PART I

PREPARATION FOR THE GLOBAL REALITY RACE

Destination: Australia

In Part I you will be introduced to the key principle of transformational innovation—innovation that is purpose-driven, sustainable and situational, and based on real needs.

Key challenges addressed:

- *How to prepare for the purpose-driven innovation process (chapter 1).*
- *How to learn to see issues from multiple perspectives (chapter 2).*
- *How to develop a deep understanding of real innovation needs through authentic empathy (chapter 3).*
- *How to balance the paradoxes of purpose at each stage of the innovation journey (chapter 4).*

1

THE AMAZING INNOVATION RACE

Who wins, who loses, who gets eliminated— and why we need to change the game

Welcome to the global reality race. In this chapter we start the adventure by questioning the typical assumptions about innovation and proposing the need for a new paradigm that will propel us forward into the future.

This chapter will help you to:

- *examine the concept of the 'innovation race' and the impact on individuals and organisations*
- *identify how strategic your innovation focus is*
- *explore the need for a clear sense of purpose and connected process in innovation*
- *consider the benefits of proactive and sustainable innovation*
- *appreciate the importance of purpose-driven innovation for greater social responsibility and environmental sustainability*
- *understand the elements of transformational innovation.*

Key challenge: How to prepare for the purpose-driven innovation process

Back in 1985, when hairstyles were boofy and TV was serious business, a television camera zoomed in on a veteran Australian journalist as he stood in the middle of the brutally hot North Australian desert. On one side of him stood a team of highly trained SAS soldiers (an elite military special operations force) in full combat gear. On the other side was a group of traditionally (lightly) dressed Australian Aboriginals. The challenge was for the two teams to race against each other to a set destination. TV cameras would follow each team every step of the way, the winners demonstrating

their superior survival skills in the punishing conditions. *The Hunting Party* was being billed as a major TV event and expectations were high.[1] It would be one of the first 'reality TV' programs ever produced.

The contrast between the two groups was striking. The disparity in their clothing stood out, as did the fact that the SAS were significantly larger and more muscular. The soldiers were highly trained, exuded confidence and determination, and could draw on the latest technologies. The Indigenous Australians, on the other hand, had survived the desert conditions for thousands of years (we now know it has been 40 000 years or more) and were quite capable of looking after themselves in the inhospitable outback. They had what you might call the home town advantage.

The temperature in the Northern Australian bush can soar to 50 degrees Celsius, hot enough to fry an egg on a sun-baked stone. The second-driest continent in the world (after its southern neighbour Antarctica), almost 50 per cent of Australia receives less than 25 centimetres of rainfall a year. Desert consumes 44 per cent of the land mass, covering 2.3 million square kilometres. This vast, arid wilderness presents one of the most isolated and difficult environments on earth for flora and fauna, especially humans. Exposure to such high temperatures can threaten vital organs such as the brain and the kidneys and ultimately cause the body simply to shut down. So for most of us it is not only dangerous to be out there alone but can easily become downright deadly.

We can look back to our own potentially life-threatening personal experience with the Australian desert. In our younger years, when we were relatively naïve about the dangers, we had decided to take the ultimate road trip challenge and traverse the country in our old Holden Commodore station wagon. We planned on completing the 4000 km crossing in just three days. We thought we were ready for the challenge, but nothing can prepare you for the vast stretches of road with no more than a scattering of stones and scrubby bushes pockmarking the otherwise flat and featureless *Mad Max*–like wasteland from horizon to horizon. The Nullarbor Plain — from the Latin *nullus* (no) *arbor* (trees) — is a huge stretch of arid desert that sweeps for more than 1100 km at its widest point and covers an area of 200 000 square kilometres. We imagined being stuck out there with no help in sight, and when the air conditioning broke down we thought we might die there. If we kept the windows closed it was like being trapped in a rapid bake oven. But putting the windows down was worse: then it was like being entombed in a fan-forced rapid bake oven.

After a little experimenting, we came up with the idea of hanging a wet towel over the open window. This cooled the wind a little as it passed through the towel, and provided some relief from the constant heat and

dust. It took about 10 minutes for the towel to dry out completely, so we had to keep replenishing our water supply and constantly rehydrating the towel, but as a makeshift solution it was not bad. In a small way, we had overcome a survival challenge that allowed us to press on with the journey. The experience gave us a new appreciation of what it could mean to survive in this extreme environment.

Technology vs tradition

In stark contrast to our own paltry challenge, the Aboriginal people had survived this environment for tens of thousands of years with only the most basic technology. Yet the SAS-trained men had all the benefits of modern technological and scientific advances, so they also had clear advantages.

When the race began, the SAS were quickly off and running. On the other side, the Indigenous Australians started ambling along calmly, apparently unconcerned by any pressure to win. The theme music was pumping and the foot cameras were positioned in the centre of the group, set rolling to appear as if they were being swept along for the ride at a cracking pace. Yet there was no real race. The Aboriginal team were clearly not interested in the competitive aspect of the challenge. Was it going to become a hare-and-tortoise scenario, we wondered, or an easy win for the SAS? The camera crews struggled to bring out the drama, but post production would have had meagre pickings to work from when trying to pull a dramatic story from the footage.

After a great deal of build-up and advertising, it seemed there was to be no real story. Only a short time into the race, having not wandered far from the start line, the Aboriginal group found a watering hole (a billabong) they liked and decided to stop right there. They had reached a good position and had no incentive to go further. They simply could not see the *purpose* of a race for the sake of a race. Their actions actually changed the whole game, and the event that could have been an original *Amazing Race* was over barely before it had begun. The show flashed across our TV screens, soon to be forgotten, but the lessons have stayed with us ever since.

When you think about it, this outcome has profound implications for the ways we think about progress and innovation. We were all initially glued to our screens in the hope of witnessing a decisive showdown between the state-of-the-art, tech-savvy, trained and tooled-up model on one side and the practical wisdom and experience built up over many generations on the other. The same provocative tension lies behind the concept of what we call 'the innovation race'. We have come to assume that progress through innovation is a race, and that the most technologically advanced will 'win', but is that necessarily the best or only way to survive and progress?

In our everyday environments we all face harsh challenges as we try to reach targets and meet objectives. Many of us are drawn insatiably to the latest technological fix, convinced that it will give us the competitive advantage. Some of us will also recognise the value of learning from the generations who have gone before us. The two don't need to be mutually exclusive. Perhaps we need to start to look deeper into the concept of the innovation race to find the right balance.

Perhaps we need to start thinking about who is best equipped to survive — not just in technological terms, but more importantly in terms of knowledge and wisdom. We also need to think about where we're going, and the purpose of the journey.

