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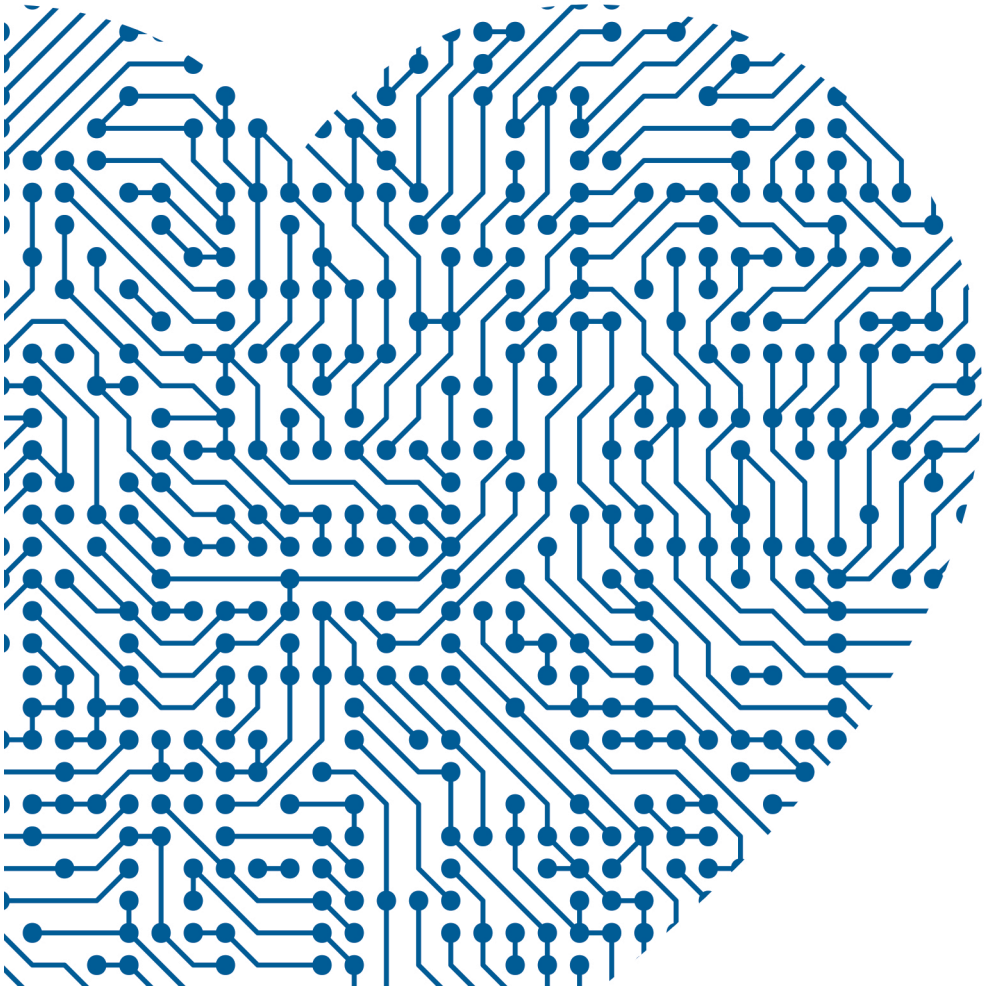
Digital at Heart

HOW TO LEAD A HUMAN-CENTRIC DIGITAL TRANSFORMATION



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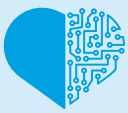

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INTRODUCTION

The year is 2049. The world around us is transforming relentlessly. Let's take a look at what the future could look like.

The working-from-home narrative has strengthened. The metaverse considerably changed how people collaborate inside and outside of work and, now more than ever, society is truly digitally immersed. Where employees previously switched between home and company offices, they now connect and interact by means of virtual reality. People are no longer limited by physical constraints, either by what their body allows or what their environment dictates. Limitations are off and the rules of work have changed in other ways as well. Whereas many people initially saw their job tasks being automated and some people worked alongside robot colleagues, shop-floor workers now operate semi-autonomous robots – almost exact replicas of themselves – from a home-based control centre. Furthermore, the increasing interconnectivity between company and industry data lakes have made product flows more transparent. Warehouse prices now fluctuate on a minute-to-minute basis, always highlighting a fair and transparent price setting.

