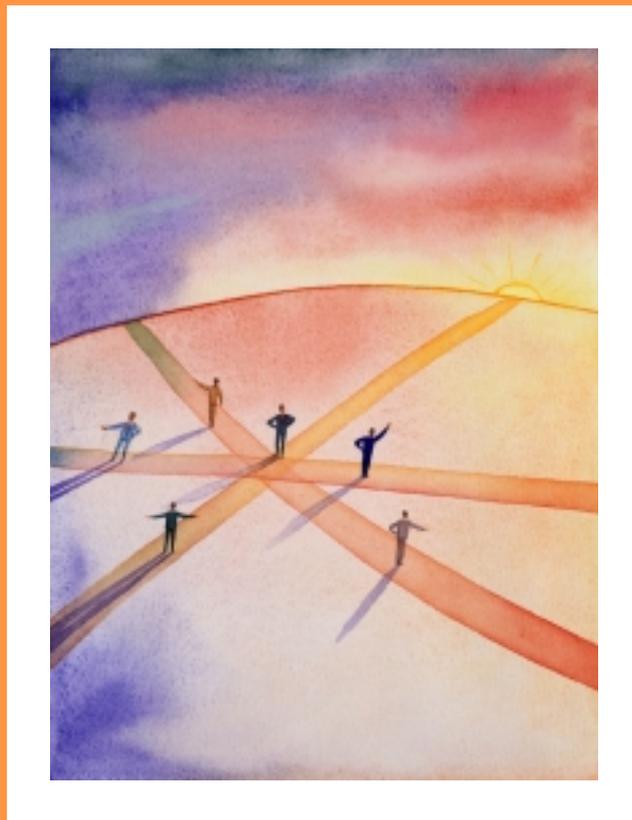


CREATING VALUE IN A CONFUSING WORLD

Contexts For The Worlds To Come



The Berlin Signpost Workshop
November 1999



World Business Council
for Sustainable Development

Disclaimer

This report was written by Ulrich Golüke and Karen Jochelson. Though partially based on the work of a workshop held in Berlin during November 1999, it does not necessarily reflect the opinion of either the participants nor the companies present at the workshop, nor that of the World Business Council for Sustainable Development, nor that of the FuturePerfect Group.

The summary description of the three worlds was written by David Bodanis, whose permission to use his words is gratefully acknowledged.

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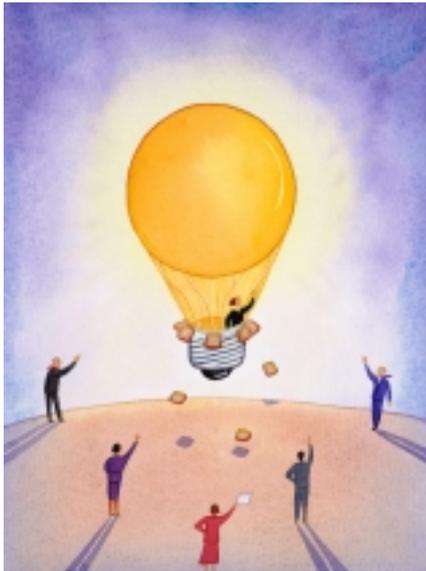
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BUSINESS AND HUMAN NEEDS

or

“What Can Maslow Tell Us Now?”

Not too long ago, the business of business was, well, business. This seemingly silly statement made sense — and money — because most of humanity was at the very bottom of Maslow’s hierarchy (Maslow 1998), trying as best as they could to meet their most basic needs at the level of safety and physiology: food, shelter, clothing, energy.

TECHNOLOGICAL PROGRESS WAS CENTERED AROUND THE REMOVAL OF MATERIAL CONSTRAINTS.

For business, as for all of us, this was a world of scarcity. You built competitive advantage on the ownership of physical assets: land, ports, mines, distribution

channels. The barriers to entry were high, changes occurred orderly and margins were good.

Technological progress was centered around the removal of material constraints. Over the last 100 years, for example, global energy intensity (ie the amount of energy needed to produce the equivalent of 1 unit of GNP) has increased by a factor of 10. This development started long before we began in the latter half of the 20th century to focus on energy intensity for environmental reasons.

This increase in ‘factor’ productivity¹ has been with us for a long time. It can be seen in energy, in de-materialization, where, for example, the material needed to produce an answering machine has fallen by a factor of 100 over the last 30 years, and in many other walks of life.

