

**IN SEARCH OF
FUTURE-PROOF CORPORATIONS**

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FOREWORD

A road trip

Learning is about curiosity, about the drive to master one's profession, about looking back in order to move forward, and about transformative experiences. Learners are people who feel an urge to understand how things work, and how they might be shaped for the future. Think of a road trip: driving across the country, through villages and cities, you gain new experiences and new insights. Learning is like this in many ways.

The journey that led to this reader started in 2016 when we wrote a paper on the importance of attraction (magnetism) and people's freedom of movement (entropy) for a corporation's ability to innovate itself and its products and services. The three of us had worked together in the past, and what led us to write that paper was our shared interest in how innovation processes in organisations work. In addition, we shared a belief that large-scale corporations could play a meaningful role in the digitised 21st-century society. We are aware that this subject might not be as appealing as the rise of start-ups and scale-ups (which are much hyped these days), but corporations are the ones that create the products and services we all use on a daily basis, employ thousands of people (you might be one of them), and have the means and capital to help ensure a socially and ecologically sustainable future for humanity. We are convinced that corporations have an essential role to play in the 21st century.

In 2016, our interest in innovation processes combined with our belief in corporations' importance in society led us to embark on a joint search for the qualities that characterise future-proof corporations – large organisations that are surviving and thriving in the current challenging times and will sustain their success as the 21st century continues. We wrote a paper on the topic, but our curiosity didn't end there, and we continued to exchange ideas on the subject. This led to the start of a new leg of our journey in 2018. We wanted to gain a better understanding of the important role magnetism and entropy play in corporations and to critically examine these concepts. This reader is the result of our year-long learning journey. It begins with a discussion of the outcomes of our work this year: the conceptual framework of magnetism and entropy along with 10 indicators that can help you to design and lead future-proof, people-driven corporations. Next, we critically examine our own practice in three case studies. And finally, we close the reader with three essays on subjects of particular personal interest to us: respectively, innovation history; the choice corpo-

rations have to make if humanity is to survive; and the use of small-scale models to help understand large-scale processes.

On any road trip, you're bound to meet people who introduce you to new ideas. We owe our thanks to many people, including Hendrik Blokhuis, Ivo Brughmans, Harald Dunnink, Lars Falch, Hans van Goudoever, Marinus Pannevis, Bob Stehmann and Pauline Westendorp, who shared valuable insights that helped us to deepen our understanding in ways that were essential in shaping the ideas in this reader. On a journey, it's always handy to have a tour guide, and we want to thank our editor, Twan Eikelenboom, for helping us to put our ideas into words and guide us in compiling this reader. Also, a big thank you to our copy editor, Laura Martz. Her keen eye and precise corrections have improved our writings even further.

Finally, we want to thank Gijs Gootjes, Marco van Hout and Edith Zweerman of the Digital Society School at Amsterdam University of Applied Sciences for working with us to make this reader a reality. We share with the Digital Society School an eagerness to learn how the 21st-century digitised society functions and a conviction that to do so we must bring together all parties involved. We must form learning communities – multi-stakeholder efforts that will help us not only to understand our future but also to shape it. For us, this 2018 road trip has proven the power and importance of learning together. And we intend to keep learning – perhaps in the near future with you.

Geleyn Meijer

Artemus Nicholson

Ruurd Priester

About the authors

Geleyn Meijer

Over the years, Geleyn's main objective in working for and in corporations has been to create shared spaces where people from inside and outside the organisation can work together on solutions and ideas to benefit contemporary society. He started at CMG/Logica and went on to serve as dean of the Digital Media and Creative Industries faculty at Amsterdam University of Applied Sciences (AUAS) from 2011 to 2018 before becoming rector of AUAS in summer 2018. This reader is a culmination of his experiences and serves as a personal handbook reminding him that people are always at the centre of creativity and innovation. It is a conviction he has put into practice by setting up initiatives such as the Knowledge Mile (which has begun transforming one of the most polluted areas of central Amsterdam into a thriving innovation district) and the Digital Society School, an AUAS education programme that is reimagining higher education in the 21st century.

Artemus Nicholson

As a long-time consultant, Artemus specialises in strategy management, digital transformation, and innovation in various large organisations (in fields including financial services, the governmental and semi-governmental sectors, transport, utilities, energy, healthcare, industry and retail). Whenever he starts working with a new organisation, he looks first for its potential to transform and innovate: that is, for people driven to make the changes and create the innovations needed for the business to become profitable and successful again. They are the ones who can truly make innovation happen. The combination of people and technology is what makes the difference. Having experienced the great power of magnetism and entropy first-hand, Artemus truly believes these are the primary success factors for many organisations in this fantastic era we live and work in.

Ruurd Priester

Ruurd Priester is a research fellow in the Citizen Data Lab at Amsterdam University of Applied Sciences (AUAS). The holder of an MA in graphic design, Ruurd has been one of the Netherlands' pioneering figures in digital design, innovation and strategy. In 2014, after many years spent working with large organisations on digital transitions, Ruurd became affiliated with AUAS. His position as a research fellow gives him an opportunity to use his knowledge, experience and network to further digital social innovation. In 2017, Ruurd decided to focus on his deepest concern: climate change and the need to accelerate the energy transition. He combines his fellowship with his work for initiatives such as the Nationale Energiecommissie (www.energiecommissie.nl), 02025 (02025.nl) and Climate Cleanup (www.climatecleanup.org). Ruurd's activities can be followed on his blog at ruurdsnotes.tumblr.com.



