technology is at least ten years ahead of the design solutions being marketed to meet new human desires. We need to celebrate the human genius with some truly smart design – these needs are not going away.

Prof Michael Braungart delivers Cradle to Cradle framework in a way that makes sense on every level of business and governmental design, and that is because it is so simple. “Just ask the question” he says, does it belong in the bio-sphere or the technosphere. There is no concept of waste where everything is a nutrient for our products or for the environment of which we are part of. It is not only a simple strategy but one with immediate possibilities.

The only thing that is lost with a successful Cradle to Cradle policy is the dilemma of whether or not to design more “stuff”, followed by guilt of doing so, because we will. Cradle to Cradle allows us to make the world better by design not premised upon reduction. The survival of the human race and the earth upon which we live depends on truly creative thinking. Cradle to Cradle is a manifesto which should be mandatory reading for all New Zealand designers, manufacturers, material providers and students. We need to look at as many options as possible in a world that is inevitably changing – this is the design way.



RAY ANDERSON

By Rebecca Asquith

RAY ANDERSON IS THE FOUNDER AND CHAIRMAN OF INTERFACE, THE LARGEST COMMERCIAL MODULAR CARPET MANUFACTURER IN THE WORLD.



At the CEO Summit Mr Anderson started his talk by taking us back to a time where his business was just business as usual, make products that sell, grow the business and make money. He told us about the time his life was changed forever, when he was asked to deliver a speech to a new task force that was being put together within Interface. This task force was to frame a response to customers' who were asking questions about what Interface was doing for the environment, Interface's environmental vision.

I could hear in his voice that he was reliving that exact moment, the moment when he realised he did not have an environmental vision. I heard and felt his heart sink at that very moment. Instantly the palms of my hands started to sweat, then I realised it was not his heart I could hear or feel it was my own!

I realised at that moment I too did not have an environmental vision, a plan. I felt a black hollow void in the middle of my chest. How could this be I asked myself? How could I not have a plan? I love this amazing, beautiful, diverse land, sea and mountain landscape, the richness of life and all of the creatures that live here on this planet that



“BECAUSE UNLESS SOMEONE LEADS, NO ONE WILL”

- Ray Anderson, Interface Inc

we call home. What am I doing to protect it? I realised that I had got so caught up in designing and making things that I forgot about everything else, everything else that really matters for without fresh water, clean air and healthy food, it would be impossible for me to live let alone run a business.

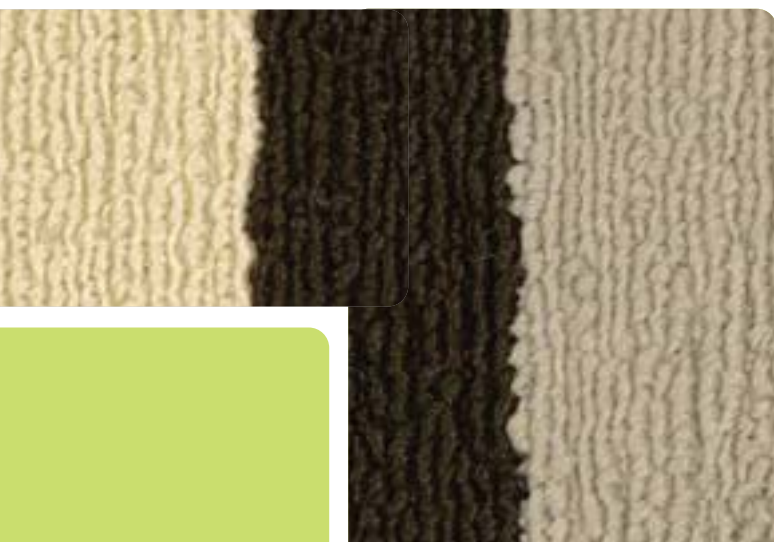
While the voice in the back of my head was questioning everything I have ever done up until this point, Mr Anderson spoke about a book that landed on his desk a week before his presentation to the new task force. This book - *The Ecology of Commerce* by Paul Hawken - was Ray's "spear in the chest". He mentions the chapter in which stopped him in his tracks, which with the title - *The Death of Birth* - would stop anyone in their tracks, anyone who was human at least. For me this 'title' did not process straight away. Not until I wrote it down in my note pad could I really see and start to feel what that meant. *The Death of Birth*, that means dead, gone, no longer here, zilch, nada, nothing! Ray spoke of animal species dying completely off, no longer here to enjoy the miracles of birth and life - extinction, the death of birth.

