



FUTURES THINKING

A guide to using futures thinking to help drive corporate resilience and transformational innovation

CHALLENGING TODAY, CREATING TOMORROW



WELCOME!

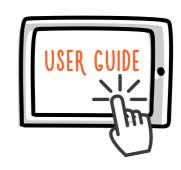
This guide, prepared by the Sustainable Lifestyles Cluster, explores how companies can use Futures Thinking to help improve strategic business decision-making.

In 2012, WBCSD released Vision 2050 – a report in which business openly rejected 'business as usual', and stated that if 9 billion people are to live well, within planetary boundaries, then efficiency improvements alone will not be enough to deliver sustainable lifestyles and wellbeing to all.

We will need to go beyond product improvements – we must explore new ways of enabling our lifestyles. We have to take a broader perspective, searching out transformation not just of products, but of related infrastructure, technology, business models and individual behaviours too. Business can use its innovative power to inspire and enable more sustainable lifestyles.

But to do this we need to envision and then create a world that looks guite different from the one we live in today. This report investigates the business benefits of different future-thinking techniques, providing companies with a guide to how they might use futures to design a more resilient approach to business strategy and opportunity identification.

The report is itself experimenting with a fresh approach to sharing information. To the right you will find some tips about how to find your way around it!



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INTRODUCTION



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INTRODUCTION

The WBCSD's Vision 2050 sets out a societal vision of a sustainable world: a world where nine billion people live well, within planetary boundaries. The vision demands radical transformation across all sectors, but achieving these goals still remains a serious challenge for society as a whole as well as for business. Systemically embedded barriers exist in part because we are constrained by the way we think and therefore act. Entrenched assumptions and mind-sets have led to inertia and a perceived inability to do things completely differently.

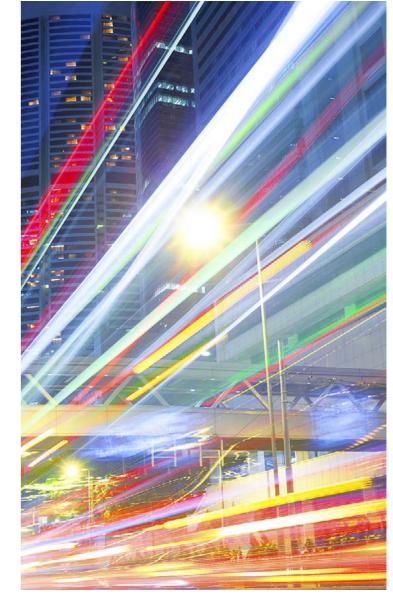
Most change tends to be incremental; sustainability is no different. Many initiatives are confined to improving efficiencies and reducing negative impacts. Although these are necessary steps, alone they are insufficient responses to meet the sustainability challenges faced if we are to achieve our Vision 2050. We need bolder more transformational actions and ambitions. The WBCSD Sustainable Lifestyles work is exploring how we can overcome some of these systemic barriers and constraints, seeking out ways in which member companies can act as catalysts for the transformative solutions that are necessary.

¹ Accenture, Acciona, BT, Deutsche Post DHL, DSM, ERM, Novozymes, PepsiCo, Philips, PwC, P&G, SC Johnson, Shell, Toshiba, and Toyota. and the Indian Global Network partner CII-ICT. Marks & Spencer and Nike were also kind enough to participate in this research.

This report shines a spotlight on how companies can think about the future differently. It is designed to stimulate dynamic and productive discussion about 'futures' and experimentation as tools that can support moves beyond 'business as usual' strategies, specifically, in support of greater sustainability.

How we imagine the future can influence our present attitudes, behaviours and decisions. The choices and actions we take today ultimately shape how the future actually unfolds. In some form, the future always exists in the present. But at the same time, we must be aware that the future is often seen from a perspective of the past (what we have already learnt, experienced, been influenced by). This can lead to the future being an "anticipated past", constrained by an inability to freely think about what is actually required and possible. The future is what we choose to make it.

We spoke to a selection of WBCSD members¹ and other leading companies, to understand how they are using futures to drive more transformative change that supports sustainability. By exploring this topic and showcasing examples from forward-thinking companies we aim to encourage and inspire people to be bolder in the way they think about the future; to push the boundaries of current constraints and knowledge of how things can be done. This, we hope, will ultimately support and catalyse more breakthrough transformational initiatives that can achieve both sustainability and business ambitions.





CONTENTS









WHAT DO WE MEAN BY 'FUTURES'?

Futures is an exciting and imaginative tool to navigate the unknown space of possibility and opportunity that lies ahead, whilst highlighting potential risks.

An all-encompassing term, "futures" comprises a range of different techniques to think about the future, but does not attempt to predict it. There is no 'one' correct future and therefore we refer to the tool in the plural - futures. Ambiguity around terminology, along with the number of different techniques that can be used, can lead to misunderstandings about what futures can provide businesses with – this report aims to provide clarity on this.

Thinking about the future is not about being right or wrong, it is a way of inspecting our beliefs, disrupting the constraints of current conceptions and revealing assumptions about what we believe can and cannot happen. Here we outline the most prominent techniques being used amongst the participating companies. Ultimately, the futures technique to use will be best determined by what feels most appropriate, depending on the desired outcome and need.









TRENDS AND FORECASTING: A PROBABLE FUTURE

WHAT?

The direction and strength of current trends can be explored by referring to extensive research from external sources and reports such as the IPCC, the Global Environment Outlook (UNEP), the World Economic Outlook (OECD), and the World Energy Outlook (IEA). These indicate how trends are projected and expected to develop over time. Horizon scanning² aims to identify weak signals for new and emerging trends or potentially disruptive impacts. Forecasts are often further informed by interviews with experts and a wide range of stakeholders.

2 Horizon scanning – systematic examination of a wide range of sources to detect early signs of potentially important developments: emerging issues, threats and opportunities

WHY?

Trends and forecasting exercises provide companies with an outline of a probable future, offering valuable information about near-term outlooks and events (within the next 10 years). By extrapolating current trajectories, it largely assumes the future will unfold in a similar way to events in the past. However, growing awareness of non-linear changes (such as those shown by differing localised impacts of climate change or ecological thresholds such as fish stock collapse), means projections are being increasingly challenged. New, sophisticated data-driven techniques are constantly being developed to improve analysis in this area.



DESCRIPTIVE SCENARIOS: A PLAUSIBLE FUTURE

WHAT?

Largely informed by trends and forecasts, scenarios develop narratives or storylines around a number of alternative futures, which offer a plausible unfolding of events. Developing several different scenarios ensures the plausibility can be stretched in different directions and accounts for the variations in trends projections. Scenarios are acknowledged not to provide predictions: the true future often lies in a combination of all storylines. Therefore, no priority should be given to one scenario since all provide insights and lessons. Scenarios can be produced at a variety of different scales: global, regional, or country specific and at a number of different timeframes (close, mid or distant) depending on what they have been designed to inform.

WHY?

Descriptions of plausible future worlds can help companies to explore and prepare for uncertainty. The storylines enable interconnections and feedback between trends to be investigated in greater depth. This is a key tool for increasing an organization's flexibility and ability to deal with 'black swans', seemingly improbable events that would have a significant, highly disruptive impact. Scenarios are used to test assumptions, challenge thinking and rehearse implications in a hope to reduce blind spots and enable more imaginative thinking. Creating 'miniworlds' provides a more holistic vision of the future, necessary when addressing systemic challenges.