In search of future-proof corporations

How corporations can survive in the face of the 21st century's unprecedented challenges

In the 21st century, traditional corporations, founded before the digitisation of society, find themselves in a radically changed situation. Faced with market disruption, start-ups, hypercompetition, demanding customers, ever-accelerating technological developments and global challenges, they are struggling to keep up. In their attempts to turn the tide, they tend to resort to old proven methods, like starting a new project or setting up a new subsidiary.

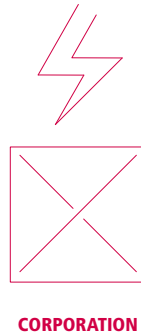
Nowadays, many corporations do also implement agile ways of working to improve and renew their businesses, but they remain stuck in time because they move too slowly and lack focus. In the end, they fail to make the necessary innovations. They are stuck in 20th-century ways of working. Specifically, they are bogged down by the idea of efficiency: their minds are set on the organisation's effectiveness at delivering a product or service. To change the situation, corporations must make the bold decisions necessary for putting innovation at the heart of their businesses. But how can they do this?

Corporations face disruptive changes

To start with, let's look at the situation the traditional corporation currently finds itself in. In these unpredictable times, the most constantly challenging factor for corporations is the increase in competition. It makes it hard for them to survive, let alone grow. And now they also face competition from a new kind of organisation, represented by companies from Silicon Valley and other smart scale-ups all over the world. These newcomers not only know the rules of the new digitisation game, they're writing them. In doing so, they're reinventing and challenging existing markets: iTunes and Spotify have challenged music stores, Uber the taxi industry, Zalando the fashion retail business, and so on. Start-ups and scale-ups see only possibilities, not problems, and their growth potential seems unlimited. In this new playing field, people in the public and private corporations¹ founded in the 20th century (or even earlier) are fighting to create value for customers, stay successful and grow.

New competition from start-ups isn't the only worry on corporations' minds. There is also the possibility of companies operating in adjacent – or completely different – areas now suddenly entering their markets. For example, publishers of major newspapers such as *The New York Times* and *NRC Handelsblad*² have started selling wine. And conversely, there are also companies that choose to narrowly specialise. This enables them

to offer the best customer proposition by outperforming others that offer products or services of lesser quality. High quality is important to today's customers, who are becoming increasingly critical about what they buy. They use the Internet to check reviews and compare products and services to find the ones with the best price-performance ratio. In sum, between start-ups and other companies entering their markets and the rise of digital technologies and well-informed customers, today traditional corporations are under pressure from all sides.



In light of this pressure, the future does not look bright for traditional corporations. They are struggling to keep up, for two underlying reasons. First, their business models stem from a different time: an era without digital technology or the looming danger of irreversible climate change. Second, over the decades, corporations have acquired a self-imposed organisational culture and structure that in the 21st century seem to do more harm than good. So, amid all the pressure, they are reverting to old ways of doing business. To be brutally honest, if they are to have a future at all, traditional corporations must transform – now. This turns out to be a massive challenge, because skin-deep marketing stories will not be enough to turn the tide. Instead, they need to implement fundamental changes to turn themselves into modern, flexible organisations that are able to swiftly adapt to circumstances as they arise.

This means that innovation – developing new products and services that will help them to achieve sustained success in the 21st century – has to be central within the hearts and minds of the organisation. PA Consulting's 2015 report *Innovation as Unusual* confirms the need for innovation, stating: "Our research suggests that organisations with an innovative culture are better at driving growth – they have the confidence to take on high-risk innovation, the capability to learn quickly from failure and the right mix of

talent to make innovation happen."³ However, only 53% of those from the Netherlands who responded to the firm's survey said their organisations put "innovation at the heart of their corporate culture and mission".⁴

These conclusions add up to a complex, unprecedented challenge for those corporations that are falling behind. Not only do they face new competition and the rise of digital technologies, they must also fundamentally alter their way of working. They need to implement deep changes to survive these times of disruption and digitisation. And the tricks that worked yesterday no longer will today. Moving forward, we need new approaches if we are to reinvent the traditional corporation for the 21st century. These approaches should be rooted in corporations' particular culture, history and unique place in society – for they have become an essential part of our daily lives. We all use their products and services on a regular basis, from food and energy to education and professional counsel. Traditional corporations still play an essential role in society, and the potential for them to reinvent themselves exists. Right now, though, society is dealing with urgent matters of its own. And those issues will affect corporations' business profoundly.

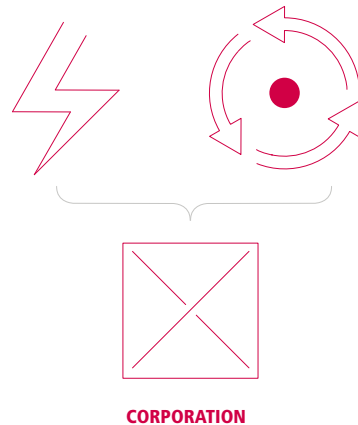
Global challenges affect corporations

Besides digitisation and the sharp increase in competition, corporations in the 21st century cannot ignore the ecological and societal challenges humanity as a whole faces. But how best to get a clear sense of these? Perhaps the most tangible way to become aware of the interrelated nature of our world is to experience the so-called overview effect.⁵ It has so far been limited to astronauts: it occurs when one views earth from a great distance and realises the loneliness of this green-blue ball floating in endless black space. In an open letter to humankind published just before his death, the Dutch astronaut Wubbo Ockels argued that human beings were all "Astronauts of Spaceship Earth". "Space flight has held a mirror in front of us of Humanity," he wrote. "We really see now where we are: On a beautiful