AI has vastly augmented most occupations, helping people work more efficiently and productively. Smartphones have become relics of the past. The microchip[1], implanted into people's brains, provides constant access to information projected onto the retina of the eye by a minuscule lens. There's no longer a need to take pictures either as everything is being tracked, recorded, and stored for easy access. People can easily scroll through the past and find that one exact moment and project it wherever they want. Completely new occupations and industries have been created: recently, rockets started leaving the Earth's atmosphere daily and various sizeable organisations now send people, robots, and materials into outer space to support the first attempts at colonising other planets and also to support the burgeoning space mining industry. Highways still stand, for now, but they are gradually being reclaimed by nature. Traffic is regulated according to multiple sky layers, each dedicated to a specific class of air vehicle. We have entered a new era.

Some futurists advocate for a technological utopia and convey an optimistic and potentially even transhumanist future to inspire people. "Why would we want to stop here?", they think. Others, more sceptically, suggest that we should stay realistic and not get ahead of ourselves. On the other hand, there are those who stress the risks humanity could face – painting Terminatoresque, dystopian images of a dramatic, apocalyptic moment when machines take over. Technological singularity, for example, represents a, currently hypothetical, point where an artificial superintelligence surpasses human intelligence, which will result in a fundamental redefining of our human existence. Some people mostly stress the positive outcomes (such as advanced medical treatment and economic growth); others are more likely to stress the negative outcomes and risk (such as job displacement and ethical dilemmas). Despite coming from often competing views, all groups have valid points and remarks. But it is up to us to choose the outcome. *"The future is not yet set in stone. The future is what we make it,"* write professor of organisational behaviour Nicky Dries and colleagues.[2]

Let's time warp back to the present. Our little Blue Planet is at the edge of multiple large-scale changes: globalisation, technological innovation, geopolitical instability, and demographic shifts. We are in the era of the always-on transformation.[3] People must adapt constantly and brace against the impact of such ruthless disruptive forces. So must companies. For them, it's truly transform or die. They are up against the digital world, a ferocious beast that has barely stretched its muscles and eagerly eyes the ring – hungry for the first round.

***ding ding*, goes the bell.**

Digital technologies are disrupting society, and organisations and employees are hit by alternating left jabs of complexity and right jabs of volatility. Unexpectedly, you are hit by two frontal kicks of turbulence – the rules have changed, or rather, your opponent doesn't follow any rules. They don't need to. You freeze in front of this monstrosity of an opponent, as making winning choices feels more difficult than ever.

***ding ding*, round two has started.**

You engage in this dance, nonetheless. Data and digital technology can be deployed to boost efficiency. Emerging technologies overhaul everything from supply chains and manufacturing to research and development. They are engines of innovation and revenue growth. You understand that this opponent will allow you to hone your skills; that you are offered unprecedented opportunities to develop

new products, new services, and potentially even reimagine your entire business. But you need to keep up; the sweat is at your temples, your breath heavy.

***ding ding*, round three – did you catch your breath?**

Your key competitors are no longer the sole source of threat and disruption. New market entrants pop up from anywhere and everywhere – often from far beyond your industry or business model. These disrupters don't just nibble at existing businesses either; they nimbly introduce far superior and more agile models. Let's not forget the mighty cutting-edge tech behemoths now trying to expand their reach, preying.

Can they be stopped?

Outcome 1

Round by round, you find your rhythm. The punches of complexity and volatility no longer catch you off guard; in fact, you have started to anticipate them. Your eyes sparkle and a smile spreads on your face – you're learning how to dance with this digital beast. Each challenge, each jab sharpens your skills, and with every blow you take, you come back stronger.