¹ As in “factors of production”



THE WORLD ACTUALLY HAS CHANGED

or

“The Triumph Of Technology”

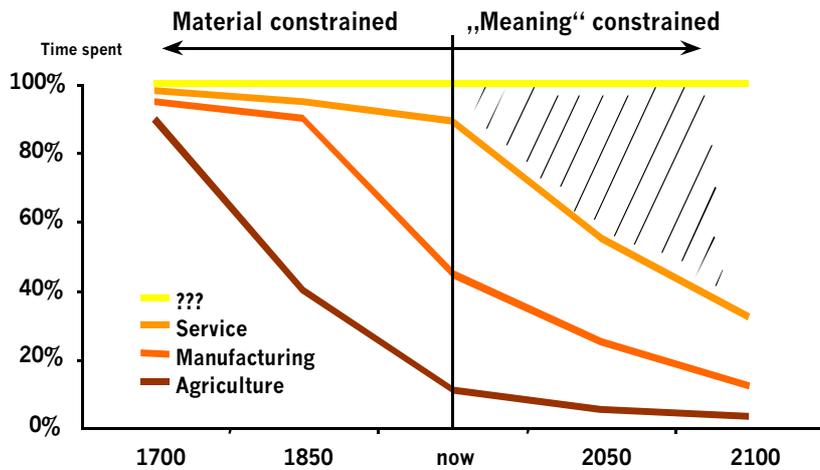
This relentless increase in ‘factor’ productivity has produced a world quite different from even that of a generation ago. That there was no grand design to change the world. Systems thinkers will recognize this as an example of an emerging property: Simply beavering away at removing material constraints creates a world in which material constraints no longer matter.

We all know this at a personal level: Simply diligently putting away money for a rainy day creates a financial cushion so that putting away money for a rainy day no longer matters (unless your fear of loss of money grows pro-portionally with the money you put away ...).

Although there is far from a uniform worldwide picture of this change, we are moving decisively away from a world in which the removal of material constraints dominated everything we did to a world in which that is no longer true.

The triumph of technology is moving us to a world where we will spend less than half of our time meeting those material needs. This trend is also an old one. For example, Americans spent close to 50% of their income in 1900 to feed themselves. This has fallen to less than 10% today. (Lebergott, 1996).

**WE ARE MOVING DECISIVELY AWAY FROM A
WORLD IN WHICH THE REMOVAL OF MATE-
RIAL CONSTRAINTS DOMINATED EVERYTHING
WE DID.**



One can visualize this change in the following symbolic way:

The graph also suggests — at least for those who learn by visuals — the profound change we are living through: Just like 150 years ago it was inconceivable for a farmer to imagine a world where 5% of a nation’s population would

feed everyone of their fellow citizens, so it is inconceivable for us to image a world where 30 to 40% of a population will meet all our material needs.

And yet, already 1/6 of the world’s population live in this world. And the other 5/6 are rapidly moving in this direction. So in order to create value in the future the question becomes: How do we want to live? And what do we value? And how do we create value in an abundant world?

WE TALK ABOUT BEANS, AND THEY TALK ABOUT VALUES.

Let us go back to Maslow for a moment. Further up the hierarchy are words like “esteem” and “self actualization”. Our proposition is a simple one: It is in these layers

that we need to operate as business people, in order to remain in business, because that is where our customers will spend the bulk of their time. Easier said than done. As one business person brought the difficulty to a point once by saying: ‘We talk about beans, and they talk about values’. Business is not good at talking about values, because, well, the business of business used to be merely business.

Before we make some, hopefully educated, guesses about how we can transition out of a material constrained world, here are some of the dimensions along which that transition will play itself out:

1— From Linear Relationships To Closed Loops

A material constrained, non connected world can get by with linear relationships. Robert Monks in his book *The Emperors Nightingale* actually went so far as to call corporations ‘externalizing machines’, but it is not necessary to decide what the motivation of corporations was or is. We simply need to realize that a focus on removing material constraints (or managing access to these materials, which amounts to the same thing) allows us to simplify life by approximating the complexities and connectedness of life with limited and linear relationships.

In a world where everyone knows everything about everyone else — even if it is just unsubstantiated rumors — the simplification of linearity, of A causing B, and nothing else, no longer holds: In

IN THE PAST, “THE NEED TO SEE A PROBLEM EMBEDDED IN THE CONTEXT OF OTHER PROBLEMS RARELY AROSE”.

the past, “the need to see a problem embedded in the context of other problems rarely arose” (Dörner, 1996:6). Now it does, all the time. And using old tools, from a disconnected time, leads — inevitably? — to failure. To return to Dörner: “Failure ... develops gradually according to its own logic ... complicated situations seem to elicit habits of thought that set failure in motion from the beginning ... making that failure even more likely and then inevitable.” (Dörner, 1996:10)

What to do? We need to develop and then practice the skills required to live and create value in closed, connected, complex and non-linear loops. Sounds easy? What is product liability in a closed loop? What is a career path in a network? What is loyalty in world where life time employment is but a quaint memory?