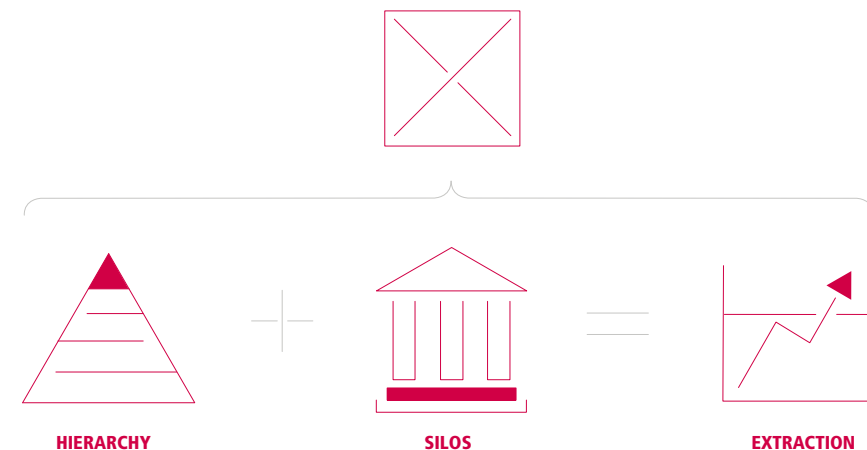
planet, with unequalled life support. An Earth of which we cannot live without. An Earth which has no spare.”⁶ Actually seeing the thin shell of the planet’s atmosphere confronts the space traveller with the extreme vulnerability and complete interdependence of everything alive on it. Earth is, to put it mildly, one system in which humankind plays an increasingly important role. We are living in the Anthropocene, the first epoch in which our actions profoundly affect the earth.⁷

So how did we get to this point?

Looking back on the 20th century, we see that it was a time that brought economic and social progress, albeit to specific regions of the globe. Globalisation in the form of air travel and telecommunications made the planet seem smaller. Industrialisation brought all sorts of changes, not least consumer goods, and most importantly the car, as a result of which we were no longer confined to working in our own villages and cities. And the 20th century saw the rise of multinational corporations: for the first time, companies were able to operate on a global scale. Without multinationals, we would have remained confined to our villages. However, globalisation and technological progress have also brought negative effects that have had a huge impact on the environment and our neighbourhoods. Planes cause severe air and noise pollution; Airbnb turns the neighbours’ houses and apartments into miniature hotels. These are just two examples; there are of course many more, from climate change to low-wage work and the unbalanced distribution of wealth. These are global challenges, caused by our own actions, and they characterise the Anthropocene epoch.



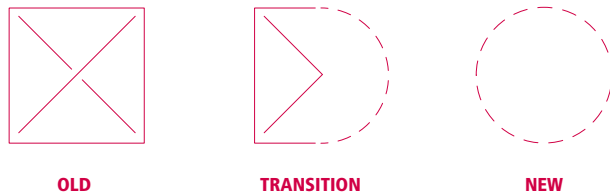
Initiatives have been set up to reverse the effects of climate change and address other global issues, but they have not been sufficient. There is no reason to be positive about the slow progress made so far: the challenges are growing at an ever faster rate, and therefore so is the urgency of solving them. The most comprehensive of these initiatives started in 2015, when countries adopted the United Nations’ 17 Sustainable Development Goals⁸ (SDGs) to focus their efforts to end poverty, protect the planet and ensure prosperity for all. The SDGs range from eliminating poverty and hunger to creating sustainable cities and communities, decent work and economic growth. For corporations to remain relevant in the 21st century and make sure that everyone – including themselves – has a future on earth, it is essential that they help to accomplish these goals, not fight them. This requires a holistic approach, while the hierarchical organisational structures and corresponding information silos most corporations are currently holding onto lead only to extractive practices focused on growth. Their goal is only to deliver a product or service to a consumer, without worrying about the effects on society and the climate. This old way of doing business is unsustainable.