Now at this point I was ready to leave the life that I knew and go and live in the bush, plant trees and become one with nature, and not be a part of this poorly designed, over commercialised world that we humans have created, including myself. This would be very difficult I know, especially in a small country like New Zealand. Or maybe not, I began to wonder.

Ray went on to tell us about what changes he made in his own life and the life of his company. Creating very high sustainability goals, that for me sounded impossible to reach with such a huge company like Interface. Fourteen years exactly, to the day that Ray Anderson spoke of his environmental vision to the new task force, Ray was standing before us as the founder of one of largest carpet manufacturing companies in the world that is well on its way up the "sustainability mountain" towards zero waste by 2020.

Mr Anderson made me realize what a difference one person can make, that all it takes is one person to make a decision and have the will power to make positive and beneficial steps, just one person. This gave me hope. I felt that if Mr Anderson could completely change the direction of his massive carpet manufacturing business into a positive, sustainable business, then there was hope for me with my small furniture practice.

Interface has also proven that it is possible to win in the market place, without plundering the planet. It makes economic sense to become a clean company; it becomes more profitable. This was very encouraging to hear, especially for all the business owners in the room.

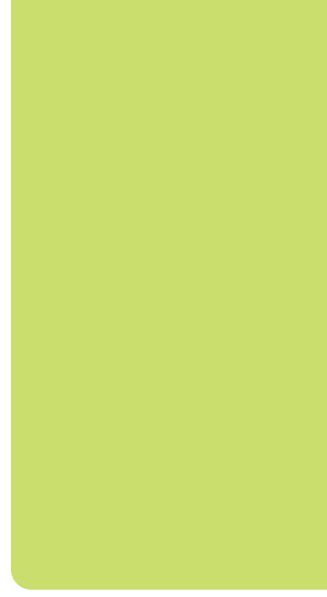


THE MORNING AFTER THE SUMMIT I AWOKE WITH NEW EYES. THE EMPTY BLACK VOID THAT WAS IN MY CHEST YESTERDAY WAS FULL OF SOMETHING ELSE, SOMETHING NEW, SOMETHING EXCITING, SOMETHING POSITIVE AND GOOD.

I felt that that day was the beginning of a new direction for me. I believe it is my responsibility as a furniture designer to make good products for people that are conducive to life on this planet, without plundering the earth and sacrificing the lives of future generations of all species for all time (to borrow a phrase). This is a massive, difficult task I have in front of me, but I believe that I must take the positive steps necessary towards a sustainable business and sustainable life.

With the road not so clearly marked ahead, I believe that collaboration within fields and equally important is the collaboration across disciplines, will be a key component in moving forward quickly with a beneficial footprint. I am hoping for the sake of all that share this beautiful place with me and for all who are yet to be, that everyone will take the positive, beneficial steps necessary to move themselves and help lead the company in which they work for, forward into the next revolution - "The Green Revolution".

- Rebecca Asquith



BIOMIMICRY **JANINE BENYUS**

By A. İdil Gaziulusoy

ONE OF THE MOST INSPIRING PRESENTATIONS AT THE CEO SUMMIT CAME FROM JANINE BENYUS, AUTHOR OF CRITICALLY ACCLAIMED BOOK 'BIOMIMICRY' AND INNOVATION CONSULTANT.