2 — From Physical Assets To Network Assets

THE FUTURE IS THE WORLD OF NETWORKS.

physical assets: land, labor, and compared to the capital flows of today, a little bit of capital. Now that these basic needs are being met, and value creation takes place higher up on Maslow's hierarchy, the dominant reliance on physical assets has faded.

Of course, physical assets will continue to play a role — it will be some time before we are completely dematerialized and have all become pure energy —

but the role they play will be minor. The future is the world of networks. Some call that the “new economy”. It is of course not new; networks have played a role in the economy at least as long as railroads and telephones have existed. But what is new is the shift in emphasis: from an enabling structure to a dominant one.

Alongside that shift in emphasis was a shift in power: from the producer to the user. How do you sell a mobile phone when the price varies between 500 USD and nothing at all? Not by stressing its material attributes, but by stressing its network

attributes. Even if those are as silly — to me at least — as colored and perfumed (!) exchangeable covers to signal to the world you are cool and with it.

DESELECTION IS LIGHTNING FAST IN A NETWORK ECONOMY.

These shifts have profound consequences: you get the color (or the smell) wrong and you are out of the market, because underneath, a phone is a phone. Deselection is lightning fast in a network economy — as more and more companies experience.

What are the “new” laws we need to learn and master in this “new” network economy:

- positive feedback
- network externalities
- rights management
- lock-in
- standards and standards wars
- contract manufacturing
- speed, speed, speed

A SHIFT IN POWER: FROM THE PRODUCER TO THE USER.

3 — From ‘More Is Always Better’ To ‘What Do You Really Need?’

Low down on Maslow’s hierarchy the answer to the questions of what humans (and customers) want is easy: it is *more*. The bottom of Maslow’s hierarchy is about material constraints: enough food, enough shelter, enough clothing, enough energy.

When you lack any or all of these, to have more is not greedy, it is necessary for survival, for self actualization, for dignity. A potato for a hungry person will always be more than a potato, and yet a

‘HOW CAN YOU, YOUR PRODUCT, YOUR SERVICE HELP ME REALIZE MY GOALS, MY DREAMS, MY REASON FOR BEING?’

very viable commercial relationship can be created on the basis of the material exchange of potatoes. That same potato offered to an overweight person is a very different value proposition. If at that point you are still selling that potato merely as a potato, the commercial relationship (which is a fancy expression for ‘sale’) is at risk, all the time.

As you move up Maslow’s hierarchy, the question shifts. From ‘Can I have a little more’ to ‘How can you, your product, your service help me realize my goals, my dreams, my reason for being?’ Neither question is right or wrong but clearly the latter is much more nuanced. And a company that merely learned to cut costs and increase shareholder value will be at a disadvantage.

4 — From ‘Being Your Function’ To ‘Who Are You?’

WHO I AM AND HOW I BEHAVE IS MY MARKET CAPITALIZATION.

The fourth dimension is about identity, of both seller and buyer. In a material constrained world, with limited ability to move about, a very sensible strategy, if you

lived in a mining area, was to call yourself a miner, become one, enjoy it and be real good at it. When the constraint of material survival — and geography — are removed, you can be anyone you want to be.

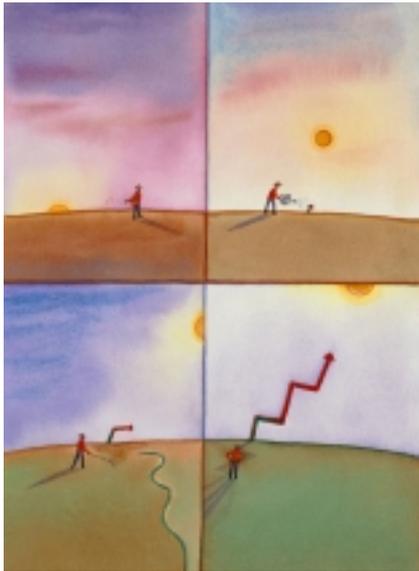
So instead of saying: I am Mr Shoemaker from Scotland, or Ms Miller from Georgia, you need to find an answer to who you really are. Airlines, who started as ‘national’ carriers can no longer rely on the bonus of nationality for getting customers. A German no longer buys a VW just because it is made in Germany. “Who I am and how I behave is my market capitalization”, as the Head of Investor Relations of a major oil company once told me.

