

Praise for *The Future of Almost Everything*

‘Absolutely brilliant. I love this man’s exhilarating thinking and writing. Here are fast, far-sighted insights into the tangible and intangible horizons of future change, underpinned by wisdom about its ultimate driving force – human nature.’

Nigel Nicholson, Professor of Organisational Behaviour, London Business School

‘A brilliant guide to our future, which should be read by every decision-maker; packed with deep insights on a huge number of trends. Patrick Dixon has a great track record over many years in forecasting opportunities, risks and challenges that will affect us all.’

Sir Brian Souter, chairman, Stagecoach Group Plc

‘Insightful views about the global trends that could shape our future. A thought-provoking tome which should help businesses think differently about the markets of the future.’

Linda Yueh, Adjunct Professor of Economics at London Business School; Visiting Professor of Economics at Beijing University

‘Every leader needs to keep ahead of major trends. Think radically and read this book to keep ahead of the future!’

Sinclair Beecham, co-founder, Pret A Manger Plc

‘Patrick Dixon is an express train straight into the future. His book, *The Future of Almost Everything*, arms you with a smorgasbord of predictions that few would ever even consider – predictions which without any doubt soon will define our daily lives. Jump on Dixon’s train – it is worth it.’

Martin Lindstrom, brand consultant and bestselling author of Buyology

‘Truly inspirational thinking about tomorrow’s world. Capture the pure genius and you are on to a winner.’

Andrew Goodsell, chairman, Saga Plc

‘Brilliant! Patrick Dixon’s insights into the future are compelling, engaging and thought provoking. Tomorrow framed by the expert.’

Baba Awopetu, group strategy and marketing director, Optegra eye healthcare

Praise for previous books by Patrick Dixon

Futurewise

‘The best book on future trends I have ever read.’

Hans-Dieter Vontobel, chairman, Bank Vontobel

‘A must-read for anyone keen to understand what the future holds for them.’

*Lynda Gratton, Professor of Management Practice,
London Business School*

‘A momentous achievement.’

*Zuhayr Mikdashi, professor, School of Business
Studies, University of Lausanne*

Sustainability

‘An excellent book that talks about actions and solutions. A good, practical view of future challenges.’

Frank Appel, CEO, Deutsche Post DHL

‘Everyone who worries about how we will be able to afford new, greener, technologies should read this book.’

Maud Olofsson, Deputy Prime Minister of Sweden

‘The missing handbook for life and business in the 21st century; an essential guide that points a clear path to a fantastic future.’

Philip DesAutels, director, Microsoft

‘Every government involved in responding to climate change should read this book.’

Valdis Dombrovskis, Prime Minister of Latvia

‘An optimistic, innovative yet technologically realistic vision of the future, which breaks from the luddites and doom merchants.’

Professor Edmund King, president of the Automobile Association

‘Sustainability will change how you see the future. Every business leader should read it. Full of new ideas, business opportunities, and practical insights about solving many of the world’s greatest challenges in a profitable way.’

Sir Peter Vardy, former chairman of Vardy Group Plc

Building a Better Business

‘One of the most stimulating and challenging reads in this field for a very long time.’

Sir Digby Jones, director-general, Confederation of British Industry

‘A really helpful guide to success. Essential reading for anyone running a business.’

Brent Hoberman, co-founder and CEO, lastminute.com

‘Excellent management books should spur you into action. This one does! A thoroughly enjoyable and refreshing read.’

Lord Leitch, chairman of BUPA and FNZ Ltd; former CEO of Zurich Financial Services in UK and Asia; former chairman of the Association of British Insurers

‘Patrick Dixon is first among equals in “how-to” business writings. This brilliant book reveals how passion for your customers and your mission is vital in developing strong brands.’

Professor Liping Cai, director, Purdue Tourism & Hospitality Research Center, Purdue University, USA

‘A perfect summary of all important factors that contribute to success in business and private life. What a potential for better results – and ultimately success!’

Robert Salzl, CEO, Arabella Hotel Holding International GmbH and Co.

‘Reading a book like *Building a Better Business* can be a little scary. So much of it resonates instantly with one’s own personal and business circumstances and experience. It is also comforting to realise that none of us is alone in trying to build better businesses and more particularly, as Patrick Dixon says, a better world.’