NORMATIVE, DESIRED SCENARIOS: A PREFERABLE FUTURE

WHAT?

A storyline of a largely imagined world describing a preferred future, an idealised outcome. 'Backcasting' – working backwards from that vision to the present day – can highlight the gaps between shorter-term trend forecasting and the longer-term vision. This can help to determine a plausible or necessary path and articulate the changes required to achieve such a future. Normative futures tend to be more distant, for example WBCSD's Vision 2050, since they usually involve a description of a very different world from that which exists today. This is required for such imagined or desired changes to have taken place.

The future is complex and uncertain (well explored in more depth in Nesta's Don't Stop Thinking

About Tomorrow paper). Companies could benefit from exploring all three of the major techniques explored above as ways to think about the future, allowing them to feed into and complement each other. However, developing futures can be a resource-intensive process, so companies should also carefully evaluate their aims and the resources and time they have available.

FUTURES AND SUSTAINABILITY

Futures has long been used as a traditional business (risk) management tool. We believe it is time to focus new attention on its links to the sustainability agenda. It is too easy to maintain the status quo in an increasingly resource and carbon constrained world: futures can be used to catalyse transformative action. However, to take full advantage and create real change, sustainability must already be embedded throughout the company at strategic and operational levels. Even where sustainability is less fully embedded, futures can be a powerful tool to demonstrate the business case for sustainability and thus drive greater action throughout the organization.

WHY?

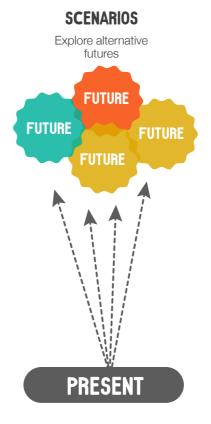
Desired scenarios provides companies with a powerful story and image. This can unite hopes and fears as a means to try to shape the future in the direction they wish. Strong faith in an aspirational vision can inspire, galvanize and help push through difficult change, providing a clear overall direction towards the desired outcome. Essentially, desired scenarios help us to break free from today's world: by searching beyond the reasonable or plausible, they provide opportunities to completely diverge from projected and existing trends and stimulate greater imagination.

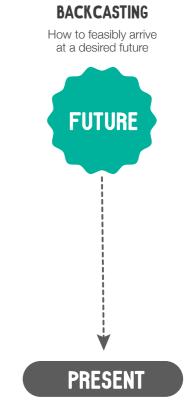
A BRIFF WORD ON THE SDGs.

The United Nations Sustainable Development Goals (SDGs) consist of 17 goals, and 169 indicators that will contribute the goals being achieved. To an extent, this is a grand exercise in defining a desirable future and backcasting the plausible and necessary pathways to achieving the goals. To explore the SDGs and how business can align strategy with the goals and contribute towards them, visit the SDG Compass developed by WBCSD, GRI and UN Global Compact.

FUTURES TECHNIQUES

Predict most likely future FUTURE PRESENT









THE GOAL HAS TO BE SUSTAINABLE LIFESTYLES





What does a truly sustainable lifestyle look like? How can it be conceived in a resource-constrained future? How can we invent, innovate and mainstream such a vision?

Current levels of consumption are not sustainable; globally we are consuming resources to the equivalent of 1.6 Earths, and this consumption is far from equally distributed. With a growing global population, and nearly three billion more people joining the consuming middle class by 2030, pressure on the Earth's resources, ecosystems, economies and societies is only set to increase. Our lifestyles are one of the crucial elements in our ability to create a sustainable society. Companies often overlook this challenge, believing it is beyond their reach – the responsibility of governments or of people themselves, but in reality, all stakeholders have a part to play.

WBCSD President, Peter Bakker, has referred to this as the 'blind spot' of corporate sustainability efforts. Making sustainable lifestyles and wellbeing available to nine billion people within the planetary boundaries will require transformational innovation of products, services and business models. This transformation is brimming with business opportunities.

Current futures exercises tend to remain in the realms of high, macro-level accounts: exploration of the everyday, lifestyle element is often neglected or lacking in scenario narratives. This can lead to an incomplete understanding of how the future is brought about and therefore of the future itself. Trying to imagine future life from the perspective of the individual acknowledges the role of people as agents who actively shape the structures within which they live. The current focus on technological and scientific visions fails to consider the social context (often left implicitly as today's incumbent reality).

However, sustainable lifestyles will almost certainly require social innovation: different social institutions, rules, values and norms. This social aspect must be considered in greater depth if we are to overcome barriers and see how necessary changes can be made and mainstreamed.









Whilst it is important to recognize individuals as actors, we also need to understand that individuals act within a framework of structures, social norms and options provided to them. Business can therefore play a powerful role in enabling more sustainable lifestyles. through either solutions that address sustainability challenges directly, or products and services capable of inspiring a shift in behaviour. By looking to the future, companies can aim to be ahead of people's needs and thus be able to meet and shape them towards increased well-being and sustainability. SC Johnson acknowledged the need to think beyond the trends of consumers in order to instigate more sustainable behaviours. When market research showed that consumers weren't interested in green chemistry, the company decided to shift its product

line to be safer and greener regardless. Over time SC Johnson has been able to educate consumers, creating a dialogue and encouraging lifestyle changes, which have ultimately made the company more trusted and competitive.

Futures can be used to explore in greater depth what a sustainable lifestyle might look like and investigate what that means for everyday life. It can reveal gaps between projected and necessary states, identifying the areas where current practices should be scaled up, where innovation is required and where the greatest impact can be achieved. It could help to ascertain where radical future innovations may face mismatches with existing infrastructure, regulations, habits and aspirations, therefore highlighting some of the complementary measures required

for transformative social and technical progress to succeed. Looking at everyday practices will show how innovations may be adopted and utilized by individuals, how they may impact habits as well as any potential unintended consequences they may cause. Ultimately, the most valuable outcome from these types of investigations will be a better understanding of who might lead and why they may be followed. Identifying successful agents of change will be key in empowering people to experiment with and mainstream sustainable lifestyles.³



ABOUT THE VIDEO:

What if... current infrastructure doesn't meet the needs of the future? New York City is rethinking parts of Manhattan's waterfront, showing how new structures could provide flood protection while shaping citizen's lifestyles and the use of common urban spaces.

VIDEO FROM: https://vimeo.com/175433020











³ Neuvonen et al (2014) Low-carbon futures and sustainable lifestyles: A backcasting scenario approach. Futures, 58, pp66-76



SEE THE WORLD ANEW

Futures encourage us to think in a different way by challenging our assumptions and mindsets. This is crucial if we are to uncover more breakthrough sustainability solutions that move on from eco-efficiency and compliance measures. Without searching for new ways to think, efforts to focus on the future will likely reinforce current logic and business as usual.

Thinking beyond existing concepts is difficult: some companies are exploring different exercises within their futures work, particularly scenarios, to help trigger such shifts in thinking patterns. An example would be the use of lateral thinking exercises, where instead of building on existing ideas, we disrupt mental pathways from a different angle to create new perspectives on a problem (see Edward de Bono's Lateral Thinking work for an example of this). The companies that participated in this report described some of the ways we can assist employees to think differently and facilitate these mental 'prison breaks'. in the context of sustainability challenges.