Digital tools are now no longer a threatening opponent; instead, they are your sparring partners. As you master various tools – automation, AI, ... –, your organisation is becoming more and more innovative, customer-centric, and resilient.

The bell rings for the final round, and this time you are standing tall, proud and victorious.

Outcome 2

You survive, round after round, managing to block the worst of punches. Some jabs land, and though they sting, you keep on fighting. Your organisation has adopted certain digital technologies, but the transformation is wearing you down, making you feel unbalanced.

Some areas of the business thrive, but others are lagging behind, still burdened by legacy systems and a resistant group of employees.

As the bell rings for a final round, you remain standing, neither defeated nor triumphant. It's clear to the crowd that you've made progress, but there's work to be done still – the match isn't over, and you know that your next steps will determine whether you win or just continue to fight in place.

Outcome 3

The relentless barrage of punches and kicks has become overwhelming. You clutch your groin as the beast's unpredictability exposes every weakness in your strategy and company culture.

Unprepared for the relentless pace of change, teams falter, unable to adapt. Technologies are implemented, but without a clear vision or purpose. Confusion and frustration have risen exponentially. As round after round passes, the business loses momentum, inertia is on the horizon.

You're in the wrong weight division, you realise. When the final uppercut comes, the lights go out, and the canvas welcomes you. The count to ten starts. *ding ding*, game over.

Has digital pushed you against the ropes, worn you out, and left you standing with your gloves up? Do you feel battered and bruised, or excited and still energised? Can you do anything but parry the punches, jabs, and hooks as they come?

The rules of the game have changed. Jack Welch, former chairman and CEO of GE, voiced the implications eloquently: *"When the rate of change inside an institution becomes slower than the rate of change outside, the end is in sight."*[4] Similarly, "A time of turbulence is a dangerous time," management thinker Peter Drucker once said, "but its greatest danger is a temptation to deny reality".[5] Entering the ring and engaging in a potentially scary dance is one thing; coping effectively and flourishing is an entirely different story. But how?

TURBULENCE AS THE 21ST CENTURY NEW NORMAL

Disruption has been a recurring phenomenon since the dawn of the industrial age. In his 1892 landmark book *Degeneration*, physician and social critic Max Nordau wrote that the unnaturally accelerated demand of industrial life offers people little

to no breathing space. And while it took several generations to perfect the steam engine to power the first Industrial Revolution, it takes significantly less time to develop and implement digital technologies. To survive today's business complexity, companies must possess flexibility; they need to routinely explore and exploit opportunities faster than their rivals. This is what we call **Organisational Agility** – defined by John Coleman, as

> "Creating an adaptable organisation with a higher possibility to drive disruption in society, the industry, and the marketplace [...]. It looks like a pattern of constructive collaboration between people with diverse perspectives [and] feels like increased humanity, authenticity, leadership, and engagement, and overall caring more about [...] meaningful-shared-purpose, value, understanding needs and wants, outside-in-thinking, and more."[6]

Organisational agility is a prerequisite for successful digital transformation.[7] Stijn Viaene defines this as follows[8]: "Digital transformation is a process of organisational change that leverages digital technology. It is a response to shifts in an organisation's business environment driven by a continuous stream of digital opportunities and challenges. We deliberately frame digital transformation not as a tactic, but as a strategic, holistic endeavour – an end-to-end effort that spans the entire value chain and is both inward and outward-looking. Digital technology plays a dual role in the process, as digital transformation is about organisation-wide change both in response to and with the help of digital technologies." Digital transformation is continuous in nature. It results in successive waves of transformation rather than discrete projects or programs.