Paul O’Toole, chief executive, Tourism Ireland

'If you want to be a great leader, you need to read this book. A vital guide to management and business success.'

Professor Prabhu Guptara, Director of Executive Learning, Wolfsburg, subsidiary of UBS

'A message that every business leader needs to listen to and turn into action.'

Professor Derek Abell, president, European School of Management and Technology, Berlin

THE
FUTURE
OF (ALMOST)
EVERYTHING

How our world will change
over the next 100 years

SECOND EDITION

PATRICK DIXON

P

PROFILE BOOKS

This edition expanded and updated in 2019

First published in Great Britain in 2015 by
Profile Books Ltd
3 Holford Yard
Bevin Way
London WC1X 9HD
www.profilebooks.com

Copyright © Patrick Dixon 2015, 2019

The right of Patrick Dixon to be identified as the author of this work has been asserted in accordance with the Copyright, Designs and Patents Act 1998.

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), without the prior written permission of both the copyright owner and the publisher of this book.

A CIP catalogue record for this book is available from the British Library.

ISBN 978 1 78816 234 0
eISBN 978 1 78283 181 5

Text design by sue@lambledesign.demon.co.uk

Typeset in Dante by MacGuru Ltd

Printed and bound in Great Britain by
CPI Group (UK) Ltd, Croydon CR0 4YY



Contents

Introduction / 1

- 1** Fast / 15
- 2** Urban / 62
- 3** Tribal / 113
- 4** Universal / 170
- 5** Radical / 232
- 6** Ethical / 295
- 7** Human life in 2120 / 335
- 8** Shaping your future / 350

About the author / 354

Acknowledgements / 356

Index / 359

Introduction

The truth about the future

Over the next 20 years, our world will be shaken by a series of seismic events and inventions, overtaking governments, corporations and our personal lives. We are hurtling at astonishing speed into a future that few understand, with massive implications for the future of humanity.

Take hold of the future or the future will take hold of you.

My job is to live in 2050, and to see tomorrow as history.

Since 1996, I have worked with around 400 of the world's largest 2,000 companies in every industry, and with many governments, as a guide to the *truth* about life in years to come. Most of what I predicted has happened, described in 17 books and a thousand keynotes.

Here is what I am telling senior leaders across the world about life up to 2050 and far beyond, based on a proven methodology, including a chapter on life in 2120. As we will see, in the years ahead board debates about the future will not be so much about *trends*, which will often be obvious, but about *timing*, which will be absolutely critical. For example, by when will most new cars sold in Paris be electric powered?

What is really changing – why many other trends will fizzle out

We face the greatest threats to survival in human history, while technology also offers the greatest opportunities ever known to solve these challenges.

Consumer choices are changing radically. Most of today's companies will vanish in 20 years. Who will be the winners and losers? And what actions do leaders need to take?

Future generations will be truly shocked at the scale of our population growth, our destructiveness, our careless waste and toxic pollution. Decisions made in the next two decades will change life on earth for over 10,000 years, as tens of millions more species are wiped out, as carbon dioxide levels continue to rise, and as we continue to alter entire landscapes.

They will also be shocked at the increasingly 'asymmetric' nature of risk: how easily small groups with limited resources were able to hijack entire national agendas, dominate global news, damage economic growth, force changes in corporate policy, or hold entire communities to ransom. So we need to pay close attention now to how such groups will gain future power and what their agendas may be.

On the other hand, many trends will develop rather slowly or predictably, much as they have over the last 30 years. As we will see, most people's daily lives will evolve more gradually in many ways than many assume. Indeed, history shows that the more shocking a prediction is, the more likely to be wrong, so we need to take great care, particularly over media-hyped issues such as Brexit or the longer-term impact of President Trump.

Many 'major trends' that now dominate media attention will fizzle out completely, some very soon. Take the digital revolution for example, parts of which are close to maturity. The growth of e-commerce doubled in the UK from 12–24% of retail in less than 5 years. At that rate, 100% of UK retail spending would be online in just over a decade, which of course will never happen. So the current growth rate will slow and plateau quite soon. The same is true for ownership of smartphones globally, growth of time spent online, and so on.