Before digging deeper into these questions, let's further consider this concept of a race.

Addicted to adrenaline

Most of us love to watch a race. We love to see winners, losers, the eliminations. We like to observe others as they go through the highs and lows of a hard-fought competition. The designers of *The Hunting Party* and of many reality TV shows since have relied heavily on this innate competitive drive. Both the contestants and the viewers are motivated by the idea of winning, getting across the finish line first. Ultimately some will be successful and others will fail, according to the unquestioned assumptions behind these shows.

Arguably the concept of the 'innovation race' has similar foundations. Many people and organisations and systems view the world as a competitive race, with innovation being the key factor in helping us to accelerate forward. Those keen to 'advance' and 'get ahead' can be prone to the competitive drive, but does this competitiveness come at a cost?

A competitive focus requires additional mental resources that can impact decision making and opportunities for cooperation, and 'drain the brain'.[2] The factors that have been found to fuel competitive arousal are all prominent elements in modern society: head-to-head rivalry, time pressure and a bright spotlight to illuminate the competition.[3] The 'desire to win' is heightened when these factors collide, as they do in reality TV game shows. The emotional volatility in decision making can in turn lead to compelling TV viewing. When we feel and enjoy this pressure to compete vicariously from the safety of our armchairs, we feed this inherent need to compete without being impacted by the consequences.

There is nothing essentially good or evil about the concept of competition in itself, and it can have both benefits and costs. Competition can be a motivating drive to assist with achieving goals, particularly when

it is internally focused on improving oneself, yet it can also become a destructive force if not managed effectively. The line can be crossed when there is unchecked competition for the sake of beating others (something we will discuss more in Part II). It will therefore be important to consider the different types of competition and potential outcomes as we consider the implications of the race to innovate.

A modern dictionary definition of competition usually refers to outperforming others and/or 'winning', but the origins of the word are actually quite different. The word itself, from the Latin *competere,* originally meant 'to strive together *(com)* to seek *(petere)* some common interest'—that is, to achieve a *mutually beneficial outcome*. Perhaps this is a first clue to how we can start to shift our focus.

In this book we will take you on a virtual race around the world, looking at different cultures, organisations and individuals in order to gain more clues on how this race to compete through innovation has fostered or impeded human progress, and how we might better navigate these challenges. It has taken us 30 years of travel, from remote tribal villages through to the executive offices of large multinationals, to try to get a feel for where we are going and why. In our travels we've encountered cultures that appear to have been left behind in the race and others that appear to be way out in front. At historical sites we've explored the remnants of ancient civilisations that in their time appeared to be race leaders, at least for a while. Think of how the Egyptian, Greek, Aztec and Roman empires expanded in leaps and bounds, becoming the invincible 'winners' of their age, before eventually being reduced to ruins. At the other extreme are the cultures, such as the Aboriginal Australians, who until relatively recently have maintained a stable hunter-gatherer, semi-nomadic way of life isolated from the rest of the world and its competitive impulses.

The initial question that confronted us as we travelled was: *How* have some countries and cultures managed to 'get ahead'? But the further we travelled and the more research we did, the more evident it became that the race would never be a simple 'two-pony' competitive run to a specified finish. So the defining question started to change to: *Why* is it that some societies, cultures and organisations seem to have raced ahead (at least technologically) while others appear to have been 'left behind', *and what does that mean*? Which led to deeper questions, such as: What is this race? Should we be in a race at all? And if so, what should we race against? Instead of racing against each other, couldn't we strive to overcome climate change challenges or worldwide poverty together? We also began to wonder if there has been a defined start and will there be a clear finish to this race, what the rules are, who calls the shots … and ultimately whether this is the best way to measure successful progress.

This cognitive ambiguity is something you will need to learn to maintain as you read through the book. History has demonstrated again and again how those who harness *technological* innovation often race ahead *technologically* and those who don't can find themselves left behind or even 'eliminated'. In many such innovation races a win for one culture or organisation has come at the expense of others. Innovation has appeared to be a key factor in both the success and the demise of so many organisations and cultures, so can we adjust the terms of the race in a way that promotes the greater good?

Why do we need to innovate responsibly?

We believe strongly that these questions are worth pursuing, because innovation matters. A lot. Creative thinking is recognised as an essential work and life skill, and innovation is an essential business and development strategy. Creative thinking and innovation are critical for the survival not just of businesses but of the planet.

Creative thinking, for starters, has been found to be related to a number of important life factors, including: more flexibility, better problem solving skills, better relationships, more optimism, higher achievement, higher retention in education programs, higher self-esteem, and less stress.[4] Creativity and innovation are clearly currently popular topics as people come to realise the value of investing in them. Many people who recognise the importance of creative thinking actively focus on building their critical and creative thinking skills through programs such as Lumosity (with some 35 million users), and more than 100 000 books on creativity and innovation have been listed on Amazon.com.

At the organisation level, Bain and Company have found that the top companies in 450 companies surveyed on measures of innovation had better employee engagement, better productivity (up to 50 per cent more), and better decision-making effectiveness.[5] Bain's specific assessment of corporate decision-making effectiveness showed that those in the top quartile were better (in terms of speed, effort involved, quality and yield) at both making and executing decisions. Better decision making, in turn, impacted strategy, project selection and organisational alignment. A survey of 1500 CEOs by IBM (that covered 60 countries and more than 33 different industries) has also revealed that CEOs believe creative thinking is *the* most important leadership quality needed for the future, and innovation is a critical organizational capability.[6] In fact 81 per cent of the CEOs surveyed rated innovation as a 'crucial capability'.

Organisations have been found to thrive when they are innovative, and growth typically follows.[7] Companies that focus on innovation usually do

well financially. The top 25 per cent of the most innovative companies grow more than twice as fast as the others (13 per cent growth compared with 5 per cent growth). When compounded over five years, this amounts to almost three times growth.

Companies that focus on purpose and sustainability also outperform control groups on a number of different financial measures over time – according to one study by almost 70%.[8] In another study, a clear and well-communicated corporate purpose was found to improve financial performance by 17%.[9] So imagine the potential when you combine a focus on innovation *with* purpose and sustainability. Economists estimate that 50 to 80 per cent of economic growth comes from innovation and new knowledge, and that innovation can be an important factor in dealing *with* social and global challenges.[10] 'Great companies work to make money, of course, but in their choices of how to do so … they invest in the future while being aware of the need to build people and society,' says Rosabeth Moss Kanter, Harvard Business School professor and director of the Harvard Advanced Leadership Initiative.[11]

Most businesses now include the term 'innovation' in their values or mission statement (or both) as they recognize the strategic value of remaining relevant and fresh. Innovation undoubtedly assists with survival in the race, new knowledge and ideas contributing to the ability to find and deal with challenges. Where positive values and principles are used to guide the innovation strategy, and where a constructive culture is created to support *sustainable* innovation, organisations are able to achieve the ultimate goal of both purpose *and* profit.[12]

The big question here is not whether creative thinking and innovation are important, as they clearly are; it is whether we are innovating in the best way and for the best reasons. Are we innovating to find the best solutions for dealing with the world's greatest challenges, or are we innovating for the sake of innovating? In the chapters that follow we will show that innovating with purpose towards a positive outcome, rather than simply for the sake of it, makes a huge difference in outcome on many levels, right down to sustained performance.