A new wave of technologies has arrived while many companies are still struggling to master previous ones. Currently, 91% of organisations are engaged in digital initiatives[9], with 71% of organisations aiming to increase their company's tech investments over the next few years. In the case of specific technologies, such as chatbots and large language models, up to 85% of organisations expect to invest significantly[10]. George Westerman, MIT Sloan senior lecturer, and Didier Bonnet, affiliate professor at IMD Business School, discuss how digital transformations become increasingly complex. Whereas 85% of companies underwent a transformation in the past decade[11], nearly 74% failed to improve business performance.[12] And approximately half of companies that undertake transformations fail.[13] It's of little surprise then that 93% of companies consider digital transformation the most important training topic to invest in.[14]

DID YOU KNOW

People often use digitisation, digitalisation, and digital transformation interchangeably, but they mean very different things:

Digitisation

The conversion of analog information into digital form. It's about data, not processes.

— Example: Scanning a paper document to create a PDF, or converting a cassette tape into an MP3 file.

Digitalisation

The use of digital technologies to improve or automate existing business processes.

— Example: Moving customer service to an online platform.

Digital transformation

A strategic, organisation-wide change that uses digital technology to respond to and shape a continuously evolving environment.

— It is not just about tools or processes—it is a holistic, end-to-end business transformation.

CHANGE: WHAT'S IN A NAME?

Business transformations are often built around structural elements – new processes, facilities, policies, and – of course – technologies. However, author and CEO Timothy R. Clark writes that *"Agile's core technology isn't technical or mechanical. It's cultural."*[15]

Change invites hidden fears, anxieties, and insecurities into your company. The author Tony Schwartz sees change as something *"[...] where resistance tends to arise – cognitively in the form of fixed beliefs, deeply held assumptions and blind spots; and emotionally, in the form of the fear and insecurity that change engenders. All of this rolls up into our mindset, which reflects how we see the world, what we believe, and how that makes us feel."*[16] You don't just need to transform your processes and technologies; as a result, you also need to transform your people. This internal shift – what people think and how they feel – must be a cornerstone of your strategy.

TOWARDS AN EXTENDED DEFINITION OF INDUSTRY 4.0

INDUSTRY 4.0 TOWARDS 5.0

Historically, industry has evolved in various waves of revolutions. The Fourth Industrial Revolution, the one we are currently witnessing, is more popularly referred to as 'Industry 4.0'. Originating from a German government industrialisation strategy, and publicly introduced in 2011 at the Hannover Fair, this revolution is highlighted by a strong aspirational nature that originally aimed to integrate new and emerging technologies in the manufacturing process to maximise productivity, efficiency, and overall interconnectivity. In contrast to its predecessors, Industry 4.0 is happening on an unprecedented scale and at exponential speed and has now left the confines of manufacturing to include changes in value chains and the industrial ecosystem. Whereas we have not yet fully experienced its disruptive properties and broader impacts, key enabling technologies are already vast and plenty, and ever-more diversely applied, most often in an interconnected manner:

— **The family of Extended Reality (XR)** – Assisted reality, augmented reality, virtual reality, holography, and the Metaverse. XR encompasses technologies that blend the physical and digital worlds to enhance or create immersive experiences.
— **Big Data and Big Data Analytics.** Examining extremely large and complex datasets to uncover hidden patterns and correlations to derive insights, enabling data-driven decision making.
— **Cybersecurity.** Focuses on protecting computer systems, networks, and sensitive data from digital attacks and unauthorised access.
— **Autonomous Robots and Cobots.** Designed to work alongside humans, enhancing productivity and safety by automating repetitive or dangerous tasks.
— **Digital Twins.** Simulates real-world entities in a virtual manner, allowing for analysis, monitoring, and optimisation.
— **Internet of Things.** Networks of interconnected physical devices embedded with sensors and software that empower them to collect and exchange data.
— **Blockchain and Decentralisation principles.** Ensures secure, transparent, and immutable record-keeping without a central authority, promoting trustless transactions.
— **5G and 6G.** Advanced mobile networks, aimed at offering faster speeds, lower latency, and greater capacity. Considered a crucial backbone for other advanced applications, such as IoT, autonomous vehicles, and more.
— **Other waves of new, frontier technologies will continue to emerge as forces of disruption and transformation (e.g., cloud computing).**

People often assume that digital transformation is solely a technical challenge. That's understandable. After all, digital is mentioned first, isn't it? Industry 4.0 is therefore often considered to be a technology-centric movement, with people eyeing automation as a way to increase system efficiency and safety by reducing human involvement. Such an approach, however, might lead to disappointment. The role of people becomes more, not less, important as more powerful technology engulfs society. Developing automation and introducing new technologies without consideration for people, however, is expected to result in new, potentially catastrophic failures.