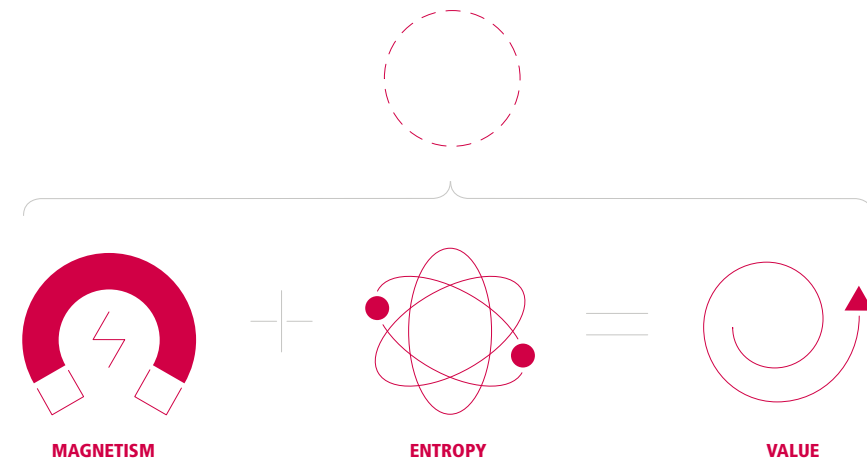
Magnetism and entropy

A conceptual framework for understanding innovation processes in corporations

So corporations are struggling with new competition from all sides and a series of fast-paced technological developments, while at the same time they need to help address global crises to secure their own and humanity's future on earth. The question, then, is: how can traditional corporations not only adapt to these difficult times but also achieve success in a sustainable way? That is, how can they create successful, innovative products and services that will sustain their businesses while at the same time contributing to efforts to sustain life on earth? In 2016 we – Geleyn Meijer, Artemus Nicholson and Ruurd Priester – came to the conclusion that the existing conceptual frameworks for corporations looking to move away from old, hierarchical ways of working and toward holistic, multi-stakeholder ways of working were insufficient. And let us be clear: making this transition is not a choice. Corporations need to change, because the old, unsustainable ways of working result in the extractive practices that rob the earth of its natural resources and threaten the stability of society through harmful practices such as exploiting workers. To make this transition, corporations need to innovate new practices of their own.



But if the current conceptual frameworks do not provide answers, what possible ways of making the transition exist? When we started to think about and discuss this key question from the perspective of our own experiences and practices working in and with corporations, we agreed that two fundamental characteristics were important for them to have: 1) a strong sense of attractiveness that draws employees and people outside the organisation toward it and its purpose, and 2) the capacity to give people the freedom to move throughout the organisation and outside it in order to realise their creative ideas. As you will probably notice, this was still too abstract. Though we knew we were onto something, the real breakthrough in our thinking came via two related concepts from physics: magnetism and entropy. In our paper “Open Innovation 2.0 calls for Magnetic Organizations”, published in the *Open Innovation 2.0 Yearbook 2016*, we described for the first time how the concepts of magnetism and entropy could be used to think about innovation in large-scale organisations. Next, we’ll discuss the two concepts in depth and explain why they are important for sustained success in the 21st century.



On magnetism

Magnetism attracts people to your organisation, products, services and ideas, allowing you to build the critical mass necessary to work on innovation with others. Too much magnetism, however, results in rigidity.

Let's zoom in first on the basic concept of magnetism. The online Cambridge Dictionary defines magnetism as "the power of being able to attract iron and steel objects and also push them away". A magnetic field exerts a well-defined attractive force on susceptible objects, such as many metals. Such a field can be created and maintained by an electrical current running through a coiled wire or by a permanent magnet (in which case the force is called ferromagnetism). Magnetic force can be very powerful, as in electric motors and MRI scanners. It also lessens sharply with distance from the source, being typically inversely proportional to that distance squared. A magnetic field can attract and move objects with a mass of several grams or more from a few centimetres away: think of refrigerator magnets and magnetic whiteboards.

A magnetic field and its attractive force provide a clear, easily understood model of the set of attractive characteristics an organisation must have for people inside and outside to naturally gravitate toward it. When a "magnetic field" is present, everyone works toward a heartfelt common goal. It is no coincidence that the Cambridge Dictionary also defines magnetism as "a quality that makes someone very attractive to other people". In the context of an organisation, however, a magnet serves as a metaphor not just for attraction but also for energy and force. Attraction, in this context, implies the movement of a person toward a strong purpose. This is the person who will really make things happen: an employee within the organisation with a great idea that serves that purpose, a customer outside it who is attracted to an experience that goes beyond just buying a product or service, a talented young professional drawn to an inspiring goal set by the organisation. And when others around these people hear about the

attractive organisation, they in turn also gravitate toward it. They magnetise too: they are attracted to the magnet that is the organisation.

On entropy

Increasing entropy in a rigid organisation gives people more freedom to act out of inner motivation and share their ideas throughout the organisation. Too much entropy, however, results in chaos.

The second concept essential to sustained success is entropy, defined in the online Cambridge Dictionary as "the amount of order or lack of order in a system". High entropy indicates a high degree of disorder in a system, as opposed to low entropy, which indicates a rigid structure. The concept of entropy comes from thermophysics, where it is used to explain phenomena such as the movement of heat between objects. When heat flows from warmer objects to colder ones, the overall amount of disorder in a system increases. In short, ice melts, resulting in a fluid substance: water. In information theory, entropy is an inverse measure of information: the more entropy, the more disorder and thus the less information. A blog post by interlogica.it illustrates this clearly using the image of a beaten egg: "After we spent energy to beat the egg with a fork, the egg shifted to a higher level of entropy. With all this mixing, we've lost the exact position of the single molecules: we've lost information."⁹

We aren't the first to bring the concept of entropy outside the realms of physics and information theory. Scholars Héctor A. Martínez-Berumen, Gabriela C. López-Torres and Laura Romo-Rojas, for example, have used it to describe phenomena in human organisations.¹⁰ On a more practical level, Bud Cadell¹¹, the founder of the organisational design consultancy NOBL, has proposed a systems design model that unites design thinking, lean start-up and agile methods. In this model, divergent (disorderly) and convergent (orderly) functions of the methods alternate. "Groups that balance convergent and divergent thinkers are able to solve problems more effectively," Cadell argues.¹²

So what do *we* mean when we use the concept of entropy to talk about organisations? In our 2016 paper, we introduced the idea of innovation entropy as a measure of the tendency toward innovative behaviour among individuals and groups in an organisation.¹⁵ When there is low innovation entropy, people just keep doing what their job descriptions and tasks tell them to do and seem to feel little or no intrinsic drive to try doing things differently. The organisation does the same thing as it did yesterday. No risks are taken, no improvements sought. There is a high degree of order. When innovation entropy is high, on the other hand, there is motivation to change individual and group behaviour, and people often take the initiative and try something different. People act and create – but in no particular direction. There is a high degree of disorder.