Either you see your own future as something to prepare for, or something to be shaped by your actions. This book is therefore about being *futuristic* rather than *fatalistic*.

As some of my clients have discovered in the past, you can have

the greatest strategy on the planet, and superb leadership, but if the world changes unexpectedly, you just travel even faster in the wrong direction. As I learned in my first career as a cancer doctor looking after the dying, *life is far too short to lose a single day* doing things that are a complete waste of time, or that we don't believe in, so we urgently need to know where we are going.

The greatest risk is institutional blindness

Media headlines are full of sensational, alarmist, confusing, foolish and nonsensical predictions, so where do true *foresight* and *insight* come from? We need to start with common sense, and with open eyes.

Over many years, I have seen time and again that the greatest risk of all to any organisation (and indeed to any forecaster) is institutional blindness. When bankers spend too much time with other bankers, the result is soon a banking crisis. When IT people spend too much time with similar IT people, the result can be major system weakness, poor customer design, or vulnerability to cyberattack. When military commanders spend too much time playing war games with their colleagues, the result can be ...

The scariest audience I have ever addressed

I give up to 60 keynotes a year, in many nations, but the scariest audience I have ever addressed was the Pentagon. My task was to give a trends lecture to 500 senior military leaders, and suggest ways in which they could use their vast military powers to *reduce* international tension, *improve* the image of America, *prevent* future wars and *eliminate* national security threats.

The people in my audience were commanders of a major part of the world's greatest force of warships, fighter planes, submarines, nuclear weapons, cruise missiles, drones, tanks, artillery, troops, military intelligence, and so on.

I wandered around the exhibition hall outside the auditorium, looking for some last-minute inspiration. It was packed with impressive displays of military hardware. Sales teams of global arms companies were explaining to me how to target and kill large

numbers of people even more efficiently, with even less effort and risk, using their exotic technologies.

It struck me how last century it all felt. The capability of such hardware was truly shocking, technologies awesome, but owning mega-weapons can never build trust, nor deal with underlying causes of conflict, nor repair the heart of broken nations.

How to trigger a major conflict in seconds

In future, the defining issue for a commander will not be how many missiles, or drones, or other forces he controls. It may be something like whether he should give an order in seconds to shoot a six-year-old girl who is walking towards a US army checkpoint, and who might conceivably be carrying a bomb – and all in full view of live TV newsfeeds.

A child whose death could spark local outrage, widespread civil unrest and further bloodshed, as well as global condemnation. The entire might of a military superpower is completely useless in such a moment.

What worried me most of all as I paced outside that hall was that I had been strongly warned that I was the *first* non-American that had *ever* been allowed to address that regular military assembly. Their policy to date had been that only the voices of American citizens were worth hearing. So it was a privilege to be there, and they were very gracious in their willingness to listen to someone with a different world view. You will find a similar blindness in the war games played by other Ministries of Defence in most other nations.

Trapped in a narrow vision

Any organisation can be affected by a mild form of collective madness – the inability to see the wider context. Each of us reads the world around us through our own set of glasses, which distort our perception and reactions, shaped as these are by our culture, birth-place, history and experiences. Therefore, *the* most important step in accurate Futuring is to be aware of your own limitations: take *off* your own glasses, and create mental space to put on other people's.

A personal journey

My own life journey has taken me to 60 countries. I have talked with leaders of the world's largest corporations and governments; engaged with every industry; met innovators and entrepreneurs; advised the super-wealthy; and worked with the poorest of the poor, in megacity slums, refugee camps and remote rural villages.

Market research can't tell you the future

One of the first truths I learned is that market research is a completely useless, expensive and dangerous guide to anything but the very short-term future. Companies and governments waste much of the \$46bn they spend on it a year, asking people how they will behave. But moods can change in hours, in response to new products, social media, atrocities, sporting events, huge scandals or the death of a national hero.

Market research is still important, however. We do need to pay the closest attention to our customers, and how they feel. Listen carefully to what they say, and sort out any problems that they see. But don't *believe* them when it comes to the future.

One word will drive the future

Another truth I learned is this. One single factor will drive the future more than events, economics, innovations, technology, demographics, religion or politics. Leaders often focus on metrics, data, financials, analysis, processes, customers, competitors, investors, public opinion and regulations. All these things matter but there is one central element, which is even more important in shaping tomorrow.