Janine enthusiastically spoke of her method of approaching innovation problems; a method now widely known in sustainable design circles as biomimicry. In a one hour speech, Janine took us on an odyssey of self-discovery through (re)discovery of nature for design concepts. Her main point was that organisms through millions of years of evolution and co-evolution have developed various methods to adapt to their environment and that these strategies may be emulated by humans to produce sustainable innovations.

Some of nature's methods Janine highlighted have been the focus of attention for curious minds for hundreds of years, often stimulated by the attempt to resolve problems their curious minds have created. Janine and her team systematised this learn-interpret-implement cycle through creative and constructive interdisciplinary interaction between biologists and designers.





BIOMIMICRY - NATURE AS MODEL, MEASURE AND MENTOR

Among the inspirational examples of biomimicry Janine showed us were:

- obtaining water from thin air through fog basking buildings which was inspired from Numibian beetle;
- recovering 90% of the solid from food processing waste through baleen filters inspired from baleen whales;
- bio-mining (i.e. harvesting metals without mining) via micro organisms;
- splitting water like a leaf to produce hydrogen fuel; and
- building material from CO2 inspired by mollusks.

These innovations are the result of visionary minds and an unusual collaboration of biologists and inventors. While I do respect the genius behind all of them, I feel mimicking nature does not necessarily equate to sustainable design. The answer to a low friction surface might be found in nature with less health hazards than Teflon. Yet, with a simple analogy well suiting to the subject, if we humans mimic viruses, which are “nature” as well, then what happens? Viruses are known to kill their host organisms and transform into a crystalline form until another host is found.

I personally don't think humans have a similar ability to survive outside of our host and float freely in space until we reach another Earth-like planet. Here, Janine's final message, “love your place” provides an interesting perspective - what we value becomes

critically important. If we are to be inspired by nature for our innovations; what selection criteria should be applied to innovative ideas in order to make sure we don't remain as viruses? I suspect Janine's experience as a biologist would lead to the conclusion that problems ought to be approached at a systemic level and nothing should be studied in isolation; her interdisciplinary experiences would likely suggest something like: “Cave ab homine unius libri*, İdil. There're a lot of good models. Go, search more, criticise more, learn how to separate butter from milk and integrate all these good ideas into your own cake that you'll bake.”

It has been a privilege to listen to this extraordinary woman after several years of being exposed to her way of thinking through my research and career. I do believe her ideas along with other leading design thinkers contribute a lot to the way we see and more importantly feel about things along the path towards a design practice which is environment and society sensitive.

- A. İdil Gaziulusoy

**something like “beware the man of one book”*



LEE WEINSTEIN

By Robert Cardwell



IT IS POSSIBLE TO EXERCISE CORPORATE RESPONSIBILITY AND RUN A COMPETITIVE BUSINESS. IN FACT, IT IS POSSIBLE TO HOLD TRUE TO ONE'S IDEALS AND VALUES AND RUN A COMPETITIVE BUSINESS.



Consumers are capable of driving positive change. Lee Weinstein's speech encouraged me to believe these things are true.

Nike has more influence than just on the shoes people wear. In fact, they have a much larger field of influence. Today, Nike is aware of this, however they haven't always been willing to take responsibility for it.

Nike was heavily attacked by the anti-capitalist movement; for reasons more serious than just bad public relations. Nike had to do something. They had to re-examine the principles on which they operated their business. They had to consider the far-reaching consequences of their actions – how they impacted more people than just their customers.

Nike has now made massive positive changes; changes instigated by pressure from the media and consumer bodies. I think this is an important fact for each of us to remember. Each of us can influence larger entities. We are capable of acting as agents for positive change.

Since being put under heavy scrutiny, the senior leadership in Nike have become active in corporate responsibility. A committee within the board of directors has been formed dedicated to corporate responsibility. As an outflow of this change, Nike has taken big steps in promoting the well-being of the people in the countries in which they operate.