There is no prescription for the right amount of innovation entropy an organisation should have. Too little is no good, but too much is equally damaging. For new ideas to float freely throughout the organisation, innovation entropy needs to be nurtured, but balanced. A high level of it can break down inhibitions that keep people in their cubicles and offices with the doors closed. To achieve this, an organisation has to facilitate people's ability to meet and share ideas inside and outside it. Too much entropy, however, will result in uncontrolled experimentation, such as endless unfocused creative sessions and a excessive number of meetings outside the organisation.

How, then, do you find the perfect balance between high and low levels of innovation entropy, where things aren't too cold or too hot but just right? First, achieving this balance is a process of constant adjustment. Second, an organisation needs occasional periods when it releases energy and creates more disorder, followed by cooling-down phases when ideas and successful results of experiments are evaluated and implemented. And third, what is needed is a way to focus the innovation entropy of individuals and teams instead of allowing random movement that may produce a lot of

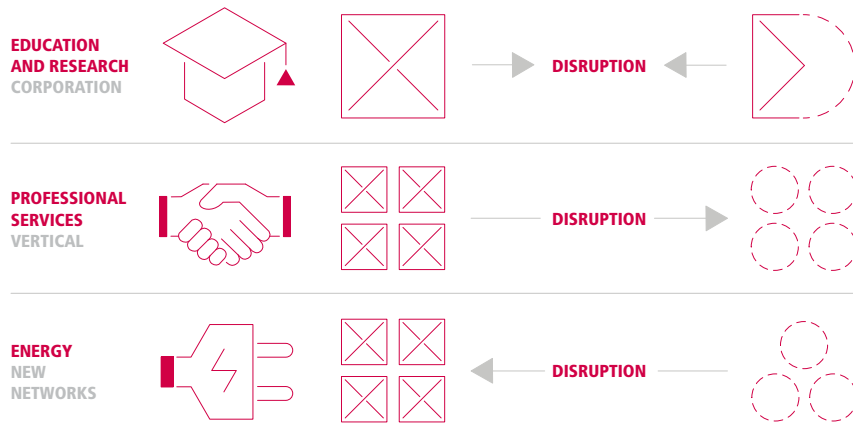
“heat” but leave the organisation as a whole going nowhere. This is where entropy and magnetism intersect. The attraction produced by a magnetic organisation provides direction and focus to movement, or entropy.

Putting the conceptual framework into practice

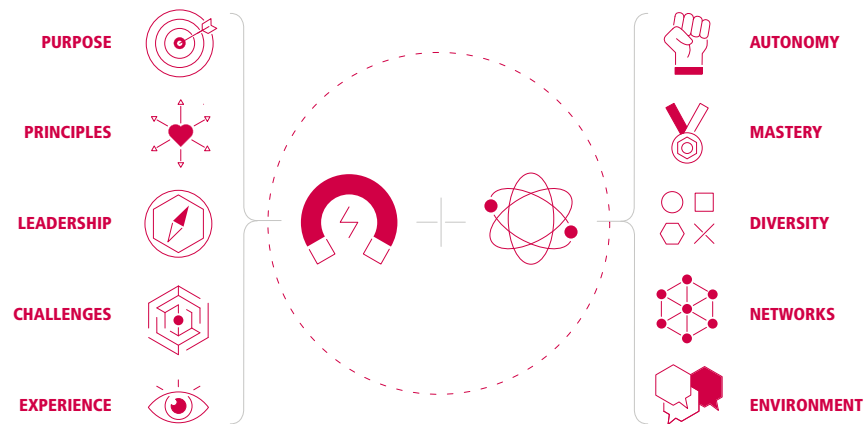
In our 2016 paper we introduced the concepts of magnetism and entropy as ways of increasing the innovation potential of traditional corporations to enable them to transition to a new, future-proof way of working geared to sustained success. Since 2016, our goal has been to connect the conceptual framework to practice. Our approach to doing this was twofold. First, we met up with a varied group of experts with backgrounds in organisation strategy, design and marketing and leaders working in the healthcare, energy, legal and consulting sectors to discuss the concepts of magnetism and entropy in relation to innovation processes in corporations.

Second, we wrote three in-depth case studies critically examining current challenges and disruptive changes in our own sectors, which are 1) education and research, 2) professional services and 3) energy. It is important to note that we chose to do so at different scales and from different angles. For education and research, we chose the level of the organisation and looked at how it makes the transition from old to new; for professional services, we chose the level of the industry and looked at how it is coming under pressure from different sides; and in the case of the energy sector, we looked at the energy supply chain as a whole from the perspective of three new networked initiatives aimed at accelerating the energy transition.

The result of our meetings and case studies is a list of 10 indicators – five for magnetism, five for entropy – that you can use in your own practice as a leader to help you design the corporation you work in. Together, the conceptual framework comprising the ideas of magnetism and entropy and the 10 indicators will provide you with a set of guidelines for designing and leading a future-proof, people-driven corporation.



Magnetism and entropy will enable you, as a leader, to quickly understand and analyse innovation processes in your organisation. The 10 indicators featured in the image and described in depth below will allow you to take action to design the corporation in such a way that pressure from disruptive changes affecting the organisation and challenges facing the world as a whole will no longer be disadvantages. Instead, the indicators will help you to turn these 21st-century challenges into advantages, resulting in a future-proof corporation.