If we wish to explore the future, we need to look at how people are likely to FEEL, as well as what they will THINK. The single word that will drive the future is EMOTION. As we will see in every chapter of this book, emotional reactions are usually far more significant than events themselves. All leadership has to connect with emotion, which is why robots cannot lead.

How far do you need to see?

Whenever I am asked to give a lecture on the future, I always ask the same question: how far ahead do you want me to take you, and into what areas?

If you are a *share trader*, you need only to see 3 milliseconds further than the market to make billions of dollars in high-frequency trading.

If you are a *fashion house*, six months ahead may be far enough. If you are a *bank*, your future horizon is probably no more than five years. If you are a *major insurer*, your view will stretch to a decade or more.

My *pharma* clients need 25-year vision, because it takes them 15 to bring a new drug to market, and patents expire after 25.

Energy companies want to look even further. Not long ago I was talking to a senior executive who had signed contracts a decade earlier to extract oil and gas from under the Caspian Sea. It will take another decade to get those fields operational, with a lifetime of 30 years or more. So on signing, she had to take a 50-year view of future energy prices.

How do you guess the future?

How on earth do you *begin* to guess the average price for a barrel of oil from 2040 to 2050?

Some people say that it is impossible and pointless to try to predict. All we can do is prepare for uncertainty. This is dangerous, naive, foolish and fatalistic nonsense. It all depends, of course, on *what* you are trying to predict.

Yes, it is true that no one can consistently predict short-term swings in market prices or exchange rates, or the result of close-run elections, or the next decisions by erratic or stupid politicians, and we can never be *certain* what tomorrow will bring, but that is not what our journey is all about. It is perfectly logical and vitally important for every decision-maker to have well-reasoned expectations of what he or she thinks is most likely to happen – while also considering alternative scenarios, to manage risks.

Long-term trends are often very predictable

All reliable, long-range forecasting is based on powerful megatrends that have been driving profound, consistent and therefore relatively predictable change over the last 30 years. Such trends are the basis of every well-constructed corporate strategy and government policy. Here are just a few examples:

- ◆ gradually falling rates of growth in world population
- ◆ people choosing to marry later, or not at all, leading to fewer children in many communities
- ◆ rapid but predictable fall in price of digital technology, telcos and networking
- ◆ rapid growth of all kinds of wireless/mobile devices and mobile payments
- ◆ shift from traditional retail to online sales, with faster delivery
- ◆ connectivity between people, companies and machines
- ◆ rapid growth of emerging market economies
- ◆ rapid growth of emerging market middle-class consumers
- ◆ hundreds of millions of people moving to cities
- ◆ large migrations from poor nations to wealthier ones
- ◆ better global literacy and more university graduates
- ◆ fall in costs of production of most mass-produced items
- ◆ rapid increase in global trade (despite protectionism) and intense hunger for travel
- ◆ formation of trading blocs, free trade areas, currency zones
- ◆ ever-larger global corporations, mergers, consolidations, with shorter, more agile supply chains
- ◆ rapid growth of gene screening to predict future health
- ◆ growth of biotech therapies including stem cells
- ◆ better life expectancy with improved diet and health
- ◆ ageing of many populations e.g. EU, Japan, South Korea, China
- ◆ baby booms in emerging nations such as India and Nigeria

- ◆ feminisation of many societies, with more women at work
- ◆ increasing concern about child welfare and abuse
- ◆ increasing focus on ‘health and safety’ at work globally
- ◆ increased concern about environment/sustainability/food supply
- ◆ destabilisation of nations with huge mineral or energy wealth
- ◆ shift from wars between nations to civil conflicts
- ◆ wider acceptance of democracy (but mistrust of traditional politicians)
- ◆ wider adoption of civil rights, protecting the vulnerable
- ◆ higher customer expectations for convenience, comfort, value, service, honesty, reliability, speed – and more complaints when standards fall
- ◆ rapid automation of routine tasks, in homes, offices, factories
- ◆ growth of Artificial Intelligence and increased potential for state control

I could list hundreds more for your own specific industry or nation. These wider trends have been obvious to most trend analysts like myself for a while, and have been well described over 30 years. They evolve much more slowly than booms and busts, or social fads.