Recently, Industry 5.0 offers a fresh perspective. Where previous industrial revolutions emphasised the economics aspects of growth, Industry 5.0 recognises the power of industry to achieve societal goals, by making production respect the boundaries of our planet, and placing the wellbeing of employees at the centre of the production process. Considering this, Industry 5.0 consists of 3 core pillars, being **sustainability**, **resilience**, and **human-centrism**. Overall, it aims to blend the creativity of human experts with efficient, accurate, and intelligent machines, illustrating a strong trend of people interacting and collaborating with technology, and suggesting a symbiotic ecosystem of our two main protagonists: the human and the machine. Although it might read like kicking in an open door, George Westerman states that "*Technology produces nothing for a company on its own.*" Yet, we seem to have forgotten this. He writes,

> "The real challenge is changing the business using technology. In other words, when [people] think about digital transformation, transformation is tougher and arguably more important than digital. In the face of constantly evolving technologies and fast-moving startups, it can be tempting to think that a strategy focused on keeping up with technical innovation will provide a competitive edge. However, focusing only on digital and not transformation sets you up for failure. You need the leadership capability to innovate – and execute – on the options that technology enables."[17]

While digital technologies are crucial for any digital transformation process, it's still your people who make the place. Humans and machines are combinatorial in this regard and the challenges of work and digital transformation require companies to reflect on and optimise the constantly evolving options of work automation. Silvia Lehnis, head of data, analytics, and AI at UBDS writes,

> "As technologists, we are often attracted to logic, structure and systems thinking. Code it in once, and it is done. A rule the system follows beautifully until you change it. But when we release new systems, new features, or fully transform organisations, that kind of thinking has limited reach. We rely on people to change their behaviour, to start using new systems and processes, to start planning differently [...] Humans are at the core of transformations, yet we do not act rationally or take to change easily. New systems that are not used, or are not used right, do not deliver the expected return on investment. Staff spend time re-training, raising support tickets, asking others for help, or avoiding new systems, which negate the expected benefits that come with a digital transformation."[18]

Because digital transformation touches upon the daily life of many stakeholders, people *"can be either the greatest inhibitors or the greatest enablers of transformation success"*.[19] In times of change and transformation, employees across the entire chain of command experience a wide variety of emotions, ranging from positive (e.g. excitement, trust, and curiosity) to negative (e.g. fear, insecurity, and resistance).

SELF-TRANSFORMATION VS. BUSINESS TRANSFORMATION

Business transformations are challenging to cope with for various reasons. First, unlike self-transformation projects, business transformations are more likely to be imposed. Secondly, businesses tend to wait too long, so transformations often happen in crisis mode and in a reactive rather than proactive manner. This doesn't really create an attractive environment to work in. Third, if the urgency is considerable, there is only a short-term, often superficial, focus. Fourth, change efforts lose momentum. There is a tendency to consider the implementation of a specific technological tool the endpoint of the journey, while this is most often the actual starting point of true operational change – where tasks are being redefined; where people now – indeed – have to work together with or alongside a technological partner; where the story of change is now actively happening and reshaping (part of) the work environment.

In an already turbulent world, employees require a different work culture – one in which they can change their thoughts and behaviours. When you are around people who are not willing to change, chances are you will be less inclined to change yourself. But if you find yourself surrounded by change-supporting colleagues, you are more likely to support change as well. This is what we call social contagion: the emotions and behaviours you observe in your surroundings profoundly influence

you.[20] Transformation expert Jim Hemerling hammers just one thing: putting people first. In other words, a **human-centric** approach.