IMMERSION

Immersion activities attempt to displace and absorb participants into an imaginary future world created by descriptive or normative scenarios. During workshops, activities such as role-playing future characters of various stakeholders aim to activate the imagination and see the world from a different vantage point. Placing oneself in the shoes of a different person can build empathy and eliminate or modify existing assumptions: essentially, being part of something fictional helps to alter one's reality. These activities offer unthreatening opportunities to enable individuals across the organization, particularly decision-makers, to open their minds to the "inconceivable" or explore topics traditionally considered "taboo" or "out of bounds". They should be fun, creative and free, offering the opportunity to play around, exploring life.

It is important to have an experienced facilitator to guide the activities, help people feel comfortable and assist the process through games and stimuli.

For example, in some workshops Shell scenarios teams try to think about the daily routine of an end-consumer in a given environment to more deeply ask what does their life actually look like? During this sort of immersion activity the group might try to consider questions such as, what do they eat for breakfast, how do they get to work, what will it be like in a supermarket, what sorts of issues will they care about? Imagining mundane everyday tasks can help to highlight and contrast the differences in future or alternative lifestyles with those of today (here's a good example of such a narrative).













VISUALIZATION

Visualization and re-creation of future scenarios can take immersion activities a step further, attempting to bring the futures to life and 'off the page' for decision makers. By providing a more physical outlet, futures can be made more tangible, stimulating the imagination.

BT has its own set of customer showrooms based on emerging or imagined rooms of the future. Covering different life situations (for example a hospital room, a shop, a bank branch) the rooms serve as a trigger to discover the sorts of future experiences or challenges customers might face, providing a base for discussion around potential solutions. By reconstructing the future and making it 'real', the conversation between clients and account managers can be enriched and lead to more appropriate, preferable and potentially transformative solutions. The rooms also create the chance to demonstrate new technologies and test out how they work and are used.

To create a more vivid impression of the future, Deutsche Post DHL created short video clips representing their own set of 2050 scenarios. They worked to understand, concretely, the ways people might live, how they would go about their daily lives – thinking about the future from the perspective of the individual and what this would mean for society and business as a whole.

ABOUT THE VIDEO:

How... would you imagine the world in 2050? DHL created a video depicting their own set of 2050 scenarios to understand how people would go about their daily lives and the consequences for DHL.

"Once you put yourself into the shoes of people you can see some things much more clearly", Deutsche Post DHL.

VIDEO FROM: https://goo.gl/yEVBbi

TAKE PEOPLE OUTSIDE THEIR EVERYDAY CONTEXT

Recreating a future world can require a lot of resources: similar benefits can be achieved by taking people out of their everyday environment and immersing them in a different real world situation. For example, Procter & Gamble took a team to Kenya for a week to demonstrate the real impact their technologies can have. As a result of that one trip, four ideas were processed through the innovation pipeline, demonstrating how successful a fresh perspective and context can be. Inspiration need not only come from the exotic; "it can also be taking the team to a landfill, so less sexy but as effective in terms of: 'is this the legacy we want to have?'" Similarly, ERM mentioned away-weekends as a crucial opportunity to enable senior management to remove themselves from a narrower view that their everyday work environment can sometimes reinforce. Taking a step back can enable the company to consider the future with a new outlook.

CROSS-FUNCTIONAL TEAMS

Providing new contexts and new combinations of ideas can also be achieved by asking people to work together who do not usually do so. Novozymes believes that "innovation is all about creating opportunities and then seeing opportunities where there are none to be seen today. To have that creative approach to things you need a different atmosphere, a different culture". Doing something as simple as placing people with different nationalities and different cultural backgrounds in a project team can help to gain perspectives on futures and sustainability challenges that would be impossible to obtain through the eyes of a team from a single nationality or corporate function only. The benefits of diversity have been empirically researched – for instance by the economist Paul Collier in his work examining economic stability and growth at the bottom of the pyramid. Ethnic diversity 'raises the productivity of a team because it increases the range of skills, knowledge and perspectives, and these help problem solving."4











 $^{^4}$ Collier, P. (2009) Wars, Guns & Votes: Democracy in Dangerous Places. London, Vintage Books. p.59

Many companies' futures remain on a relatively close timeframe, largely covering the next 10-15 years, or even sooner. Extending futures out to a more distant point encourages more creative, imaginative thinking, but more importantly, discontinuity with today's mind-sets. Shell has even performed exercises thinking out to 2100, which obviously leads to a very different future view. One need only consider the changes that have occurred in the last century. Although this timeline is perhaps not appropriate for all organizations, thinking, for example, to 2050 opens a broader window of options helping to see the bigger shifts required. At times, close futures are too aligned with current trends, and therefore have the tendency to encourage ideas that build within these trends incrementally rather than disrupting them completely.

DIFFERENTIAL THINKING

Some companies may understandably struggle to engage with futures. The Confederation of Indian Industry's ITC Centre of Excellence for Sustainable Development (CESD) addressed this through a 'differential thinking' approach. This helps companies to develop ideas for transformative solutions by thinking differently about the business they are in and challenging their incumbent perspective.

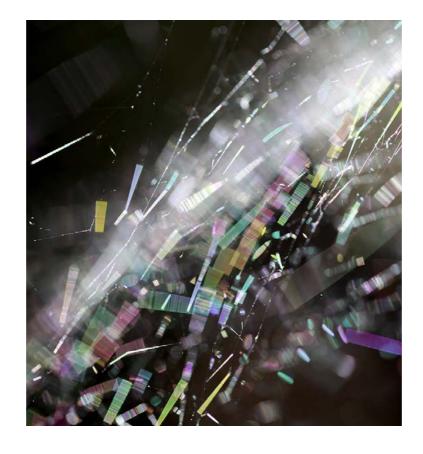
Companies often define their business by the products they make and sell, which, over time, can limit the ability to explore beyond these portfolios. Differential thinking is about stepping outside of the business and instead asking 'what problem am I actually trying to solve'? So, for example, is it, how to make a better car or how better to move people from one place to another? Taking a problem-solution approach rather than a problem-product approach can identify less obvious business opportunities.

In contexts of extremely rapid change, the CESD suggests that scenario planning can lag behind the pace of change. Consider the cement industry: cement manufacturers have achieved reductions in their environmental footprints through advancements in mining and production technology, but construction, particularly in developing parts of the world, continues at an incredible pace. Forecasting and scenarioplanning would confirm the on-going development requirement, and therefore the need for cement products. This would provide the cement industry with significant confidence but whether we should be constructing with 20th century infrastructure may not be so easily considered. Differential thinking challenges whether the construction sector needs to base its growth on the use of cement: can it be decoupled? What is the problem that cement companies are solving for society?

Encouraging companies to think beyond their industry's current value proposition and consider the implications of 'unthinkable' future developments, can reveal totally different and potentially transformative business opportunities.

AN ETERNAL FUTURE?