All trends connect to all other trends

All major trends interact and only make sense in the context of all other trends. What is more, your own *personal* future is being shaped by over 7.5 billion other people’s futures. That is why it is so illogical and dangerous to focus on a single trend. But, sadly, that is what so many economists, biologists, techno-gurus, military advisors and other specialist ‘experts’ tend to do, each blindly micro-forecasting within their own speciality.

I am not saying that I haven’t also got some things wrong. Anticipating future trends is always a risky and potentially humbling process. If you want to judge for yourself, you will find over 600 YouTube videos, hundreds of presentations and articles and the

text of six entire books posted since 1997 on my website, visited by over 17 million different people.*

2040 is closer than we think

You may think this a strange question for a Futurist to ask, someone whose career has been built on making sense of rapid change, but this question is of utmost importance:

How much has really changed in the past 20+ years?

The truth is, that despite all the hype about the speed of change, it would not take long to update a business leader who had recently woken up from a coma that had lasted 20 years – probably less than a couple of hours to cover the most important global and social changes. Let us call him Tom ...

Little would really surprise Tom. What would we tell him about? The dot.com crash and 9/11 attack; wars in Iraq, Afghanistan and Syria linked to Islamic militants; cheaper and more mobile computing; faster web, more e-commerce and rapid growth of social media; cheaper technology and robotics; Asia rising fast; more worries about global warming, and solar panels everywhere; big market crash following a long boom, triggered by a bank lending crisis; corporate banking scandals; rising retirement age and worries about pensions; Russia flexing its muscles again; some worries about viral epidemics; and more autocratic, nationalist leaders in nations like Russia, Turkey, Hungary, China and America.

Pushed to see radical change?

But walk Tom down the streets of any capital city in Europe and he would struggle to see much *radical* change, for example, in fashion, music, day-to-day culture, politics, the hopes and dreams of young people. Things would look pretty much the same, apart from more people looking at smartphone screens far more of the time, and buying more online.

Tom would doubtless point out that many people, like him, were

* <http://www.globalchange.com>

already using smartphones such as the Nokia 9000 in 1996, with full web browser, email, camera, word processing, notepads and prices halving every 12 months. And he might well tell me that his daughter used to run up to 16 chat screens simultaneously back in 1997. Most of the other things above were also signposted in the 1990s in some way. So what would really feel so radically new to Tom today?

Young and old share very similar lives

There is also far less of a 'generation gap' today, compared with what we saw in many developed nations back in the 1950s to 1970s. Younger and older people listen to similar music, watch the same films, wear similar clothes, travel to similar places, and share quite similar values.

People eat out more, and standards of living have risen. Technology is cheaper. Most homes in Europe and America look very similar to what they did in 2000. Offices are more open plan, and people carry their own computers or mobile devices. But most still commute. And TV news looks the same. Hollywood film plots keep being recycled, albeit with better graphics, and major sporting events still attract huge crowds.

Many things in 2040 will also be remarkably similar

The *truth* is that *daily life* for most people will be very similar in many ways in 2040 to what it is today. In many parts of the world, a three-year-old child will have a life that is very familiar, when they are 18, to people who are 18 today. They will have attended high school, taken exams, and be heading for first jobs or university. Hopes, thoughts and dreams will be similar in many ways to yours at the same age.

They too will look in the mirror and wonder about self-image, and hope one day to meet the right person and settle into a wonderful long-term relationship. They too will seek a happy, comfortable life, and think about 'making a difference', or what government they want, or about a more sustainable world.

And when that new generation become parents themselves, they will have similar worries to previous generations about the well-being of their own children. So please don't make the mistake

of thinking that human nature will be any different because of next-generation digital, mobile, robotics, virtual life, wearable devices, gene programming, social connectivity or anything else. You only have to look back at the stories of people's lives written 2,000 years ago to realise that our deeper psychological and physical needs are similar in many ways.

The M generation is more concerned about the long-term future

Yet at the same time, fundamental shifts *are* taking place, shifts that will transform societies, wipe out many multinationals, destroy many governments. And the M generation, whose entire adult lives are being lived in the third millennium, is far more concerned about long-range issues such as sustainability.

History will record a very different kind of world by 2050, with a totally new balance of power, new global cultures, new industrial giants, new forms of government and new social habits.