In striving for an agile organisation, leaders will stumble upon various people-related challenges. This is why we wrote this book:

> Digital transformation impacts and involves people from all layers of the company in different and profound ways. We need human-centric digital transformation.

After all, your colleagues define how a place looks, feels, and behaves. They are fundamental. In other words, if you want to be successful in this transformation process, you must change people's **hearts** (*"Why am I doing this job?"*), **heads** (*"How do I look at my job?"*), and **hands** (*"How am I doing my job?"*).[21]

REVAMPING LEADERSHIP MINDSET AND CAPABILITIES

Can you expect your colleagues to be agile when they are swimming in fear? Can you and your colleagues give candid feedback, explore unconventional ideas, and dissent without being ridiculed? Or have these acts of agility already become sources of punished vulnerability (e.g. criticism, embarrassment, discouragement, silencing, shaming, trivialising, bullying, intimidation)? When you notice that colleagues don't ask questions or admit mistakes, don't dare to explore ideas, let alone challenge the status quo, it is time to act. Timothy R. Clark states,

> "If you drop agile tools and processes into a legacy culture that punishes the very acts of vulnerability required to be agile, you will fail."[22]

Alongside an organisation-wide struggle, employees also struggle to change behaviours and mindset. George Westerman and Didier Bonnet identified two capabilities that can help companies in becoming digital masters.

— **Digital capability** empowers organisations to change existing processes and products and improve or create new business models.
— **Leadership capability** is envisioning and driving organisational change in systematic and profitable ways.

There is a growing fear that the gap between the digital masters and their competitors is increasing. George Westerman and Didier Bonnet surveyed 1300 executives in more than 750 global organisations in 2018 and concluded that,

> "Only 38% of them told us that their companies had the digital capability needed to become digital masters, and only 35% said they had the leadership capability to do so."

The New Leadership Playbook for the Digital Age – the result of a global executive study that set out to explore how the changing nature of competition, work, and society is influencing the future of leadership – states that,

> "[Leaders] around the world are out of touch with what it will take to win, and to lead, in the digital economy. Digitalisation, upstart competitors, the need for breakneck speed and agility, and an increasingly diverse and demanding workforce require more from leaders than what most can offer [...] The need for change is urgent, and time is running out for leaders who are holding on to old ways of working and leading [i.e. command and control], [...] that may have worked in the past but now stymie the talents of employees throughout their organisations."[23]

The results of a global survey of 1500 executives, conducted by Harvard leadership professor and change expert Linda A. Hill and colleagues, concluded,

> "More troubling, though, was that fewer than half of our participants think that they or other senior executives at their organisations have the right mindset and skills to lead in the digital era. Those closer to the nuts and bolts of digital functions – the chief technology officers, chief information officers, and chief digital officers – feel more confident about their own capabilities but less so about those of their colleagues in other functional areas."[24]

Hill and colleagues supplemented this with,

> "Leaders must be comfortable moving forward with ambiguous and incomplete information [...] and must learn to see their decisions and actions as working hypotheses that they can only validate by collecting feedback [...] as expeditiously as possible. Leaders will be blindsided if they rely only on their past experience or expertise when making decisions [...] and need to adopt holistic thinking and stay open to the

> unexpected. [As such,] they must learn to stretch their 'own imagination and creativity' to envision what the future could be for the company and its stakeholders, anticipate possible scenarios, and prepare to adapt to whatever unfolds."[25]

Does this mean that everything is terrible these days? Of course not. Some companies already embrace new ways of working and leading. Their employees aim for transparency, authenticity, collaboration, and empathy. Leaders understand the strength of purpose and connectivity, and value curiosity, trust, and digital savviness; colleagues are customer and employee obsessed. But they also admit that no one is competent across the complete set of required skills, attributes, and capabilities. In this new way of working,

> "Teams don't simply rearrange the relationships between leaders and followers; they unleash the talents of every person to cultivate communities of leaders [across the divides]. [...] The primary leadership challenge in the digital economy, however, isn't simply to adopt a group of [digital technologies and] behaviours [...]. The deeper challenge is to develop a new mindset that anchors, informs, and advances these [digital technologies] and behaviours."[26]