The Finnish, when investigating the consequences of establishing a site to store their nuclear waste, had to think out as far as 100,000 years into the future, exploring how they could prepare a site so that it would not be disturbed for the hazardous life of the radioactive spent fuel. No structure in human history has stayed standing for such a period, let alone a society lasted for anything close to that long. They coudln't even be sure if language as we know it would still exist. This complex scenario exercise, involving a diverse group from physicists to faith leaders, was brought to life in the film, Into Etemity and is a example of how far futures can be pushed.













LEARNING THROUGH FUTURES

By testing assumptions and questioning world-views, futures can help to create an individual and organizational mind-set that is different from business as usual. Moreover, exploring futures can be an educational instrument that builds organizational capabilities in decision-making and dealing with uncertainty. It can aid an organization in being more flexible, better able to cope with change – both essential in searching out transformation. Engaging employees across the organization in the process can spread lessons and experiences more widely and enable them to apply these skills to everyday tasks.

IMPROVE STRATEGIC CONVERSATIONS

Deutsche Post DHL, which provides continual discussion and communication of futures topics via its <u>Delivering Tomorrow blog</u>, believes a key benefit to using futures is to widen the perspectives of

decision-makers beyond the immediate bounds of the company, improving knowledge and awareness. In their experience, this enhances the quality of internal and external conversations, leading to enriched decisions and action.

Furthermore scenario narratives provide a 'language' that works across different levels of a company. This framework of common language and understanding is a foundation on which to base discussion, collaboration, and co-operation. Such narratives and storylines can make difficult, boundless and intangible topics, such as sustainability challenges, more accessible - crucial if we want to be able to discuss the currently 'non-existent'. They offer people a frame of reference to talk about the issues in relation to something else. Shell highlighted this, emphasising the importance of creating identities for scenarios and names that aptly encapsulate the essence of each different story. When events start to unfold in a recognized way, colleagues are able to make easily understood references to particular scenarios.

The best way to predict the future is to invent it.

- THEODORE HOOK -





What if... we question the status quo from a multitude of perspectives? This workshop uses different activities to get people exploring the future in an interdisciplinary way and uses different mediums to help communicate the currently non-existent.

VIDEO FROM: https://youtu.be/JvTx7Aft4Tc











ENHANCE DECISION-MAKING CAPABILITIES

Engaging employees and wider stakeholders in the process of futures can improve and provide opportunities to practice decision-making, particularly under conditions of uncertainty. Immersing into scenario storylines in particular can help to develop this competence by obliging participants to practice or try out operations and decisions in imaginary situations. This also cultivates their ability to see or rehearse the implications of actions in advance. Working through 'what if' situations in scenarios can stimulate imagination and explore the implications of different outcomes, enabling employees to consider various options and think in alternatives.

Nike developed a gamification tool called NIKE INC202 to immerse employees in a scenario, enabling them to 'live' in a 2021 future world. During the interactive experience, employees and senior leaders

were fed information about external events that might happen, which they had to react, making decisions based on the information they were given. They then experienced the outcomes of these decisions and investments... It proved itself to be a particularly useful tool, as it enabled them to see the increasing impact of sustainability challenges and demonstrated how they were directly relevant to each employee's role in the company. Senior leaders reported greater commitment to integrating sustainability into their strategies as a result.

Gamification enabled by technology will continue to offer opportunities. Could companies use increasingly accessible virtual reality (VR) technology as a training tool, immersing employees in hypothetical future situations in order to improve decision-making capabilities? See <u>Fast Company's analysis of VR opportunities beyond gaming</u>.

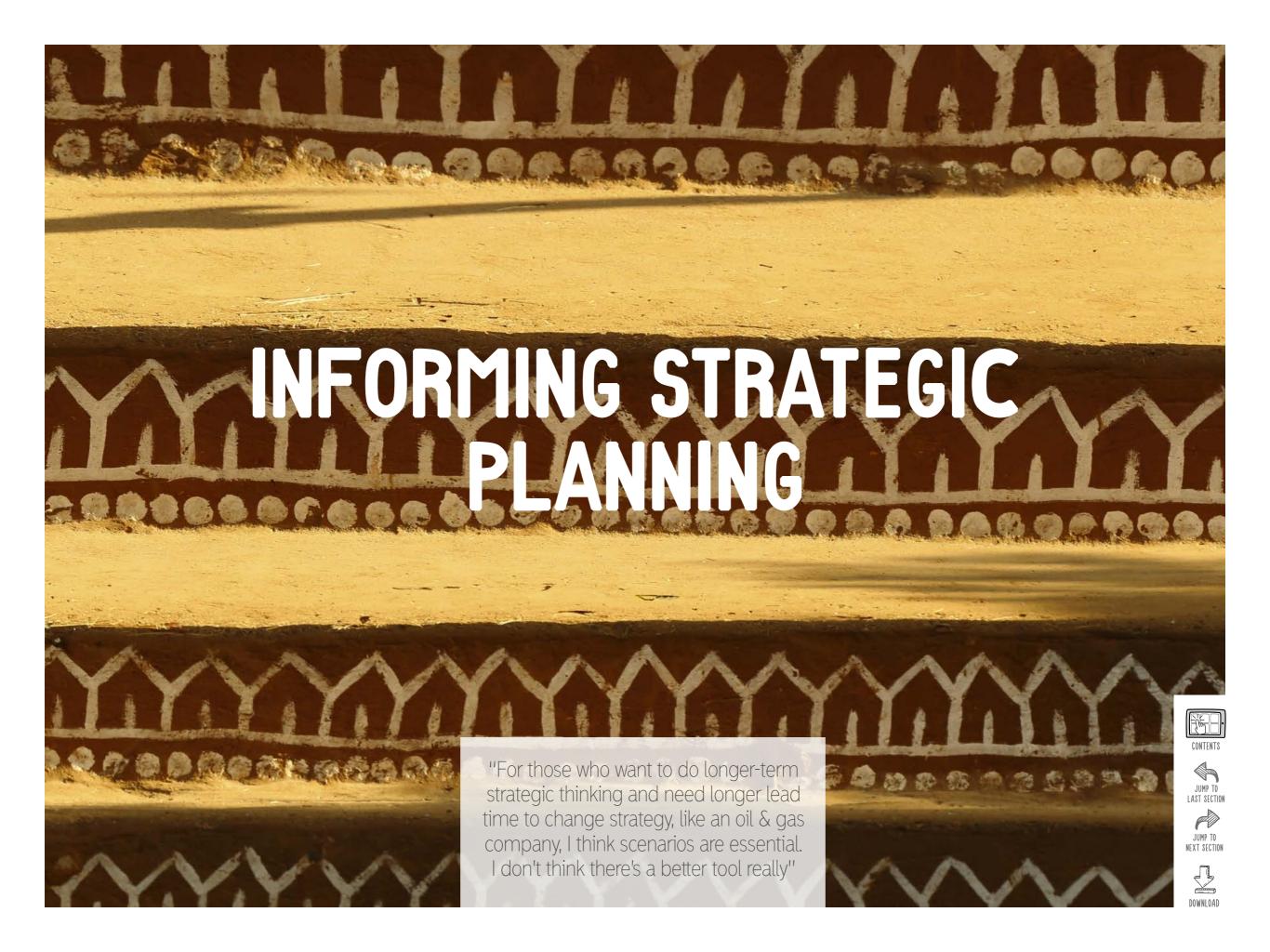












INFORMING STRATEGIC PLANNING

THE PAST SHOWS WE NEED TO BE PROACTIVE

Currently, many companies focus their futures thinking towards risk management and mitigation to safeguard on-going performance and longevity of the company. This is important in supporting corporate resilience, but to truly thrive and avoid being caught at a disadvantage in the future, companies will need to take a more proactive approach: "You need to be part of the solution or you get left behind" ERM. For example, although Kodak invented the first digital camera and was aware of the growing digital revolution early on, it was unwilling, or unable, to see the potential beyond its core-business assumptions, blinded by the apparent strength of the status quo. The company failed to alter its strategy, or shift its focus away from film manufacturing to its ultimate detriment. Alternatively consider Apple – it didn't invent the MP3 player and neither did it invent online music access or sales. Yet, iTunes became, comfortably, the largest music retailer in the world.