Let's now take a step back and re-evaluate what we are doing and why we are doing it, to ensure we have the best possible strategy going forward.

Keeping pace with the race

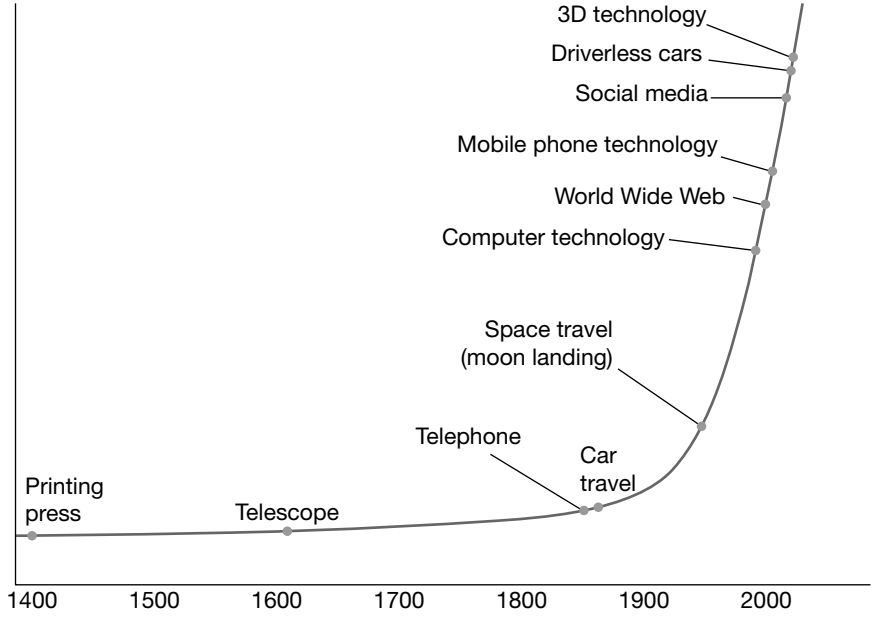
Remember Aesop's Fables, and in particular the story of the tortoise and the hare, which we mentioned in relation to *The Hunting Party*? In the best-known version of this story a slow-moving tortoise challenges a hare to a

race after being constantly ridiculed by him. The expectation is of course that the hare will win easily. The twist in the tale is that the overconfident hare convinces himself he is so far ahead he can afford to take a nap, and while he sleeps the tortoise overtakes him and crosses the finish line first.

Most people assume this is a cautionary tale against hubris or about the dangers of a focus on speed, with the motto 'slow and steady wins the race'. Perhaps it's also a source for the popular contemporary saying 'if you snooze you lose'. Both lessons are worth reflecting on in this context. Speed can be important as you need to remain vigilant and in tune with the fast-changing economic and social environment to be ready to face the challenges, but strategic focus is just as important — if not more.

Let's start with thinking about the pace of the 'innovation race'. Innovation has been studied extensively since economist and political scientist Joseph Schumpeter first suggested its critical role for business in the 1930s.[13] One thing that has become apparent over those years of study is that the innovation imperative in the technology sector is rapidly increasing, as the figure 'Accelerating pace of technological innovation' reveals. This graph seems to indicate that need to innovate now more than ever, and we will need to continue to innovate faster and faster in order to survive — hence the common understanding of innovation as a race.

Accelerating pace of technological innovation



As an interesting side note, some anecdotal research has found that the biggest cities have the fastest pace of life and rely on the fastest rates of innovation, which it appears is reflected by the speed people walk in that city.[14] It seems that the average walking pace has increased by up to 30 per cent over the past few decades, as is especially evident in some of the cities that are innovating the fastest. For example, people have been found to walk the fastest (18 metres in 10.55 seconds) in Singapore, which often rates as the fastest innovating city in the world according to standard innovation measures. Perhaps we're feeling that sense of urgency so strongly that we're unconsciously picking up our own pace to try to keep up!

One of the challenges is that western economic systems are typically built on the imperative of economic growth and rapid progress. The treadmill has an automatic speed-up setting that can't be changed, because capitalism requires constantly evolving systems and structures to support it. Physicist Geoffrey West and his colleagues have identified some interesting principles from physics that help to explain this economic phenomenon.[15] For example, they have found that the open cycles of growth that characterise capitalism demand exponential rates of innovation merely to stay afloat and avoid collapse. West compares it to a clock ticking ever faster, which demands ever faster rates of innovation simply to keep up.

Disruptors and breakthroughs

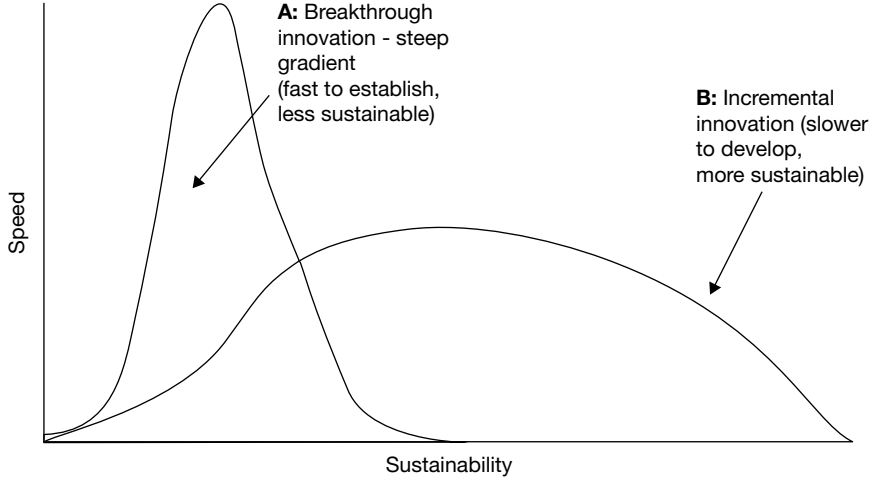
Let's consider what 'the innovation race' has led to in the technology sector, where the realities are harsh. Only one out of the top five tech companies in 1995, companies that were established at the time of the introduction of the internet (the 'hares', if you like), remain in the technological innovation race today.[16] What's more, 14 of the world's 15 most valuable technology brands have disappeared during the two decades since 1995.[17] With the notable exception of Apple, all have been rendered obsolete by more agile competitors. Many of the top companies researched in Tom Peters' and Robert H. Waterman's book *In Search of Excellence* (1982) and in Jim Collins' book *Good to Great* (2001) have not lasted the distance. Good companies can fail easily when confronted by market and technological change — even the kinds of companies that are known for their ability to innovate and execute.[18] There is no permanent immunity in real business life, and it's easy to lose the lead.