Building on this, one might want to consider the example of W.L. Gore (famous for its waterproof GORE-TEX fabric): as a result of its cultural principles that revolve around the notion of freedom, the company is considered a nimble organisation, "*a company filled with people who feel it is their job to lead and to step forward, propose new ideas, and translate them into action*".[27] Companies need increased awareness to ask better questions; the habit of constantly scanning outside of the industry; a hunger to search growth models; and an ambition to follow through on new pathways. Rather than taking pride in creating the old there must also be accountability for transforming the old and, ultimately, achieving strategic congruence between the two. However, to get there, to a state where everyone feels they can be a leader, a mindset shift is also required.

THE 4-V DIGITAL TRANSFORMATION LEADERSHIP MODEL

To help you reimagine what it means to lead in the digital economy, the 4-V digital transformation leadership model was developed at Vlerick Business School by Professor Stijn Viaene.[28] It outlines four digital transformation practice areas and associated leadership activities. These areas – Vigilant, Voyager, Visionary,

and Vested – need to be cultivated and balanced for organisations to develop and maintain digital-age organisational agility. The model provides guidance by defining the progress that digitally transforming organisations and their leaders need to strive for in each practice area. The model was developed using extensive and longitudinal action-design research methodology.

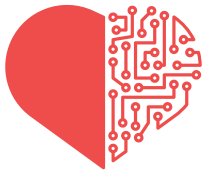
To make your digital transformation successful, the model states that you require a combination of these leadership activities to cope with the aspects of novelty, ambiguity, and uncertainty.[29] The framework of the model will be used in this book to highlight and discuss a selection of useful skills and insights that these leaders can build on and hone to diagnose, envision, and mobilise transformational change.

THE 4-V MODEL

As an organisation-wide phenomenon, digital transformation inevitably spans multiple contexts within an organisation. The model identifies four primary contexts, or practice areas, for studying digital leaders within organisations undergoing such transformation. Each context is defined by two key dimensions of organisational tension – transformational purpose and scope – that influence the digital transformation mandate of leaders, as well as the criteria for judging its success.

The first dimension, transformational purpose, involves a tension – exploiting versus exploring**.** Transformational purpose qualifies whether progress with the introduction of a new way of working by digital transformation leaders is sought in the space of the organisation's exploration agility or exploitation agility. The ability to effectively transform the organisation's exploitation and exploration is critical to organisational agility and long-term success. The second dimension, transformational scope, involves another tension – thinking versus action. Transformational scope qualifies the latitude afforded to digital transformation leaders in seeking to push the edge of the thinkable or the actionable with the introduction of new, digital-savvy, agile ways of working. While it is important to think big and demonstrate audacity of thought, it is equally important to balance this with pragmatism to ensure digital transformations are implementable and can lead to real, tangible change.

Plotting these two dimensions of organisational tension on a pair of non-quantitative axes produces four distinct quadrants, each corresponding to a context in which the notion of effectiveness or success is different.



The **Vigilant leader** is always alert, curious and attentive to technological advances, changing customer behaviour, competitor moves, market disruptions and new entrants, and – as such – is ready to respond when necessary. They operate well in ambiguous and turbulent situations. They are sharp-eyed, fascinated, and circumspect. Their watchful demeanour helps the company act quickly at the earliest, most feeble signs of opportunities and threats. The Vigilant leader, in sum, enables the company to make sense of what is happening beyond the periphery of the organisation, business model, or industry. As a result, Vigilant leaders decode the turbulent environment and make it easier for everyone to see interesting future world scenarios. In short, Vigilant leaders help realise digital transformation by:

— Keeping people **alert** for new digital-age threats and opportunities beyond the boundaries of the organization or sector
— Helping people make sense of what new digital opportunities and threats **could mean** for them
— **Inspiring** people to explore new ways of working powered by digital technologies