5 — From Adapting To Learning

A material constrained world leads to adaptation: There is a ‘best’ way to extract gold from the earth; there is an ‘optimal’ way to plant cassava in a given climate; there is a ‘best’ way to raise sheep, independent of what you may think, or wish, or hope for. The task, under such conditions was to understand the ‘laws of nature’ and adapt to them.

IF MATERIAL CONSTRAINTS NO LONGER PLAY THE DEFINING ROLE IN OUR LIVES AS THEY ONCE DID, WE ARE FREE TO LEARN AND CREATE.

If, as we argue, material constraints no longer play the defining role in our lives as they once did, we are free to learn and create. But as any student of Dr. Faustus knows, the freedom to do so implies the obligation, and at times the curse, to do so.



WE NEED A NEW MAP

or

“From Scarcity To Sustainability”

Scarcity has served us well. For several hundred years it was the concept around which we organized our lives. It drove us to learn ‘for life’, to take the right job, to marry the right spouse, to defend what we had. In the extreme, it drove us to war.

It created, and then made preeminent, the dismal science — economics — because economics is the science of how to allocate scarce resources. It has taught us how to count, but could it be that

SCARCITY HAS TAUGHT US HOW TO COUNT, BUT COULD IT BE THAT WE HAVE FORGOTTEN WHAT COUNTS?

we have forgotten what counts? We have, because that is all we ever have, the tools, the language, the habits of the past, however inadequate that past has become as a guide to the present, let alone the future.

We need a new map, not least because the key value driver of the last 10 to 20 years, *cost reduction*, has run its course. Strategies for value creation have become mere copies of each other and are very short-lived.

The search for margins has turned into a search for fashion: witness the valuation of biotech companies, then of internet companies, then of what?; traditional companies are reduced to “buying value” through mergers and acquisitions; index funds outperform managed funds; corporate visions sound disturbingly alike; risk transfer has become a Faustian bargain. The very nature of the way we do business is changing.



WE NEED COORDINATES

or

“Governance And Carrying Capacity”

SCENARIOS ARE STORIES ABOUT THE FUTURE.

We need a new map, adequate in giving us a sense of where we are and in which direction we are heading, of a terrain no longer defined by scarcity. Scenarios are mental maps. They lay out possible routes into the future. These ‘maps’ are tools to work with in your own businesses as you look at events around you and try to assess their significance.

Scenarios are stories about the future, and therefore, scenarios involve the skill of story creation and telling. For thousands of years and across diverse cultures,

humans have told stories to imbed values, wisdom, social expectations and moral teachings. Mothers and fathers tell bedtime stories to their children to make them think about their behavior, parental expectations, personal safety and other issues of growing up. We tell ghost stories around the campfire that reinforce beliefs (or lack of) in the spiritual world, the triumph of right over wrong, and the fear of the unknown.

SCENARIOS ARE THE CONSUMMATE TOOL FOR ANTICIPATION.

When done properly, scenarios bring to life vivid, thrilling views of the future, but they are not intended to be predictive. Rather, they are intended to open the minds of those involved, to help them identify key driving forces or variables, and understand how those variables could play out under changing conditions. Scenarios are the consummate tool for anticipation.

The WBCSD created such a map several years ago. For those not familiar with the stories, they are summarized here²:

The First Future Considered Is The World of ‘F.R.O.G.’

This is the world where the dominant cry of consumers and voters is to ‘First Raise Our Growth’ — hence the acronym ‘FROG’. It begins as a world of business as usual, where local profit incentives and local or regional politics will dominate. Energy projects, for example, are given the go-ahead so long as they do not pollute in the immediate backyard of powerful interest groups.

But the legal system is often obstructionist, with class-action suits and associated legislation often getting in the way of large or visionary projects. Few politicians

WHAT CAN I DO?

I AM JUST A LITTLE MULTINATIONAL. CEO

are looking after the wider good. If the FROG attitudes continue for long, gradually the world will turn inward. Nations and regions begin to concentrate on guarding what they already possess; international cooperation goes down. New product development slows, and although in a few isolated regions of prosperity there is great concern for maintaining a high quality of life, the global environment begins to decay.