When we had the opportunity to work with a number of properties in the award-winning Four Seasons hotel group, a VP from the company

(whose previous property had won the best hotel award three years in a row under his management) shared with us that 'getting to number one was easy compared with maintaining that position.' Take the problem of 'premium position captivity' as an example. This expression refers to the way a company can be held back from the quick and nimble responses of competitors. 'A company that solidly occupies a premium market position remains insulated longer than its competitors against evolution in the external environment. It has less reason to doubt its business model, which has historically provided a competitive advantage, and once it perceives the crisis, it changes too little too late.'[19] A study of Fortune 100 and Global 100 companies between 1955 and 2006 found that almost 90 per cent went through a stall phase at some stage, and fewer than half of those were able to recover sufficiently. Few of the companies that stalled for more than 10 years recovered at all.[20]

Survival in the competitive technological innovation race, it has been found, often depends on radical breakthrough innovations rather than slow evolutionary adaptations. This is apparent in the figure 'Typical trajectory of breakthrough vs. incremental innovations'. And these disruptive innovations are changing the game. Unexpected rapid innovations are like wild cards thrown into the mix that catch everyone off guard. The clear message for today seems to be that you must be proactive and anticipate future trends to generate better, faster solutions, or risk being relegated to the back of the pack or even eliminated.

Typical trajectory of breakthrough vs. incremental innovations



In a Formula One race, if someone brings out a significantly new car, the benchmark is moved, the bar drastically raised.[21] The switch to mid-engine cars by Australian Jack Brabham in the 1960s, for example, led to a complete revolution to this type of car. In the late 1960s the introduction of aerofoils led to the dramatic recognition of the potential of aerodynamic downforce to increase cornering speeds, which again led to a new revolution. Throughout history countless technological transitions have dramatically impacted rates of development and established new benchmarks. Think about the switch from horse and buggy to motorcar, from typewriter to computer, from snail mail to email.

Disruptive and breakthrough innovations have emerged as a way of dealing with gaps, yet these forms of rapid innovation can be risky. Sometimes they are like a game of snakes and ladders: when you land in the wrong place you can find yourself sliding back to square one, having to start all over again. Discover a significant new innovation, on the other hand, and you can leap ahead of the competition and scale a fast-track ladder to the top in one swift move. This race generates both great opportunities and great risks, fast winners and losers.

Disruptive innovations, as defined by Harvard Business School innovation expert Clayton Christensen, enable nimble smaller players to leverage simple and inexpensive ideas and products at the bottom of the market in order to compete against the big players and established products.[22] This can help lead to more equality in innovation. Breakthrough innovation also involves a 'paradigm shift' to push the boundaries of science and technology in order to keep up with the rapid pace of change, which naturally brings risk and uncertainty.[23] Both of these types of innovation allow for a faster pace of progress and pave the way for 'changing the rules of the game', but there is still a long way to go.

Playing snakes and ladders: evolution or revolution?

The free-to-air and cable TV channels, for example, spent so much time competing against each other that they didn't even see their new competitors coming. By the time the streaming companies (following the Netflix model) hit the market the customer was begging for these sorts of flexible solutions, and the TV channels were left struggling, often reduced to back-to-back reality TV and sports programs.

Traditionally companies within industries have focused on competing against each other through sustained incremental innovation and haven't had to worry about anything outside their own particular world. This system can work as long as deep change is not needed. Disruptive innovation often emerges when an outsider enters a market and defies the established system. Entrant companies have been able to trial radically new ideas and methods by importing them from different industries and applying them in a new situation.

The sharing economy, which existed well before Uber and Airbnb popularised the concept, has become an increasingly popular means of ensuring everyone has access to the best ideas. Uber has been successful because the incumbent taxi system was inefficient, and possibly taxi companies didn't innovate because they thought they had a monopoly. Taxis ended up being viewed as expensive, inefficient, lacking a customer-friendly focus and, in some countries, blatantly overcharging. Endless phone queues and slow payments contributed to creating an environment in which customers would have done anything to find a better way to travel.

What these established companies failed to see was that customers will go ahead and innovate, with or without their approval, according to their needs. But rather than looking at Uber itself, it is important to consider the conditions that led to the innovation. It's the principle behind the innovative model of efficiency, rather than the company Uber itself, that should be considered. It is interesting to note that the concept of ride sharing has taken off most in countries where the taxi system is least efficient or most corrupt. Some of the few cities where taxis are not threatened by ride sharing, such as Singapore and Tokyo, already had an efficient and user-friendly system and managed to remain strong competitors. Interviews we've had with drivers in these cities have revealed that a taxi app (Grab) already existed that streamlined the customer experience, and the taxi companies have focused on raising their standard rather than playing the blame game and falling further behind.

This reminds us of a clever quote we have referred to many times in our workshops to help increase awareness of the need to identify the real needs behind development: Bill Gates has said, 'Banking is necessary, banks are not.' When you think about it, this simple but profound statement opens up a multitude of possibilities. The idea could be applied in any industry. In relation to transport, we might say that mobility (transport) is necessary, but cars as we know them today are not. In hospitality, accommodation is necessary, hotels as we know them today are not. Or how about, 'Communication is necessary, telcos as we know them today are not'?

(Think of how pro-democracy protesters in Hong Kong switched to using Bluetooth apps such as FireChat to communicate, completely bypassing the telcos and therefore avoiding government scrutiny.) Disruptive innovation is a wild card that leaves the concept of the 'innovation race' wide open: new rules and new players creating new opportunities.

The challenge is that, just as we need to move beyond the slower but more sustainable incremental innovations that help us to survive, eventually we are going to have to go beyond the sometimes haphazard breakthrough and disruptive innovations that are helping us to get ahead in the game. We need to progress to what we call *transformational innovation*: innovation that is fast enough to keep up with the rapid pace of change, yet is also meaningful and sustainable from a social, environmental and commercial perspective.