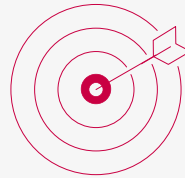


How to design future-proof, peopledriven corporations

Ten indicators of magnetism and entropy



MAGNETISM



PURPOSE

Why does your organisation exist? Answering this question will lead to a better understanding of your purpose. The answer needs to be actionable and not organisation-focused: it should relate to a larger societal challenge the organisation wants to solve.

BACKGROUND

People spend a lot of time in the workplace. Meanwhile, they want to fulfil a purpose in life. In the 20th century, people weren't very demanding in this regard. Work and personal life were seen as separate, and organisations regarded employees as "human resources". In the 21st century, however, the search for meaning has become important to individuals. Consequently, a corporation too needs to define and live by an inspiring purpose. Why does your organisation exist? Simon Sinek's book *Start With Why* is essential reading for anyone looking to define their "why" statement. A clear purpose inspires employees. And by connecting with like-minded organisations in its efforts to fulfil that purpose, a corporation can create and join multi-stakeholder networks at various levels, with partners ranging from entities that have adopted the UN's Sustainable Development Goals to neighbourhood communities working to improve social cohesion.

CHARACTERISTICS

- A clear, specific, well-formulated *task* or *challenge* the organisation has set out to accomplish or solve.
- A *rationale* to show why this purpose fits the organisation. People need to be able to relate to this narrative, so it should be in line with aspects such as the organisation's history, culture, collective experiences and available infrastructure and expertise.
- A *track record* to communicate progress made toward achieving the purpose. Measuring progress will provide you with proof points you can use in communications.

EXAMPLE

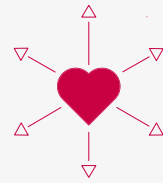
Corporations working in the fossil fuel and energy industries are having a hard time adopting a new, sustainable purpose of helping to address climate change. This is because they have not defined an (industry-transcending) purpose that includes not only providing the world with energy but also cleaning up the mess caused by fossil fuels. Therefore, agile single-issue initiatives like The Ocean Cleanup and the Plastic Soup Foundation are becoming more attractive to people than corporations not focused on circularity.

plasticsoupfoundation.org

theoceancleanup.com



MAGNETISM



PRINCIPLES

In addition to knowing why your company exists, drawing up a set of indisputable guiding principles will help you to weigh decisions when they arise. It can also be viewed as a list of shared values that helps to create a stronger sense of unity and consistency for people in the organisation. For those outside it, showing what you stand for creates trust.

BACKGROUND

Working together means knowing which collective choices you're making as a group. These are your values. What does the group stand for? Before the digital turn, collective values might have been important for teams because they allowed team members to rely on each other to do the correct work. In the age of social media, online aggregators and consumer platforms, activities not in line with your company's stated values will quickly be "shared" and exposed worldwide. The need for organisations to align their behaviour with their stated values has therefore increased. If you do not act in line with your values, you will be held accountable.

CHARACTERISTICS

- People personally *identify* with the principles and are able to communicate and explain them in their own words.
- The principles are part of people's day-to-day work. They *apply* them when confronted with difficult decisions.
- The principles are not hidden in reports but are easily *accessible* online for everyone – inside and outside the organisation.

EXAMPLE

De Correspondent, founded in 2013, is an innovative, crowdfunded Dutch-language online platform for journalism. One of the things that sets it apart from other news providers is its use of 10 founding principles to guide its reporters' decisions. These principles are continuously challenged and discussed online. A good example is "We don't just cover the problem, but also what can be done about it." Principles like this also require that the organisation upholds a promise to its readers, who are also its funders. De Correspondent is publicly accountable.

thecorrespondent.com/principles



MAGNETISM



LEADERSHIP

Good leadership fosters creativity, ensures well-being, encourages excellence and provides direction through clear vision and strategy. When people connect with a strong purpose and principles, they can become leaders – energetic driving forces that move others inside and outside the organisation to join in.

BACKGROUND

Today, leadership is no longer bound to hierarchy. This is partly because opportunities arise at a much faster rate in the digital age. So an organisation needs natural leaders who can quickly decide where to go and what to do. Corporate leadership must also take a new approach. Perhaps one of the best examples is “servant leadership”; the term was coined by Robert K. Greenleaf in his 1970 essay “The Servant as Leader”. A servant leader, he writes, “puts the needs of others first and helps people develop and perform as highly as possible.” For anyone seeking to be one, the challenge is: can you influence a group of people to work in a common direction? When natural leaders throughout the organisation are effectively supported by servant leadership at the top, an organisation’s creativity and innovativeness will thrive.

CHARACTERISTICS

- *Support* for self-management and actions taken by natural leaders that help to move the organisation forward.
- *Balance* between new opportunities and forward movement on the one hand and taking care of the organisation’s financial sustainability on the other.
- Consistent and *distributed leadership* to increase interdisciplinary cooperation inside and outside the organisation.
- A *fluid arrangement* of roles, as discussed by Frédéric Laloux in *Reinventing Organizations*. People should not be forced to take on management roles that do not fit their talents in order to progress in their careers.

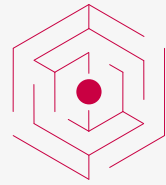
EXAMPLE

Self-management is increasingly popular in organisations. One example is the Dutch home care organisation Buurtzorg. It is built on an innovative nursing model that cuts bureaucracy and gives nurses more freedom and time with clients. In 2016 Buurtzorg launched Buurtzorg International; today it is active in 24 countries.

buurtzorgnederland.com



MAGNETISM



CHALLENGES

To attract the best talent, you need to offer the best challenges. Opportunities to work on complex, advanced issues and make a real impact on the world attract new talent as well as experienced professionals eager to excel.