This is a reminder that leaders need to revolutionize their industry before someone, or something, else does. An increasingly resource- and carbon-constrained world will disruptively affect all industries just as digital technology shocked Kodak: the sustainability challenges ahead will ultimately force us to transform. Companies either act boldly now, taking advantage of the opportunities of new business models and strategies, or they join a continued race to the bottom, where they will no longer be able to react profitably.

"When you look at the long term, <u>nothing</u> is a given, not even your own success, so you have to be able to challenge your own assumptions on what works and what doesn't", Nike.



ABOUT THE VIDEO:

What if... you could inspire your employees to revolutionize your industry, to make them the "catalysts of progress"? Nike calls on makers everywhere to take back control and do what they do best.

VIDEO FROM: https://vimeo.com/201566963









INFORMING AMBITIOUS STRATEGIES

Exploring futures can help identify these assumptions and shift to more transformational strategies, turning potential risks into business opportunities in new ways. SC Johnson has used its values and a long-term consistency ("futures thinking for us is generational") to set aspirations and ambitious targets that help to drive its strategy. These are set beyond what may seem initially achievable, enabling the company to push the boundaries with its work on efficiencies whilst at the same time focusing its value creation strategy towards green chemicals. Toyota uses a similar philosophy of setting stretch targets and then continuously improving the way in which the target is being reached. These stretch targets tend to be set based on a future event (e.g. legislative, economic, environmental) that the company believes highly likely to materialize.

Philips⁵ developed a vision in which the future was reource-constrained and impacted by technologies. As a result the company has fully embraced a shift away from standard recurring revenue business models. The key to a successful shift in strategy is "to show the new model is not only an alternative but also that it's much better – a more stable and profitable business." The strategic direction of Philips' lighting business is to offer its products as systems and services, maintaining ownership over the materials, and thus focusing efforts on a more circular and efficient use of resources. As it focused its strategies to achieve this goal, it sold off a component-manufacturing part of the business to concentrate investments in new. more sustainable areas. This is transforming the way it operates, encouraging more sustainable solutions that decouple growth from resource use. Furthermore, the purchase of a service, rather than a light bulb, is helping to change the way customers view and use lighting, opening up opportunities to explore other servicebased offerings in the future.



PROVIDING A VISION

Shell invited the WBCSD to a scenario development workshop which was convened to consider new scenarios of a world where global temperature increases had been capped at 2°C: a desired vision of the IPCC, many policy makers and wider society. Since both Shell's current Mountains and Oceans scenarios result in an overshoot of the internationally agreed 2°C target, it was clear that there was a need to explore a more normative vision of a 2°C world, reducing potential blind spots and revealing unconsidered opportunities. Backcasting from the vision explored the kinds of events and changes that would need to happen to achieve that future and help define more sustainable pathways. Investigating different future visions is one way to deal with present trajectories that seem to be leading to an undesirable and unsustainable outcome.

TESTING STRATEGIC DIRECTION

Companies can run through the implications of their intended direction within scenarios and discover what the range of consequences could be in order to understand their best route forward. Assessing different options can help to build more robust and also alternative strategies, model how these fare in a variety of different futures and explore how the company might be positioned in a sector or market as a result.

For example, Nike uses future scenarios to investigate the ability of potential innovations firstly to mitigate future problems identified (e.g. resource loss, legislative constraints), and secondly, to see if these innovations result in improved performance and more sustainable outcomes. Companies can experiment around future solutions to see which might be the most appropriate, successful and sustainable, not to mention, increase the chance of avoiding unintended consequences.

Backcasting can complement such testing, helping to demonstrate if targets are sufficiently ambitious. It can check that strategies will successfully lead companies onto the right pathway, aligning with and successfully meeting longer-term desired visions and needs.

⁵ The interviews for this report were conducted before Royal Philips' September 2014 announcement concerning its demerger into two market-leading companies, one with a focus on Healthcare and Consumer Lifestyle, the other on Lighting solutions. http://philips. to/2gN2SjF. Our interviews were with Royal Philips' lighting division.











A search into futures can support the discovery of product and service ideas that are far removed from business as usual – exploring truly unknown strategic territory and customer offers.

The challenge is, how do you get there? How to arrive from the visions to reality?

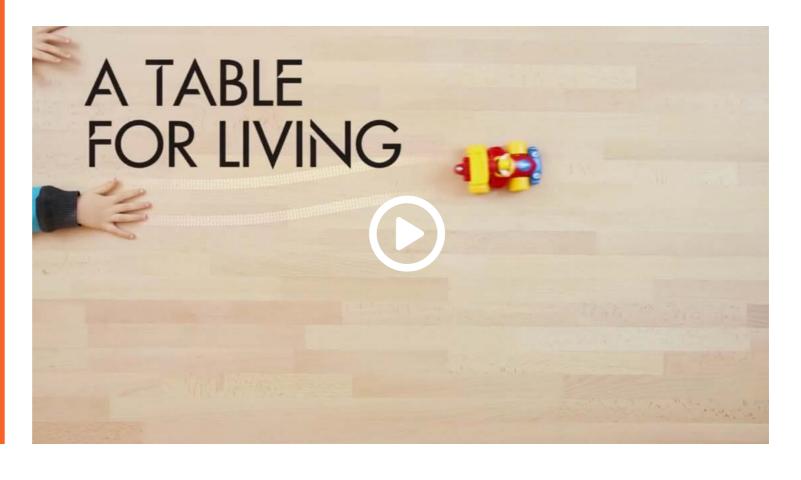
Commercializing these more transformational offerings can be a challenge, requiring companies to be comfortable with ambiguity and a lack of clarity on the best way to proceed. Ideas for fundamentally different products and services (for example Tesla's business model) require experimental market testing, experimental manufacturing and experimental marketing tools. Companies that develop a culture of experimentation will be better placed to move towards bringing products to market that are fit to meet sustainability challenges, thus also increasing company long-term resilience.

With every year the understanding of complex sustainability issues grows, as does agreement regarding the urgency with which progress needs to be made against some of these challenges. Forward-looking companies are clear that sustainability considerations and experimentation capability are intrinsically linked. In particular, experimentation is required when exploring how to turn new product and service ideas, which do not presently fit easily within the current system, into a commercialized product or implementable solutions. A number of mechanisms can help support such exploration.

ABOUT THE VIDEO:

How... could this concept kitchen table from IKEA become a commercial product? Turning something like this into a reality will take more than just technical innovation – it requires a culture of experimentation and the right internal process to support this.