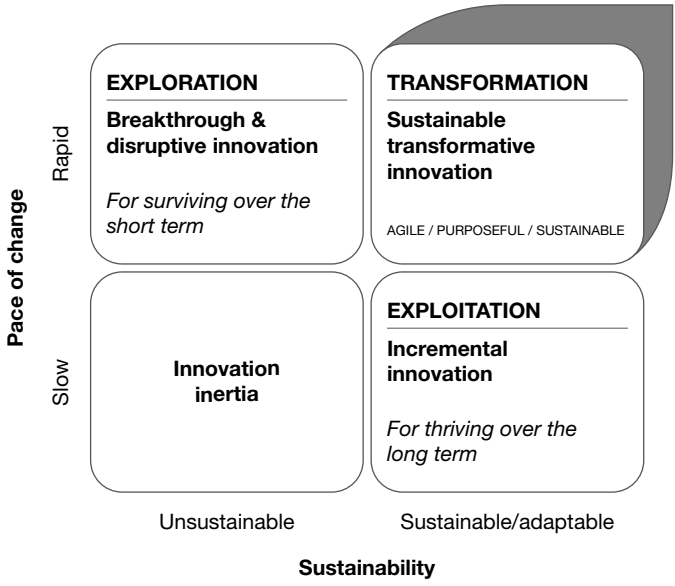
The first step in finding a purpose behind innovation is to start to think about how we can manage the race to ensure innovation is not only commercially viable but also sustainable on all levels for the long-term survival of all.

Transformational innovation: beyond exploration and exploitation

The connection between keeping up with the pace of change through speed *and* ensuring long-term sustainability through strategic focus has never been clearer. This is recognised by researchers as a key paradox in innovation. As stated earlier, typically there is a tension between the 'exploitation' functions of the organisation (maintaining current systems and processes) and the 'exploration' functions (prospecting for new concepts). 'Exploitation' in this context usually refers to innovating in small, incremental steps and is the more sustainable approach. 'Exploration' refers to creative thinking and breakthrough innovations and is the more fast-paced approach.[24]

Typically organisations will choose to focus on one *or* other approach, yet their future survival will depend on embracing the best elements of *both* approaches concurrently. This book will explore how that can be done most effectively. Certainly large organisations today are learning to separate innovation functions to cater for both needs, with the more established divisions focusing on the slower, incremental innovations, while leaner, startup-style divisions are set up to focus on radical innovations. Leaders recognise the need for this dual focus, and the importance of continuing to explore how this can be done most effectively, perhaps through taking it a step further and *synthesising* these functions. Our concept of transformational innovation (see figure overleaf) aims to help bridge that gap.

Transformational innovation



The *innovation inertia* quadrant in this figure refers to the situation where innovation fails both to keep up with the pace of change and at the same time to meet the sustainability criteria. Most organisations will at times drift into this mode, but they will have little chance of survival if they remain there too long. In the *transformation* quadrant, on the other hand, organisational leaders have their fingers on the pulse and are responding accordingly. They remain flexible and adaptable while at the same time ensuring their decisions are based on sustainable *principles* and *purpose* that will also lead to greater social responsibility and more environmental sustainability.

If left to their own devices, most organisations will move towards their preferred dominant tendency. Typically, new startups will thrive on the exploration of new ideas, while larger, more established companies will have become settled into maintaining and adjusting existing ideas and resources. Managing both positions simultaneously will bring the greatest success over the long run.

Balancing apparently competing and contradictory needs will be quite a stretch for many organisations, but if we don't start to think differently about innovation and take that leap, we risk the future of our organisations and social structures—and even, at the extreme, the very survival of the planet.

Bridging the innovation purpose gap

When our air-conditioner failed in the Australian outback our survival instinct led us to a small innovation. This incident had a significant implication for our thinking about the *purpose* of innovation and of the innovation race. Without realising it we had in fact created a simple water cooling system. Portable water-cooled units based on this concept have been produced as an alternative to air conditioning for many years. They are cheaper and therefore more accessible to poorer communities, and they are also more environmentally friendly (using 75 per cent less power than a conventional air-conditioner), which helps to solve a few challenges.

As the rapid growth in air conditioning threatens to exacerbate global warming (according to one estimate we could be using up to one trillion kilowatt-hours of electricity for air conditioning annually worldwide), developing low-energy alternatives for dealing with warm temperatures will become essential. Wind towers (being developed in Dubai), air pumped from underground tunnels (as used in India), water evaporation techniques (under development in Kuwait) and other solar-powered passive cooling projects are now emerging as viable options.

According to Darwin's famous 'survival of the fittest' evolutionary theory, innovation will most often arise from emerging needs. Yet today it has typically become something much more complicated than simply innovation for survival. Innovating beyond simple needs has become essential for commercial success. The shift from innovation based on *needs* to innovation based on *desires* has led to a significant change in the ways we innovate.

The shift from innovation based on *needs* to innovation based on *desires* has led to a significant change in the ways we innovate.

The most commercially successful companies are now those that push the boundaries in innovation, imagining and realising ideas that would never have occurred to most people, and thereby creating a new desire. Although products and services created in this way may be commercially successful, think about how they could actually be failing to meet the deeper needs, leading to what we will call an 'innovation purpose gap'.

A classic historical example of how desire can become an overriding passion and what impact it can have is the 'cargo cults' of the late 1800s and early 1900s, which demonstrated early dramatic shifts to consumerism in

traditional societies. When industrial nations came into contact with certain tribal societies, particularly in remote areas of the Pacific, the local people began to rely on and desire the new manufactured goods rich nations brought with them. Some of these objects, which they had never known or needed before, suddenly became highly coveted. In some cases this desire became so strong that a whole religion was built around the objects, with the planes, landing strips and radio equipment that brought the goods being reconstructed from local materials and worshipped as a magical source of the desired objects. 'Commodity fetishism', first identified by Marx back in 1867, persists in different forms today,[25] but a common theme is that out of context these objects were or are often totally useless.

Steve Jobs was a master at anticipating consumer appetites. Jobs, once described as 'the hippy high priest of consumer capitalism', had a genius for creating desires consumers didn't know they had, then successfully producing fabulous new products to satiate those desires.[26] What generally separated his approach to commodities from those idealised by the cargo cults is that he was able to develop products that were extraordinarily functional and useful to customers. Jobs created devices that not only looked great but that people came to rely on … and then to consider essential for them to survive. Imagine the contestants in the TV game show *The Amazing Race* hauling around a mountain of electronic devices (phones, radios, cameras, calculators, computers and so on), rather than a single slim, multi purpose mobile device that can suck data down from an imaginary cloud — that's how profound this shift became.