It is much like the parable of the unfortunate frog, which is put in a pot of cool water. The water is gradually heated, so the frog never notices a great enough change to make it jump out. At the end the water boils, and the frog dies.

² The stories are available at <http://www.wbcds.ch/scenarios>

The Next World Is Called 'GEOpolity'

WE MUST MAKE THE RESCUE OF THE ENVIRONMENT THE CENTRAL ORGANIZING PRINCIPLE FOR CIVILISATION. AL GORE

This is a world where business is made the scapegoat for environmental disasters such as coastal flooding or massive crop failures which might arise. As a result, public opinion comes to

support the creation of new national and international bureaucracies, to strictly regulate the way business operates.

At first the bureaucracies take an anti-business line, with harsh regulation, but gradually the more relaxed models of the American New Deal, or the traditional French government 'guidance' of business takes over.

Businesses can flourish in the GEO world, but only when they work closely with these new bureaucracies.

The Third World Is Called 'Jazz'

This is the world where the new-style businesses we now see associated with the Internet begin to take over. There are a great number of quick, ad-hoc linkages between firms. There are also many new technological breakthroughs, and entrepreneurs and arbitrage specialists move quickly to bring them into the marketplace.

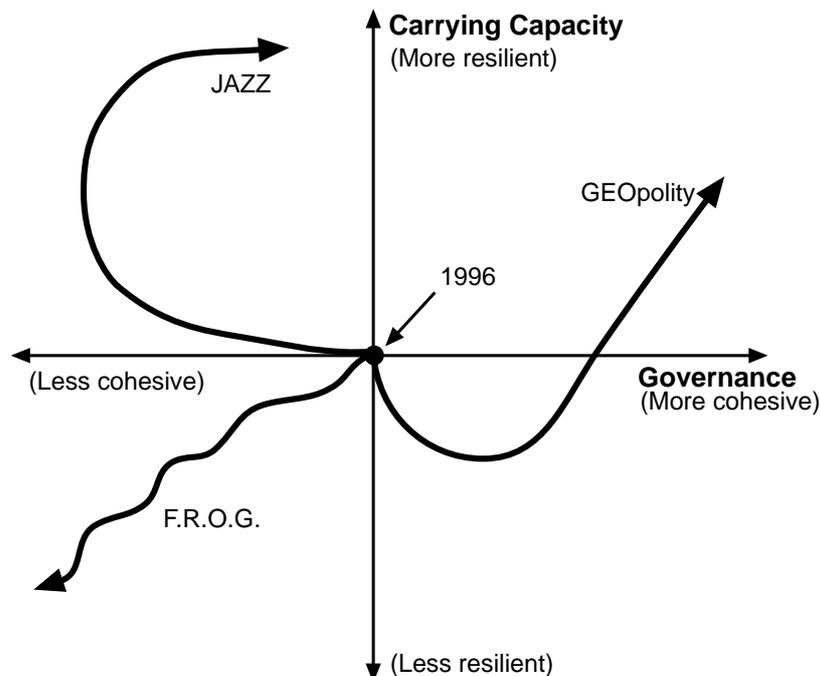
**INTEGRITY HAS NO NEED FOR RULES.
ALBERT CAMUS**

Consumer activists are important, and use the enhanced availability of 24-hour news channels and the Internet to apply pressure against firms or operating practices they find objectionable.

It is a very different environment from the GEO world. There, solid, stable firms, protected by traditional high barriers to entry, did well. Here in Jazz, only quick, constantly adapting firms will prevail. For in GEO, bureaucracies made the decisions, and rules were generally clearly laid out in advance. In Jazz, however, it is the markets which decide what will happen. There is a constant feeling of uncertainty: rules and guidelines are always trying to catch up with the fast, unsuspected developments of the market.

It is unlikely that the real world we experience in 10 years time will be a pure example of any one of these three scenarios. Almost certainly it will be a mix. Keeping these 'pure types' separate simply helps in clarifying how the different parts of the real world will work.

For the visual readers, the stories can be mapped in the following way:





WE NEED SIGNPOSTS

or

“The Berlin Workshop”

In November 1999 the WBCSD Scenario Unit held a workshop in Berlin to assess its 1996 Global Scenarios. If the Global Project described three possible directions the world might follow some years ago, then this workshop assessed which world we exist in now, and tried to create signposts on a map for the future. By understanding the context we may understand the opportunities and challenges the transition away from a material constrained world offers for business.

Intense discussion among the participants resulted in the conclusion that F.R.O.G. and Jazz were likely futures – though they had great difficulty seeing which one of the two was more likely. Participants felt that GEOpolity was a less likely future.