However, Nike did not make this positive change instantly. At first they reacted defensively, but eventually realised that they needed to take a more proactive approach. Lee quotes Phil Knight (former CEO and co-founder of Nike) as confessing that he himself was the company's biggest barrier to change. The change had to begin with Nike re-examining their values and working to change them. I think the change that followed can be best summarised by the asterisk in Nike's new mission statement:

“To bring innovation & inspiration to every athlete* in the world”

*** IF YOU HAVE A BODY, YOU ARE AN ATHLETE.**

Nike's story shows us that it is possible for a large organisation to both act responsibly and maintain profitability. I would challenge anyone reading this to ask the question; “What are your values?” And, if you happen to be a business leader, “What are your company's values? Have you considered what else your company's actions may be influencing?”



MEET THE CONTRIBUTORS



IDIL GAZIULUSOY, 30, PHD IN SUSTAINABLE PRODUCT/SYSTEM DEVELOPMENT, UNIVERSITY OF AUCKLAND & FISHER & PAYKEL APPLIANCES LTD.

I started to specialise in sustainable product design during my M.Sc. degree which I successfully completed in 2003. After completion of my M.Sc. degree I proposed and lectured two courses on product sustainability in the Department of Industrial Design, Middle East Technical University, Turkey. Following a period of three years working at an environmental consultancy in addition to part-time lecturing, I decided to further my academic study by doing a PhD which brought me to New Zealand in 2006.

I am in the final phase of my PhD study which is a collaboration between the University of Auckland and Fisher & Paykel Appliances Ltd. The overall aim of my research is to develop a scenario tool for product development teams of manufacturing companies to help them in planning for system level innovation for sustainability. The select speakers of this year's summit are among those ground-breaking and inspirational few in the areas

of sustainable design and, business and sustainability, whom I've been following since the beginning of my M.Sc. degree. I believe that listening to and possibly interacting with them would be a great privilege and opportunity in harvesting their knowledge and experience in sustainable product/system development, thereby incorporate the learning into my thesis and my professional life both of which are devoted to positively influence the society in the transition towards sustainability.



REBECCA ASQUITH, FURNITURE & LIGHTING DESIGNER, UNLESS, WELLINGTON

When designing furniture and lighting objects I am constantly aware of the effects that my decisions have on the environment. I believe I have a huge responsibility to ensure that the objects I make will not harm the planet.

This is extremely challenging, but I believe it can be achieved through knowledge, understanding, innovation, commitment and the willingness to make change.

Noticing a gap and lack of responsible furniture outlets in New Zealand, I started, with my partner, an outlet for New Zealand designers whose work is linked by a concern for environmental issues. This progression from designer to also include retail has been a huge learning curve and a great success. The business is called 'Unless - Sustainable NZ Design' (www.unless.co.nz) and sustainability is at the forefront of my thinking, my design practice and the Unless brand. I have been in direct contact with customers which has been an enormous asset to my own furniture design practice. Also the

opportunities that have arisen from the interaction I have had with other NZ designers has been of great benefit. Unless is a member of the Sustainable Business network.

To attend this Summit would be of great benefit to my own design practice and to the growing Unless community. The wealth of knowledge I would gain would greatly assist me in my endeavour to design and promote sustainable products.



DAMON STENHOUSE, 31, INDUSTRIAL DESIGN STUDENT, UNITEC

It would be my pleasure to be given the opportunity to attend a summit of this magnitude which will be an unprecedented impact on the design community in New Zealand. I have come to Unitec to study product design as my second career and intend to build industrial design as a profession and a dedication.

My background, included studying of physics and working in the New Zealand electronics industry. I am aware that I am entering into a forward-looking and environmentally and economically sustainable profession at a turning point in social and political thinking. I believe design will be of pivotal importance during the transition from the past to the future. While studying product design I have been inspired by writers such as Victor Papanek, McDonough and Braungart often recalling their powerful ideas and techniques, in particular the positive enthusiasm portrayed in 'Cradle to Cradle'. They have enlightened me to the opportunities that industrial design has to influence

our society and the world. I am committed to basing my design sensibilities on a foundation of eco-effectiveness.