Henry Ford famously said, 'If I had asked people what they wanted, they would have said faster horses'. People often simply don't see the possibilities before a visionary creative innovator imagines and realises them. We need this sort of imaginative thinking to help identify and solve problems we can't always see — that is what thinking outside the box is all about. Mario D'Amico, formerly Chief Marketing Officer of Cirque du Soleil, has noted research showing that external restrictions often kill creativity. Where companies thrive on focused innovation, placing too much emphasis on what they traditionally think customers want can destroy a company's ability to be different. The most successful companies are successful because they push boundaries and do the unexpected.[27] This is the vital role imagination plays in the innovative process.

These days, rather than necessity being the mother of invention, invention has become the mother of necessity.[28] It's inventions that create blue ocean opportunities and become new fast-forward cards, enabling companies to progress to a premium position at the front of 'the race'. Yet there is a

line that is often crossed between creating a useful, purposeful benefit and wasting resources on a relatively useless, excessive investment.

Here is the key contradiction, as identified by Clayton Christensen in his landmark book *The Innovator's Dilemma*: 'When the best firms succeeded, they did so because they listened responsively to their customers and invested aggressively in the technology, products, and manufacturing capabilities that satisfied their customers' next-generation needs. But, paradoxically, when the best firms subsequently failed, it was for the same reasons — they listened responsively to their customers and invested aggressively in the technology, products, and manufacturing capabilities that satisfied their customers' next-generation needs. This is one of the innovator's dilemmas: Blindly following the maxim that good managers should keep close to their customers can sometimes be a fatal mistake.'[29]

Customers like to have a lot of choice, yet this can easily go too far. It's certainly nice to be able to choose from a range of different types of milk, but should we need to walk down whole supermarket aisles of milk to find the perfect option? Consumer watchdog group Choice has identified more than 80 different brands and types of milk on the Australian market.[30] Milk is essentially a natural product that comes more or less straight from the cow! Does this excessive choice fulfil a genuine need? Is this where innovation is taking us?

Psychologists recognise that we need to determine the line between the benefits of choice and excessive alternatives.[31] Too much choice, they believe, paradoxically leads to paralysis rather than liberation and creates a dangerous escalation of expectations. When we habitually compare what we get with what we expect, we often end up less satisfied than we would be if we had fewer options to choose from. Too much choice has also been linked to depression. As people's expectations increase, new desires go unsatisfied. Some choice is definitely nice, but it doesn't follow that a great deal more choice is helpful or necessary.[32]

The dark side of desire

Once we start to look behind the scenes of the creation of a new product, the image may quickly lose some of its brightness. Sleek and sexy products too often have a darker side. Many of the big IT companies, for example, have been identified as imposing harsh or unsafe factory conditions on their workers, employing child labour or failing to meet basic environmental standards. It has even been said that Steve Jobs' genius was partly due to his ability to 'elevate his products above ethical or environmental considerations in the minds of consumers'.[33]

Of 56 IT companies surveyed by one organisation, none had completely traced the production of their raw materials, which could include tin from Indonesia or cobalt from the Democratic Republic of Congo, both of which have been linked with child labour and dangerous mining conditions.[34] An earlier report by the same organisation had found that only 9 per cent of companies in the fashion industry had traced their suppliers to the raw materials supply chain level.[35] So if we believe it's important to act responsibly in the 'innovation race', we need to ask: At what cost have we been satisfying our own desires at the expense of integrity and sustainability? Our unprecedented access to information today means we can't claim ignorance.

Looking at the impact on the developing world. While technology is undoubtedly improving the lives of many people around the world, it becomes a problem when it is prioritised over more basic needs. Unfortunately ownership of TVs and mobile phones often seems to take precedence over more basic survival needs. One study found that almost 60 per cent of people living in Asia were subsisting on less than $2 a day, but the majority of them owned their own mobile phone.[36] A United Nations report has found that more people around the world now have mobile phones than have access to a flush toilet![37]

Perhaps it needs to be asked: Are we being driven to invent and consume at all costs, rather than according to genuine need or to serve a greater purpose? Increasing expectations based on growing aspirations are raising the bar higher and higher, faster and faster.

Do we really need purple ketchup or Crystal Pepsi? It may have reached the point, as the former CIO of Google and co-founder of ZestFinance Douglas Merrill has suggested, where we are 'innovating for innovation's sake', rather than to meet any real need.[38] This devotion to innovation has been described as a religion.[39] 'And what is *innovative*?' asked communications specialist Falguni Bhuta in 'Beyond Innovation for Innovation's Sake' on *The Holmes Report*. 'Is it innovative for innovation's sake or is it something that makes a difference to people's lives, their work?' If there are no objectives for the innovation, she says, organisations can end up spending a lot of money and not necessarily adding value.[40]

Perhaps it needs to be asked: Are we being driven to invent and consume at all costs, rather than according to genuine need or to serve a greater purpose?

By thinking about how innovation takes place, about the *why* and *what for* of innovation, we started

to develop the concept of transformational innovation. Transformational innovation is about changing the innovation culture to support sustainable and purpose-driven innovation over the long term. As we will discuss in chapter 6, incorporating into innovation a sense of purpose beyond just 'winning' offers major long-term benefits.

A recurring theme in this book relates back to the message from *The Hunting Party*: the Aboriginal team didn't compete in the TV race because they could not see any purpose in participating in it. Innovating for the sake of it can be seen as trying to grab the lead without purpose. Such an approach can so easily end up with a pyrrhic victory (that is, a victory that inflicts such a devastating toll on the victor that the costs negate any potential gain).

Sustainable innovation can come only from a strategic culture change that supports innovation at all levels. When there are deliberate systems and structures in place to support innovation, and when all people are inspired by deeper values and equipped to support the innovation process, change can be effective and rapid, and can be sustained over the long term. Innovation should not be an isolated, random event limited to the creation of new ideas and products. But as a part of a greater purpose and process, it can be transformational.

Changing the culture to change the game

We have had the privilege of working with a number of companies that have been aiming to bring this sense of purpose back into their organisation, and ultimately into the way they innovate. Through our targeted innovation workshops a major food company in Europe explored ideas around more sustainable food preparation solutions for developing countries. In California's Silicon Valley IT companies have increased community commitment and engagement. A tech company developed exoskeletons to help paralysed people to walk again. An innovation centre in Latin America has made a commitment to improving dental hygiene education in developing countries. A large consulting company in Asia has adopted a comprehensive corporate social responsibility program based on local community needs. We have spent time supporting a global pharmaceutical company in the US, Europe and Asia, and have heard first-hand about their desire to make health a priority in developing countries by making important medicines less expensive and more accessible. They are working towards the lofty goal of eradicating malaria.