VIDEO FROM: https://youtu.be/qD60cBQOABY











INNOVATION PROCESSES THAT SUPPORT EXPERIMENTS

Novozymes changed their organizational design to move their radical innovation function out of R&D and into the business development department: "To make it less of a technical innovation and make it more business focused." Broadening out innovation beyond a single corporate team is pushed through another mechanism: all Novozymes functions have been asked to establish their own innovation team to accelerate opportunities for innovation within established business units. This more fragmented organizational innovation process design is intended to increase the company's ability to develop transformative offerings.

"Many companies don't have very structured formal processes where something matures from an idea to a concept to a business plan to a venture – that logical go/no go decision structure."

Even with a formal decision structure in place, outlier concepts, those that have the potential to be truly transformational, often cannot fit into the restricted mandates that innovation departments are given. Widening innovation mandates and allowing these departments to utilise discretionary resources can help to address this. A sufficiently well-designed structure enables companies to build on existing successes in traditional technical R&D at the same time as experimenting with more radical transformational ideas. Tried and tested structures that might support this include developing a venture capital arm, utilizing different project screening criteria, having a direct reporting line between the innovation team and the CEO and setting up daughter companies in competition with the main business.

CREATE A CULTURE OF FLEXIBILITY AND CHANGE

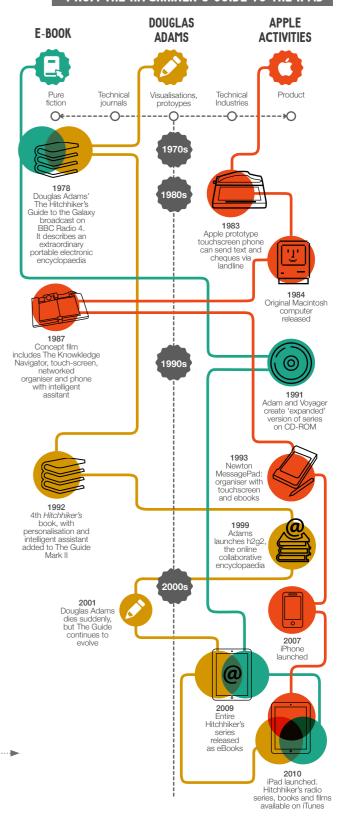
Ultimately, sustainability pressures will drive fundamental change in companies: change is an uncomfortable process and successfully navigating it requires flexibility. However, long-term resilience benefits from a healthy appetite to amend strategy and adapt to a changing business environment.

"We need to put systems and processes in place to earlier identify, monitor and, if required, adapt our strategy", Toyota.

A less ambiguous and much more easily controlled space is the setting of sustainability standards for existing products. This is not mutually exclusive to strategic change, and companies have shown themselves to be comfortable with contradictions that might result from such a dual-purpose approach: "It is absolutely fine to be working rigidly around setting sustainability standards for your existing products. But it is equally okay to be looking at exploring new opportunities for what the products of tomorrow might be. Even if these products might fall outside of the constraints of the standards you are setting today", Marks & Spencer.

MAKING THE EBOOK

FROM THE HITCHHIKER'S GUIDE TO THE IPAD













COLLABORATION OUTSIDE OF A SINGLE SECTOR

That collaboration is required to address sustainability challenges is practically the mantra of the most forward-thinking corporate actors: "The future is very much around an issue-based platform: access to education, energy, nutrition, or water – these are all systemic issues", Accenture Development Partnerships (ADP). Openness of company boundaries is key to accelerating and scaling up necessary action. Royal DSM is working with the systemic nature of sustainability challenges to both encourage collaboration and maintain focus on the commercialization of product and service ideas – creating criteria to rate capital expenditure against sustainability factors.

EXPERIMENTATION BENEFITS FROM PROFIT PATIENCE

Successful experimentation is comfortable with a lack of a clear economic business case. Toyota freely admits that if the company had focused solely on the successful market introduction of the Prius, on "the short term profit, we would have never got there." Proctor and Gamble took a team outside their known business context to highlight sustainability challenges and several experimental ideas emerged. One of the ideas to be developed was approved with executive understanding that profitability did not have to be an explicit consideration in the early stages of bringing the idea closer to commercialisation. The fact that the innovation team had the luxury of "profit patience" was a key factor in their ability to push the idea forward "because it's totally new territory".



FAILURE IS PART OF EXPERIMENTATION AND NOT TO BE FEARED

More common in some cultures than others, failure to commercialize product and service ideas outside business as usual can be seen as a set-back as opposed to a springboard into future projects and activities. This is acknowledged, but also changing:

"It won't be that everybody goes away for six months and comes back with an idea like M-Pesa, but one in ten, one in fifty, one in a hundred might. Actually, frankly, if one in a hundred do it, that would still be brilliant, right?" ADP

This being the case, the remaining radical ideas that will not be executed should still be capitalized on as a learning opportunity, to maximize the lessons gained from the experience. As pointed out in a 2008 Nesta policy briefing on social innovation, 'Innovation involves risk... The value of experiments should be judged by the lessons that resulted – from success or failure.' ⁶





⁶ Nesta (2008). Policy Briefing, Social Innovation: New approaches to transforming public services. p.4







COLLABORATION BEYOND THE USUAL SUSPECTS

Futures consistently reiterates the need to collaborate in new ways. The challenges are complex, interconnected, systemic: addressing them is beyond the scope of any single actor. As a result, acting alone limits the impact one company or sector can have. Transformation requires collaboration within sectors, across sectors and value chains, beyond the business community and most likely with some unexpected partners too. Ultimately, searching for, developing and commercializing radical ideas will require a new openness of company boundaries.



NEW PARTNERSHIPS

Collaborating in non-competitive and unexpected areas may be the crucial component to uncovering business solutions that enable and inspire more sustainable lifestyles. Integrating various products and services from companies in different sectors could link up different lifestyle elements, resulting in a more sustainable solution that is convenient and affordable for individuals. Providing a more attractive 'package' to customers could actually improve competitiveness. It could lead to new revenue sharing models as a result of new customer value propositions and thus a financially sustainable proposition where one did not exist before. For instance, 'MyEnergi Lifestyle', an unlikely partnership between Eaton, Ford, Sunpower, Whirlpool and others, enabled consumers to conveniently reduce their carbon footprint, energy use and home electricity bills.

Novozymes sees searching for and experimenting with new partners as crucial in the quest to reach its future vision of the bioeconomy. Its innovation teams are looking through new search strategies and engaging with do-it-yourself communities and start-ups to develop new technologies and solutions.

Although these more open-source partnerships are not always in directly strategic areas, they are considered hugely beneficial in forwarding knowledge and helping to build the business ecosystem around Novozymes' products, both now and for the future. Building a group of partners with common interests reveals co-benefits and accelerates action and progress towards its vision far more effectively than if the company attempted to act on its own.

ABOUT THE VIDEO:

Imagine if... Amazon looked beyond their immediate business offer to truly lead in the space of drone business models? What if they collaborated with urban farmers to deliver local food in the right quantities and at the times needed, cutting emissions, congestion and waste!