BACKGROUND

Ever tried to solve a Rubik’s Cube? Although the puzzle is conceptually easy to understand, solving it is tough, but the sense of satisfaction when you do is great. The challenge is complex, but you want to keep going. The same is true of challenges in organisations. The most energetic people with the brightest and most creative minds want to tackle the most advanced issues. The sense of satisfaction is great when you get to work on a solution that will have a lasting impact on the world.

CHARACTERISTICS

- The challenges people can work on are *clearly visible* inside and outside the organisation.
- The organisation isn’t afraid to take on the most *complex challenges*. Don’t wait for other, seemingly more innovative competitors to solve them. Even better, work with them to do so.
- The organisation *actively searches* for challenges. Look outside the organisation – in society, in markets and among clients – to find the right one.

- A challenge must be connected to the *purpose*. Its goal is not financial gain but achievement of a heartfelt objective.
- To solve a challenge, it is essential that everyone involved takes a *constructive stance*.

EXAMPLE

Hackers love a good challenge. HackerOne is a platform that offers so-called hacker-powered security testing to organisations, thereby presenting hackers with complex challenges. The monetary reward they receive for solving them is called “bug bounty”. The us Department of Defense’s Hack The Pentagon is one of the bug bounty programmes on the platform. HackerOne was founded in 2012 by three young Dutch hackers and former Facebook head of product security Alex Rice.

hackerone.com



MAGNETISM



EXPERIENCE

Create unique, memorable experiences – in the form of products and services – that constitute proof of your organisation’s purpose, values and excellence. If people associate your organisation with a great experience, they’ll be drawn to your products and services in the future.

BACKGROUND

Economists Joseph Pine and James Gilmore introduced us to the idea of the experience economy, in which the customer’s focus is not on the products and services a company sells but on the memorable experiences they create. In the digital age, experience is increasingly important. Corporate marketing isn’t just about TV commercials and newspaper adverts but about content creation, storytelling and user engagement. And don’t forget: with the rise of the critical consumer thanks to the Internet, your products and services must be of the highest quality – i.e., offer the best experience – or you risk a one-star rating on Amazon.

CHARACTERISTICS

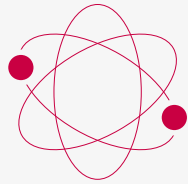
- The customer is at the heart of the corporation, and every decision or project is focused on increasing *customer satisfaction*.
- Highly *personalised services* – ones that make use of all the channels, services and brands an organisation has – create a fluid experience for customers. Services should not be persona-based but tailored to the individual.

- The focus on experience is not limited to customers. *Everyone involved* in the chain – employees, suppliers, partners – is sharing in an experience that inspires them personally. This shines through in the organisation’s offerings.
- *Measurement* of customer satisfaction, for example through Net Promoter Scores, is essential for large-scale organisations.

EXAMPLE

One of the most famous examples of creating an experience around a brand is provided by Red Bull. It isn’t just an energy drink but also a sponsor of extreme sports, motor sports and football clubs. People today don’t just think of Red Bull as just a beverage but also identify it with their beloved racing drivers and football stars. The brand has built a coherent experience across a range of platforms.

redbull.com



ENTROPY



AUTONOMY

Autonomy is the amount of freedom individuals and teams have to achieve goals and tasks relevant to the organisation's purpose. Removing restrictions such as prescribed working practices and process templates can free up people's minds. They will feel more inclined to speak out and share their best ideas and can become drivers of change in rigid organisations.

BACKGROUND

Many traditional organisations have an existing culture in which employees feel they have to follow the rules and do things as they've always been done. This culture is nurtured by the fear of losing the job one depends on to pay the mortgage and buy groceries. But people are the best source of creativity and innovation a corporation has. Therefore, it should facilitate autonomy when an employee attempts to share his or her thoughts and ideas. Autonomy is also a question of individual character: autonomous people tend to be either experienced employees with an independent mindset or driven, talented recent graduates with a clear goal in mind. They want to achieve that goal regardless of organisational structures. If your organisation doesn't give them the freedom they need, they'll just start their own businesses.

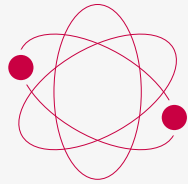
CHARACTERISTICS

- Displays of autonomy by individuals and teams are *facilitated by leaders* so their views and creative ideas can benefit the organisation.
- *Self-management* creates room for autonomy to grow. Instead of working for a manager, employees work to meet their inner – often much higher and more demanding – standards.
- There is a high level of *trust*. People feel free to speak out without having to worry about losing their jobs or incurring penalties. Small-scale experiments can help to create an environment of trust.
- Autonomous people can easily *find central places* in the organisation where they can progress their ideas, e.g., by getting funding or connecting with partners. These places could include departments, meeting spaces and internal networks.

EXAMPLE

At Emma Children's Hospital in Amsterdam, care is organised around children and their families, with their benefit in mind. Instead of merely completing tasks assigned by management, as is the practice in traditional corporations, people in the organisation are free to contribute to this goal as they see fit. Those eager to advance their own projects can apply to the Steun Emma foundation for funding. However, they will be expected to do things like attend networking events and organise fundraisers to bring in partners and additional financing.

steunemma.nl



ENTROPY



MASTERY

People eager to become the best in their profession – masters – tend to make decisions not because they are easy but because they are the right things to do. Masters have the unique knowledge and insight required to move an organisation – and a profession as a whole – forward.