On the other side, we have also been disturbed by our encounters with organisations that clearly favour profit over purpose, and fail to think through the implications of their innovations. We think of the soft drink company trying to find innovative ways to sell more of their sugary product into schools (to the obvious detriment of the children's nutrition). Or the tobacco company trying to work out how to get around strict government advertising restrictions to sell more of their deadly products.

In each of these cases we have been able to identify a deeper culture driving innovation decisions and actions, a culture that, on the one hand, actively engages and inspires employees to think about how they can contribute to improving the way we all live, and, on the other, revolves around the desire to make a profit at almost any cost. Of course every business needs to make a profit to survive as a commercial enterprise, but innovative thinking can make it possible to combine purpose *and* profit. Colgate Palmolive, for example, is a highly successful company with the most penetrating brand in the world (Colgate toothpaste), but it is also ranked in the top five ethical companies in the world.

In Part II we will delve deeper into when organisations innovate to achieve a higher purpose and when they are driven purely by profit and control—and the impact this has on employees internally, as well as on organisational performance in the long-term 'innovation race'. 3M, recently named the most ethical company for the second year in a row, stated: 'The commitment of our people to the highest ethical standard and to doing business the right way promotes trust with our customers and in the quality of our products. Furthermore, it gives us confidence to grow our business anywhere in the world.'[41] 3M credited their win to the collective action of their global workforce, from the top down. The company demonstrates how ethical practice and innovative leadership of collaborative teams can generate consistent business success. In the following chapters we will unpack these ideas and show how critical they are for innovation.

We will continue to address the need for sustainability on a number of levels: the cultural and economic sustainability of the organisation necessary for its long-term viability, along with the long-term sustainability of our planet. Once there is both sustainable development *and* exploratory growth there is a solid foundation for transformational innovation.

Roadblocks and fast-forward advantages

Imagine a new reality TV show, based on *The Amazing Race*, called 'The Amazing *Innovation* Race'. This program would be designed to make it possible for viewers to travel virtually to a range of different locations around

the world in order to learn about the impact of innovation. Viewers would also learn about the cultures and history of the locations they visit. Now imagine you have already been signed up as a participant!

Let's take this idea to the next level. As you set off, you discover that this version of the race is not about trying to *accumulate* the most or getting *the furthest ahead the fastest* as an individual or organisation. (Think of how many traditional games, such as Monopoly or Risk or Speed, centre on accumulation.) Instead, it is about trying to create the greatest *shared benefit* for all. How might that change your perspective on the race? We have pointed out that there are already competitors out there that are breaking the rules through the power of the *shared economy* and *collaborative consumption*, such as organisations that enable owners to rent out something when they are not using it. Well-known pioneers of this approach include Uber, Airbnb and SnapGoods (which focuses on high-end household items such as cameras). We will delve further into how these sorts of changes in approach to innovation will ultimately equalise the opportunities and change the game.

As in *The Amazing Race*, the reality show we are drawing some tongue-in-cheek parallels with, in the current competitive race there are winners and losers, eliminations and opportunities, pit stops and detours. We will see how some countries and cultures — and in parallel how some organisations — have been able to seize the 'fast-forward' advantage, while others have faced daunting 'roadblocks'. We will be looking out for 'route markers and information', the clues that will help us work out the way ahead for our generation as we navigate into the future.

To take it to another level again, think about the countries around the world participating in this race, some with the resources to acquire all the latest gear and the latest training, and others that seem to be heavily disadvantaged. Countries with a technological, economic and knowledge advantage can be expected to speed ahead on this current trajectory while others are left behind at the start line or struggle to stay in the race, or perhaps even choose to ignore or dismiss the very concept of the race (as did the Aboriginal team in *The Hunting Party*). The contextual device of an imaginary reality TV race adds another dimension to this study by highlighting in the rawest form some of the motivations and emotions that drive us to want to achieve.

To assist in dealing with both immediate challenges and future directions, this book will develop two parallel themes:

- **How to survive the current race:** Tools (for the realists!) to help your organisation keep up in the current innovation race and avoid elimination, and potentially even get ahead — in other words, ensure survival in the short term.

- **How to change the game:** Transformation strategies (for the idealists!) will help you build a culture that supports *transformational innovation,* looking at the bigger picture from a more philosophical perspective and through redefining the race — in other words, ensure innovation and progress are sustainable over the long term.

By digging back into the archives of history we can get a feel for how different approaches have played out in the past and learn from the outcomes. We can then use this learning to check the current indicators and get a feel for what might happen in the future.

In the end, the transformative question will be: 'What can we learn from one another to build a culture that can ensure a sustainable future for us all?' This is the central challenge we will be exploring throughout the book.

Purpose-Driven Innovation (PDI)

The principles explored in the chapters that follow should help today's organisations build their own cultures to support what we call purpose-driven innovation (PDI) strategies, which lead to transformational innovation. These are developments that actually help to improve individuals' lives, advance society and protect the earth. We believe innovation should not be viewed in isolation from its context, that positive, purpose-driven innovation derives from and in turn creates positive intentions (mindsets) and cultures (environments). As Tim Brown, CEO and President of innovation and design firm IDEO, has argued, only businesses that have a clear 'reason for being', or purpose, will be innovative and truly sustainable in the future.[42]

The PDI culture change model we propose can be summed up in the following equation:

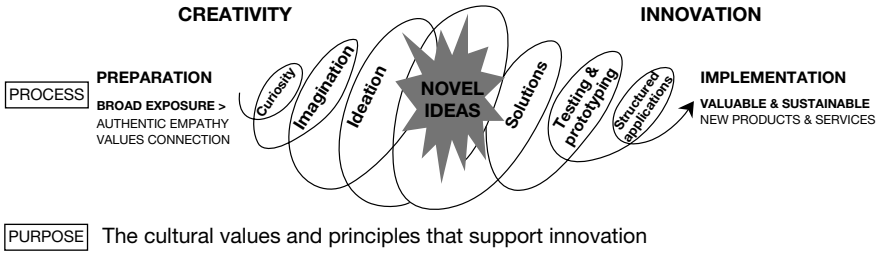
Purpose-driven innovation = PURPOSE × PROCESS

The rest of Part I explores the *process* of innovation, while Part II examines the *purpose*. We would point out here that we consider creative thinking and innovation to be two parts of the same process. Although many companies today attest to the importance of innovation (which is typically declared as a core value and included in company mission statements), very few seem to recognise the link to creative thinking. Note we are not referring to artistic creativity here, but rather to a thinking capability focused on practical solutions. That is, we believe you can't build a culture of innovation without first developing individual creative skills and capabilities that can lead to original and valuable ideas. Conversely, you can't support the development of

individual creativity without ensuring there are opportunities for following fresh ideas through to implementation.