VIDEO FROM: https://youtu.be/MXo_d6tNWuY

COLLABORATIVE FORESIGHT

Combining one company's unique processes and culture with another's particular perspective, can challenge existing frames and bring in new ideas. The imaginary and unthreatening space that futures provides is easily shared to stimulate creative thinking. For example, Novozymes partnered with Henkel in a collaborative foresighting exercise, followed up by a collaborative online ideation tool to support the process, extending it beyond geographical and cultural boundaries.

The crowd-sourced event (exploring residential lighting in 2025) allowed both companies and participants to share perspectives, providing all involved with new insights into future lighting needs, whilst learning about the process of using collaborative digital approaches to lead targeted mass discussions about the future.

Such exercises bring even more value when directly aligned with strategy. In one scenario building exercise, PepsiCo invited farmers, suppliers and engaged employees from various sections of the supply chain to include their perspectives and input. The result was a better-informed, more holistic supply chain strategy that would support future resilience. Furthermore, it encouraged and introduced suppliers to thinking about the future in new ways, whilst supporting them in using futures techniques.











ENGAGING OUTSIDE THE CORPORATE COMFORT ZONE

Looking outside of the corporate sector and collaborating with governments and civil society may in fact lead to more 'transformative scenario planning'. This was shown in the famous Mont Fleur scenario exercise in 1991, which developed potential stories of how South Africa could emerge from the post-apartheid transition. The process included a broad range of groups from politicians to business people, academics to activists, all with hugely different opinions, hopes and fears. But by bringing such people together, enabling dialogue and seeing the world from the different points of view, the conflicting sides produced four shared, stark storylines of potential future outcomes. Disseminated to the public via newspapers and a short film, the stories provided prophetic warnings as well as a vision of a better future: ultimately it is thought to have enabled a complex social system to transform and peacefully move forward. This demonstrates that creating and using scenario narratives can aid more fruitful conversations that might otherwise be avoided.

A further example of collaborative stakeholder engagement to tackle large scale future visions can be found in JUCCCE's 'China Dream' project, which has attempted to reimagine prosperity by telling a different story for the future of China. It aims to 'bake' sustainable habits and values into the norms of China's growing consumer class.

Engaging with a range of stakeholders allows companies to initiate more open and inclusive conversations, informing and influencing external debate around the shape of the future. Furthermore a broader group of stakeholders is better placed to encourage longer-term thinking in policy. "Once you spot a long-term trend that is important but that you may be challenged to meet because of short-term business needs, if you're willing to step a bit outside your comfort zones and take a leadership role, government and regulation can have a very positive role to play." BT

The landmark 2014 New York Declaration on Forests, transforming the playing field with regard to sustainable sourcing of key agricultural commodities such as palm oil, is one demonstration of what can happen when companies come together around a common

challenge, broadening out the group of stakeholders they engage with across value chains, civil society and government. At a more local level, the Mayor of Seoul, Republic of Korea, opened up decision-making on the city's investments to stakeholders and the public, particularly in the space of social innovation. This reveals the ability of collaboration to encourage engagement in the pursuit of a mutually-created future. As Mayor Park Won-Soon says in his 2013 Stanford Social Innovation Review article (*Forging Ahead with Cross-Sector Innovations*), "the time has come for us to pinpoint the competences of each sector and strategically use them to improve the well-being of all citizens".















KEY CHALLENGES

It is clear futures can bring many benefits to companies; from disrupting entrenched assumptions, to providing clear goals to improving decision-making capabilities.

However, those pushing the boundaries, thinking creatively in the long term and translating it into action, can face a number of challenges. In order to use futures effectively, we need to be aware of the challenges so that we can reduce or mitigate their impact.

LONG VS SHORT-TERM TENSIONS

Currently there are few immediate rewards for long-term thinking, making the business case for engaging in futures potentially elusive and intangible. Companies identified a tension and need to find the balance between short- and medium-term demands with the longer term. Short-term daily pressures are rife: managers and investors expect returns to achieve their quarterly or annual targets, and customers demand good service and their needs to be met today, not in the future. This means it can be hard to see beyond the constraints created by everyday activities and demands. This needs to be overcome with longer-term thinking that is encouraged or rewarded, since ultimately planning with foresight should lead to fewer short-term issues.











IMPLEMENTATION

Turning foresight and ideas revealed by futures activities into a material outcome can be complex, potentially risky, and with many points of possible breakdown. Valuable results are reliant on systematic processes being in place and leadership from top management. The companies who are achieving the most from futures have institutionalized the process, using and returning to the work regularly as a key strand that feeds into and informs decisions at all levels of the company. The exact pathways of how to turn visions and ideas outside the current system into reality are still uncertain, with many barriers still in place. There is certainly a role for collaboration and experimentation to uncover and scale up necessary action, which is briefly explored in the experimentation section of this report. The WBCSD's Sustainable Lifestyles cluster is exploring this in greater depth, working with members to understand exactly where and how more transformational offerings could be successfully implemented.

TERMINOLOGY

The fact the word 'futures' is used for short-, medium- and long-term futures and refers to a variety of different outcomes, can create confusion. These interchangeable and sometimes fuzzy terms are a key challenge, particularly since misconceptions and misunderstandings can fuel scepticism and undermine the true value of futures thinking. Furthermore, most companies do not have a designated team responsible for futures work, which can lead to a breakdown in the process. Wherever it sits within the organization, it should be clear whose responsibility it is to lead on futures work. Engaging employees across the organization will ensure its impact filters through.

COLLABORATION

Collaborating with totally new, unexpected partners and across sectors may feel uncomfortable to many and requires strong relationship- and consensus-building skills. Companies can be protective of knowledge and strategies and prefer to keep closed boundaries. However, if companies are to be successful in the long-term, collaboration will be crucial to tackle the increasing complexity of the future and central to enhancing offerings to evermore demanding customers.

CHANGE

Change, particularly more transformational, radical change, is difficult and uncomfortable. Resistance is common: for some it is easier not to search for change but instead look for answers that validate current action. Rather than being afraid of unexpected conclusions, managers should highlight the opportunities associated with boldly pushing forward new action. Change is always occurring and therefore in order to be successful, companies must constantly be adapting. Human resources teams need to develop leadership, and encourage those with vision as well as those charged with operating within the status quo.