With the opportunity to attend the CEO Summit I will enthusiastically seek to be a medium for the wisdom of the sustainability icons of our time who will be speaking to the Summit. I am extremely excited about the opportunity that they are giving New Zealand to accelerate the wake up from an ignorance induced by isolation and small population. I have a commitment to bring the knowledge and messages that they deliver to my school. I am a firm believer that industry and the environment can eventually work effectively in symbiosis.

However without the work of dedicated scientific and design minds the solutions will not find themselves. I therefore believe that learning from people such as Michael Braungart, Janine Benyus and others is essential for the development of students studying design who play a vital role in the ongoing well being of humankind. “



ROBERT CARDWELL, 21, FINAL YEAR MECHANICAL ENGINEERING STUDENT, UNIVERSITY OF CANTERBURY

Why should I be chosen to attend the Better by Design Summit?

This year I have been the team leader for my final year project. Our team has been investigating a solar power concentrator concept to achieve low-cost solar power. I have been enjoying tackling the technical details of the project as well as leading our team. I am very keen to use the knowledge I have gained at university to implement positive change in the world. I will be taking the Master of Engineering Management course in 2009 in order to increase my capacity to implement positive change.

I have also been very fortunate to be a part of the inaugural University of Canterbury Engineers without Borders (EWB). My involvement has included helping to organise events promoting the club as well as Fair Trade and Sustainability. I am also part of the team working on our first overseas project (working with the EcoCARE Pacific Trust); to implement a renewable energy resource for Vava'u High school in Vava'u, Tonga. We have

also worked with other organisations such as the Kakariki Club (the University Environment Club), TradeAid, World Vision and the University of Auckland EWB chapter. I am also involved in other local community work, collecting food once a week for the Christchurch City Mission. I believe attending the Better By Design Summit would be an excellent opportunity to gain valuable insight into matters of interest to EWB and other projects that I may involve myself with in the future.



JEFF VICKERS, 24, PHD IN ENVIRONMENTAL ENGINEERING, UNIVERSITY OF AUCKLAND

My name is Jeff Vickers and I am a 24 year old student at the University of Auckland studying toward a PhD in Environmental Engineering. The aim of my research is to develop a model for integrating sustainability concepts into the design and management of products and services, particularly within small-to medium-sized enterprises (SMEs). In addition to my studies, I also manage the NZ Society for Sustainability Engineering and Science's web site (www.nzsses.auckland.ac.nz) and helped to coordinate their 2007 international conference and the one-day student workshop that preceded it. As the society's 2008 international conference approaches, I look forward to being involved in a similar way again.

My research uses Auckland-based SME Actronic Technologies as a single in-depth case study. As I am focusing on sustainability in a business context, I am already familiar with the work of three of the international speakers at this summit: Ray Anderson, Michael

Braungart and Janine Benyus. I believe that I should be given the opportunity to attend because not only am I passionate about sustainability, I am also in a position to apply what I learn in a business setting and feed back my findings to the academic community, both locally and internationally."

ABOUT INTERSECT



YOUNG PROFESSIONALS, LEADING THE CHANGE [WWW. INTERSECT.ORG.NZ](http://WWW.INTERSECT.ORG.NZ)

Intersect is a national network brings together young professionals who care about sustainability to develop capabilities and grow networks.

It's facilitated by a group of trustees (see www.intersect.org.nz) and co-organised by each and every member. The member site provides a place where people can meet some like-minded (and not-so-like-minded!) folks, share ideas, seek assistance, and develop opportunities.

Members inform and inspire others by adding events, sharing videos, and contributing to discussions.

Intersect facilitated the selection of 5 young people to attend the summit with sponsorship and support from Interface NZ and Better By Design.

Each of the 5 were selected through a nomination process with referees and have all demonstrated leadership in their approach to sustainable thinking & practice, and are committed to implementing positive change.

"In a changing world, the learners will inherit the earth while the knowers will find themselves beautifully equipped to deal with a world that no longer exists"

- Eric Hoffer