For purpose-driven innovation, certain important prerequisites will ensure a meaningful outcome. The figure 'Purpose-Driven Innovation' gives an overview of the different elements of the *process* and shows how the *purpose* can provide a strong foundation for developing a culture to support the process.

Purpose-Driven Innovation (PDI)[43]



In the next two chapters we will explore the important prerequisites of the process in more detail, notably the ability to see multiple perspectives and to develop empathy. In chapter 4 we will look at the components and interconnections of the whole process, from imagination through to implementation. In particular, we will review the tension between creativity and knowledge generation on one side and innovation implementation and knowledge synthesis on the other, as well as how dealing with this tension can effectively fuel innovation. In Part II we will also explore how it is possible to build a purpose-driven organisational culture that supports the process. For each of the phases of culture development we will visit different locations around the globe to find both stories of inspiration and cautionary tales. And we will use these journeys as opportunities to explore principles that can assist with transformational change.

Back to the future

An even more interesting version of the 'tortoise and the hare' tale brings a unique slant to the well-known fable. In his 'True History of the Tortoise and the Hare' (1915), the Irish writer Lord Dunsany has the hare realise the stupidity of the challenge and refuse to participate in the race, whereupon the tortoise is declared the winner.[44] But the story doesn't end there. Soon afterwards there is a forest fire, and the tortoise, now recognised as the fastest

animal, is sent to warn the other animals of the danger. You can probably guess how that turns out.

Let's now return to *The Hunting Party*. To remind you of the setting, in 1985 the early Australian reality TV show set up a contest in which a crack SAS army team with all the latest equipment and survival training was pitted in a cross-country race against a team of local Aboriginals. In the event, the Indigenous team chose to abandon the race. Like the hare in Dunsany's version of the fable, they just could not see the purpose of the race, so they chose to opt out. Yet have the technologically advanced competitors in the race assumed they are the superior winners? What do they think has been won? And what are the potential consequences of that assumption?

We discussed this issue with Professor Patrick Dodson (former chairman of the Council for Aboriginal Reconciliation and winner of the Sydney Peace Prize), an Aboriginal elder and Senator who has long played an active role in Indigenous affairs. We met with Professor Dodson at the same time as *National Geographic*'s Wade Davis, and we could see the deep respect this internationally recognised anthropologist had for the Australian leader. When we asked Dodson where he felt the Australian Aboriginal people stood in the international innovation race, his bemused expression made it clear that the whole concept was madness to him.

Dodson explained that the Aboriginal people have traditionally been more concerned about living in harmony with their environment than trying to change it. Life for his people, he told us, is about maintaining harmony. The Aboriginal people care about protecting and maintaining what they have been given. All their rituals and rites are related to preservation rather than progress.

For countless generations the Indigenous people of Australia were isolated from Europeans and much of the rest of the world, but then quite suddenly they were dragged into the 'modern world', with no option to opt out. In the years following the arrival of explorer Captain Cook and his crew in 1770 there was no escape. For more than 40 000 years the Aboriginal people had set their own narrative, determined their own fate and sustainably managed the land, yet they were barely able to make it to the foreign-imposed start line. The new players on the scene brought with them alien ideas and practices, technological superiority, violent weapons of control and virulent diseases, which between them all but wiped out the Indigenous people.

The Australian Aboriginal people have traditionally been more concerned about living in harmony with their environment than trying to change it.

Today the 'innovation race' is ruthless. It can be as aggressive as our perceptions of the Australian shark; as harsh as the Australian desert. Survival is not assured. The challengers are also no longer playing out in separate, unconnected communities, lands and continents. Indigenous groups that may have been content with their traditional way of life, and may have preferred to be innovative in areas other than technology, have been drawn involuntarily into the global race. Somewhere along the line it became one big, interconnected, inescapable contest, televised live around the world, uncensored and in full colour. As we have been emphasising, we might like to think we can merely sit back and watch it all happen, but in reality we can no longer remain passive viewers.

All of humankind has been signed up for future episodes of the race. Some will come unwillingly and unprepared, and will end up being helpless pawns facing an unknown fate. Others will prepare themselves to be actively engaged and empowered players. As we will explore at the end of the book, some will even learn how to move past being players, to rise up to become disruptive innovators (producers), to influence the rules, and perhaps to make the race fairer and more sustainable for all — in other words, to change the game.

The first task in preparing for the innovation challenge ahead, however, will be determining how to spark the curiosity and imagination that feed the innovation process. This is the starting point for transformational innovation, for innovation that is designed to bring about real change. We have started to explore one different cultural perspective to gain some initial insights into the idea of purpose-driven innovation; now it will be helpful to go further afield to explore multiple cultural perspectives. Being exposed to different ways of thinking and different cultural perspectives can significantly enrich innovation. Yet, as we will discover in the next chapter, there can be challenging psychological blocks to overcome along the way.

PRODUCTION NOTES

Getting off the couch — the need for active participation

TV was originally a one-way medium. Passive viewers looked into a box to see a 'world' that had been framed by others. Reality TV (preceded by similarly interactive game shows) *enabled* viewers, giving them the feeling

of being participants. By voting they could sometimes change the course of the show, and they could have fun predicting winners and losers through discussions with family and friends. They could even pretend to be contestants, while remaining in the safe environment and comfort of their own home.

In the 'innovation race' there are those who will feel they can only be passive observers, watching helplessly as innovation passes them by. We hope to show that it is possible to move from passive observer to active participant. More than that, we want to show that whether you like the idea or not is no longer relevant, because the 'innovation race' has now become a global phenomenon, and sitting it out as a passive viewer is not an option. The question is no longer *whether* to join the race, but rather how to think about the race we are all part of, and how to potentially change that race.

INNOVATION TRANSFORMATION CHECKLIST

- ☐ How strategic is your organisation's innovation process?
- ☐ Does your organisation suffer from innovation inertia?
- ☐ Are your organisation's innovations proactive or reactive?
- ☐ Has your organisation been able to get beyond haphazard innovations?
- ☐ Do you identify an authentic reason for new innovations: the *why* and the *what for*?
- ☐ Are your organisation's innovations and innovation processes sustainable?
- ☐ Do your innovation programs have a clear PROCESS built on a sound PURPOSE—are they purpose-driven?
- ☐ Are your organisation's innovations transformational: do they keep up with the pace of change AND are they designed for the long term survival of both the organisation and the planet?
- ☐ Have you considered your organisation's current position in and approach to the 'race'?