Six Faces of the Future

I have used a Futuring method over the last two decades: Six Faces of the Future. Each face is important and is a chapter of this book, but the relative strength of each face will depend on who you are and where you live.

It is impossible to keep all six faces in view at once: some are related, others are opposites. Together they form the faces of a cube, which we need to keep turning. Emotion is the force that makes the cube spin. The faces spell the word 'FUTURE'.

Fast – speed of change, Wild Cards, future of digital, AI, robotics

Urban – future urbanisation, demography, health, fashions, fads

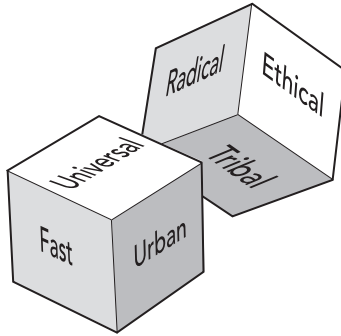
Tribal – future nations, cultures, social networks, brands, teams

Universal – future globalisation, retail, e-commerce, trade,
manufacturing

Radical – death of politics, rise of radical activism, sustainability

Ethical – values, motivation, leadership, aspiration, spirituality

Fast and Urban are closely related and sit together on one side, while Radical and Ethical are also together on the other. On top is Universal, and beneath, pulling in the opposite direction, is Tribal.



Most executives spend their lives looking at the cube from above, at a world that is Fast, Urban and Universal. However, one twist through 180 degrees presents us with a very different view: a world that is Tribal, Radical and Ethical.

Understanding the tension between these two dominant views is really important. As we will see, a tiny minority who are strongly Radical, Ethical and Tribal can impact a company or nation profoundly. Think of nationalist politicians, anti-migration protestors, Islamic State, or climate change activists, or consider consumers who campaign to stop child labour: they are Radical in thinking, driven by a strong sense of Ethics (you may not agree with these ethics but that is irrelevant), and very Tribal (tight, together, well organised).

For every trend, look for a counter-trend

As we will discover, every trend tends to have its counterpart, which is why media pundits are able at once to describe, for example, trends to greater liberalism and greater conservatism, in parts of the same city or nation.

Drug use soars, with growing calls for decriminalisation, at the same time as a neo-prohibitionist movement seeks to make it all but impossible to smoke a cigarette in a public place.

Hyper-sexualisation of children and young teenagers is still promoted every day in Western media and marketing, at the same time as outrage grows over child abuse and sexual harassment.

Expect to see powerful clashes between opposing trends, and a world increasingly of extremes over the next 100 years, with tendencies to intolerance – as we see in culture clashes between Islam and liberal ‘Western’ culture, and also within Islam itself. The greatest forces will be unleashed by clashes of *conscience* rather than *culture*, influenced by religious conviction, or lack of it. The truth is that in a pluralistic, multi-track society there are a number of pendulums operating in every city and nation, which is why trend-watching is so fascinating.

All leaders must be Futurists

People often ask me what a Futurist is. But in a sense, all thinking people are Futurists. It is part of the human condition to plan ahead. Futurists are just professional future-thinkers, with a span that reaches across industries and nations.

All leaders have to be Futurists. People only follow leaders with a compelling vision of a better future. Vision has to be founded on reality, based on what we know today, and where we are likely to end up if no action is taken.

Why I am optimistic and not apocalyptic

I am often asked if I am an optimist or a pessimist. I am probably an optimist, despite many future threats and challenges, despite the horrors that small numbers of human beings are capable of.

Over the years, many trend-spotters have given dire, apocalyptic and spectacular warnings about our world running out of food, or water, or space, or about all of humankind being wiped out by major events, or being taken over by robots.

As we will see, the vast majority of such claims are alarmist nonsense. Our world is far more resilient than many fear. Humankind has an astonishing and accelerating capacity for genius and innovation, which will solve many of the world’s greatest challenges in ways that are hard to imagine today. In addition, there

are many balancing forces within global systems. However, human actions can be totally irreversible – for example, 60% of all animal species on earth 100 years ago are now extinct, in many cases (maybe most cases) as a direct consequence of human activity.

So then, let us turn to the first Face of the Future, which is all about the speed of change, and what that may mean for you.