To come to these conclusions the participants developed a set of signposts which they believed would help them understand better where they are going:

Signals

If you have very little time to assess where the world is heading, take a look at NGOs (non governmental organizations)

Pointing towards F.R.O.G. – NGOs begin to loose influence internationally (or stated the other way around, NGOs acting primarily globally loose members and influence)

Pointing towards GEO – NGOs gain in strength, *out of anger*. They develop, pursue and implement negative and disruptive strategies and actions

Pointing towards Jazz – NGOs gain in strength, *out of cooperation*. They redefine their roles and tolerate more ambiguous identities for themselves

If you have more time to ponder where the world is heading, where you are and where you might be going, a good place to start your deliberations is with these signals:

Financial Markets

Pointing towards F.R.O.G. – financial markets value short term growth to the detriment of sustainable development, or even environmental considerations

Pointing towards GEO – financial markets also value short term growth, but company activities and profitability will be shaped by global and national standards and legislation, especially global accounting standards

Pointing towards Jazz – sustainability indices like the Dow Jones Sustainability Index will encourage companies to move in a sustainable direction
– money managed under sustainability criteria increases significantly
– private equity takes social, ethical and other ‘soft’ criteria seriously

International Government

Pointing towards F.R.O.G. – global institutions have less and less power and authority, there is no enforcement mechanism
– the UN security council is more often deadlocked
– climate talks will stagger on without reaching binding conclusions
– COP-6 ends in failure

Pointing towards GEO – global institutions increase in power and develop mechanisms to monitor and implement global regulations; an International World Court adjudicating over war crimes emerges
– the Euro is a success
– disarmament continues and extends beyond nuclear weapons

Pointing towards Jazz – global government institutions collaborate with a range of other institutions to shape and implement global policies
– elections are done by internet

Consumers

Pointing towards F.R.O.G. – consumers seek out the cheapest goods

Pointing towards GEO – commercial transactions become standardized
– verification agencies and companies do well

Pointing towards Jazz – customers make purchases and investments according to personal ethical criteria
– commercial transactions become complex
– information ‘aggregators’ emerge
– sales bots become very sophisticated

Internet

Pointing towards F.R.O.G. – lack of transparency creates an environment of unproven, fast spreading rumors, half truths and outright lies

Pointing towards GEO – there is an internet tax

Pointing towards Jazz – web based distribution of music and books dwarfs traditional media decline of paper (esp. newsprint) sales
– web based B2B transactions become the dominant vehicle for business transactions

Role of WBCSD and its members

Pointing towards F.R.O.G. – the WBCSD becomes an inward looking enclave, with little impact beyond its members

Pointing towards GEO – the WBCSD becomes a lobbying organization

Pointing towards Jazz – the WBCSD seeks out strategic alliances with other societal stakeholders to enable a path to sustainable development

- it learns and shares power
- it develops and enforces membership standards

What to do?

... in F.R.O.G.

- make defensive plans
- invest in the ability to change fast
- focus on protecting your intellectual capital from poaching by competitors

... in GEO

- increase your lobbying work
- help governments develop sound regulations
- seek out global environmental and social standards
- compete on standards

... in Jazz

- seek out interaction with your consumers and NGOs
- create sustainability through the marketplace
- become transparent
- understand network economics
- compete on values: on who you are and how you behave
- consider how to retain intellectual capital as employees shift from one company to another



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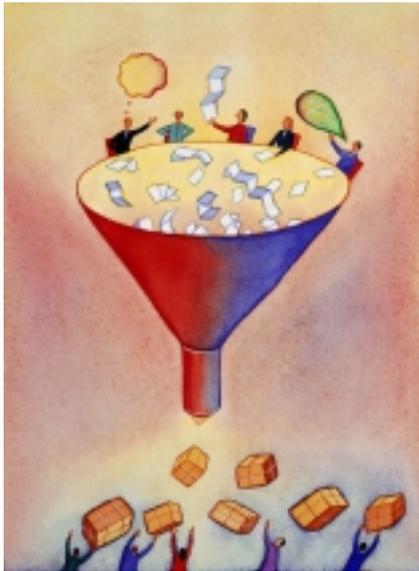
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PEOPLE

Andreas Eggenberg
Arie Brand
Axel Wenblad
Benedikt Vonnegut
Claudia Schweizer
Dania Quirola
David Rodier
Fabienne Thonney
Francois Kaisin
Frank Annighöfer
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