INTERCONNECTED FACTORS

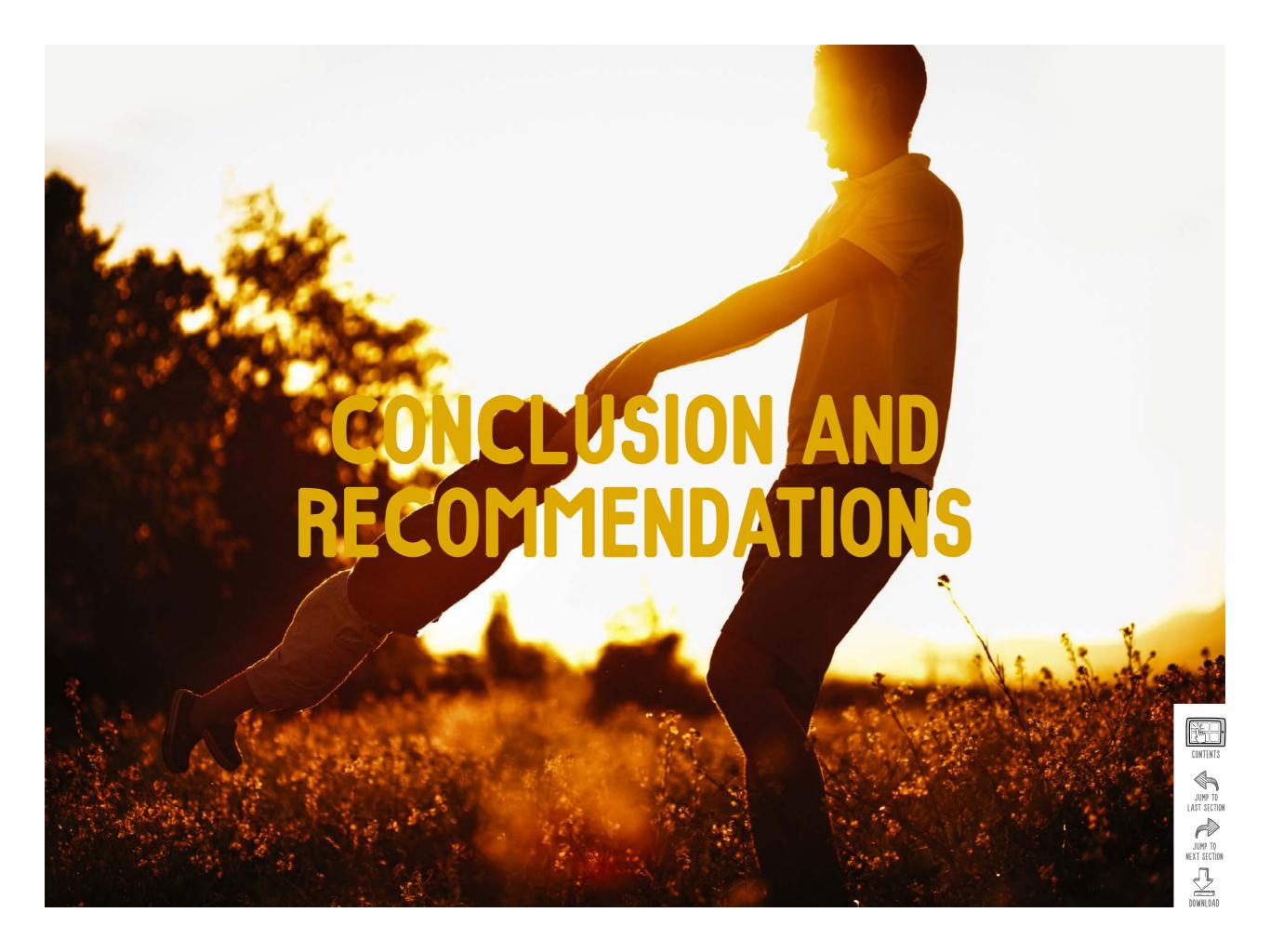
Futures is just one element of a complex web of many processes and capabilities that are essential to the agility a successful forward-thinking company draws upon. While Futures is important, it cannot be viewed in isolation, and many other elements, such as strong leadership, innovation, flexibility and good customer relations, will be crucial for any company seeking to discover, define, influence, inspire and embed truly transformational change.













This report explores the role futures can play in searching for and leading more transformative initiatives. When companies hold well-embedded sustainability ambitions, futures thinking can feed into strategic decision-making and start to push the boundaries of what we believe is possible.

Futures, explored in depth, for example through immersion activities, can disrupt current mind-sets and encourage more imaginative robust thinking that leads away from business as usual and into new territory. It forces us to consider our deeply entrenched assumptions, increasing our ability to make our organizations more flexible and resilient.

Futures provides a safe space to instigate unfamiliar conversations, develop decision-making capabilities and test future innovations and strategies. Futures can support experimentation mechanisms that assist the development of transformational offerings into commercially viable business solutions.

There is an urgent and pressing need to move beyond incremental change if we are to enable more sustainable lifestyles, if we are to move towards a world where 9 billion people can live well, within planetary boundaries. Many challenges and barriers remain: companies must be open to discussion, exploration and engagement – identifying opportunities, and addressing and overcoming systemic roadblocks.

This change requires all companies to be bolder in both their thoughts and actions, but the leaders are those that jump onto transformation early, defining the path as opposed to following the path. Leadership can be lonely, uncertain and unquestionably risky, but through exploring futures, experimentation and collaboration, these risks can be reduced, turning an unknown and uncertain future into one of sustainable business opportunities.









RECOMMENDATIONS



- Deprive the companies should reconsider the role of futures beyond a traditional, largely business as usual, management tool, to explore its potential in driving their sustainability and business development agendas. Seeing beyond the macro-level view to explore more everyday perspectives, for example through role-playing, can stimulate new thinking and guide more radical innovation and strategic planning, as well as protect the company from increasing risks and uncertainty.
- Companies should consider producing normative, desired visions of the future, relevant to their own business offering and internal culture. They act as powerful tools to encourage and envision necessary changes and provide a story that can motivate new aspirations and behaviour across a society in which the company continues to play a positive role. Existing future visions (e.g. Vision 2050) can be used to provide a broad framework and a springboard for a more specific company vision that includes a diversity of ideas in a context appropriate to the business.

- Fostering a culture of longer-term thinking within the organization is important. In particular, senior executives and managers should be involved in futures exercises and must be a driving force behind the process.
- e Futures work needs to be clearly communicated across the organization, ensuring that employees are educated in its role and use. Making it a more participatory and systematic process can develop understanding, build up a range of capabilities among employees and reduce potential breakdown in the implementation of initiatives. Making futures and sustainability more relevant to individuals' roles ensures that resulting actions are more successfully driven forward.
- Thinking-time and -space, both mental and physical, should be dedicated to futures work, to stimulate deeper exploration and ensure that the future of the organization receives adequate attention away from immediate everyday activities.

- Internal and external collaboration and engagement should be fostered to develop shared visions and new partnerships that can cross-fertilize ideas and scale up the rate of transformational change.
- Innovation processes need to support experimentation: patience in the demonstration of an economic business case enables newer territory to be explored. Failure must be seen as necessary and inevitable, and provides important learning opportunities in the quest for transformation.









ABOUT THE WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (WBCSD):

The World Business Council for Sustainable Development (WBCSD), a CEO-led organization of some 200 forward-thinking global companies, is committed to galvanizing the global business community to create a sustainable future for business, society and the environment. Together with its members, the council applies its respected thought leadership and effective advocacy to generate constructive solutions and take shared action. Leveraging its strong relationships with stakeholders as the leading advocate for business, the council helps drive debate and policy change in favour of sustainable development solutions.

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DISCLAIMER:

This publication is released in the name of the World Business Council for Sustainable Development (WBCSD). This document is the result of a collaborative effort between WBCSD and the organisations that were interviewed for the guide. All interviewees reviewed their own inputs, but this does not mean that every organisation agrees with every word.



ABOUT THE VIDEO:

The frontier is everywhere. What happens when a cosmologist thinks about the future? Carl Sagan believed big: in his opinion, no longer bounded by this planet's atmosphere, future generations will be able to look back from the various corners of the solar system, unified by their common heritage as descendants of Earth.

VIDEO FROM: https://youtu.be/oY59wZdCDo0



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