BACKGROUND

In *Drive: The Surprising Truth About What Motivates Us*, Daniel H. Pink explains that the secret to high performance and job satisfaction is rooted not in financial motives but in the human need to “direct our own lives, to learn and create new things, and to do better by ourselves and our world”. Becoming a master brings a certain amount of status, appreciation and trust from peers and happiness with one’s work. Masters are more inclined to do the right thing based on their skills, insights, knowledge and experience. This means they don’t always make what seems to be the most logical choice, or follow existing processes. Finally, masters are persuasive by nature and tend to collect people around them who want to become masters themselves.

CHARACTERISTICS

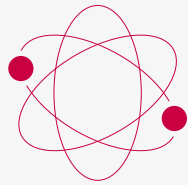
- Curious, talented people are supported in developing their craftsmanship and becoming masters, for example through *master-servant* relationships. Career paths focus on mastery, not on climbing the ladder in a hierarchical organisation.

- The organisation *values the knowledge and insight* put forth by masters. People who ask why things work the way they do are challenged to come up with ideas to improve processes. The expression of ideas is not constrained by a hierarchy.
- The organisation provides masters with an *international forum* for sharing knowledge and new insights. This improves the flow of ideas between the organisation and the rest of the profession.
- *Learning communities* within the organisation support an exchange of knowledge between masters. They bring together people who are eager to learn how things work now and how they might work in the future.

EXAMPLE

TED is a world-famous community whose mission is to share “ideas worth spreading”. The TEDx programme takes this idea a step further by bringing the TED presentation format to local communities everywhere. Masters from around the globe share their personal experiences on stage, inspire others, and meet new people with whom they can exchange ideas. Those looking to become masters can find plenty of inspiration in the ever-expanding library of TEDx Talks.

tedx.com



ENTROPY



DIVERSITY

A high level of diversity in terms of knowledge, perspectives, backgrounds and areas of expertise helps to foster an open culture where new ideas can be shared freely. An open culture is one in which people respect and are genuinely interested in each other's stories and ideas. As a result, more people connect throughout the organisation.

BACKGROUND

When people go beyond the confines of their own departments, disciplines and backgrounds, new and unexpected things can happen, leading to fresh, creative ideas and innovations. In his book *Where Good Ideas Come From*, the media theorist Steven Johnson describes good ideas as wanting to cross borders, to connect, fuse and recombine. Good ideas are generated by groups containing different types of people. Engineers mingle with sociologists, artisans meet creatives, young and old people share experiences, and so on. A mix of cultural backgrounds and genders is also essential if your organisation aspires to create innovations that are relevant for society as a whole.

CHARACTERISTICS

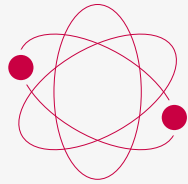
- People from different cultural and social backgrounds *meet* at events where they can get to know each other and share stories about the work they do for the organisation.
- In the development of new products and services, teams *involve* a wide variety of people to create great user experiences for everyone.

- *Knowledge transfer* takes place between experienced employees and young talent, for example through master-servant relationships.
- *Policy* must be in place and implemented to: 1) ensure a culture of respect and mutual interest between employees, 2) create diverse teams, and 3) proactively recruit new employees from a wide variety of backgrounds.

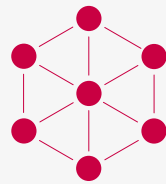
EXAMPLE

The Global Goals Jam is an international event organised by the Amsterdam-based Digital Society School and the United Nations Development Programme. In it, designers, developers and communities come together to create interventions in an effort to solve local social challenges. In 2018, the Global Goals Jam was held in over 60 locations worldwide, bringing together a wide range of cultures, professions and backgrounds.

globalgoalsjam.org



ENTROPY



NETWORKS

Traditional corporations are mostly organised in silos, with hierarchical structures. A top-down control mechanism makes sense for organisations focused on predictability and specialisation. However, where innovation is required, creativity and interdisciplinary cooperation are essential. To achieve them, a company needs to set up and engage in networks.

BACKGROUND

We live in a network society, in which people, aided by digital technologies, decide for themselves who to communicate and collaborate with and who to trust. Consequently, engaging in networks has become essential for corporations wishing to harness and stimulate their teams' creative energy. Instead of working solely within the confines of corporate offices, teams in the network society also work with government, educational institutions, knowledge institutes, other businesses, and communities (such as neighbourhoods and user groups) to create meaningful products and services. This idea follows the Open Innovation 2.0 approach, which is part of the European Commission's Digital Single Market policies. There are limits to what networks can do, however. Today, they mostly go through a life cycle of creation and decline. Only once networked collaborations are able to embrace responsibility and accountability will they potentially be able to replace hierarchical organisational structures.

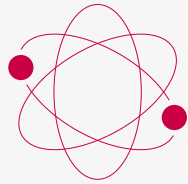
CHARACTERISTICS

- Policies are in place that make people *free to connect* with others inside and outside the organisation for its benefit.
- The organisation uses *multi-stakeholder networks* to achieve its purpose and specific goals. Ideally, those involved in these networks will have a mandate to implement solutions.
- The organisation brings networks of people together by regularly organising *informal gatherings*. There, people can share inspiring experiences they've had in the course of working toward the common goal.
- *Freedom and accountability* go hand in hand. People need the freedom to work in networks but must also be held accountable for their actions.
- The *results* of networked collaborations set up by the organisation are visible to everyone and presented as best practice, encouraging participation in successful networks.

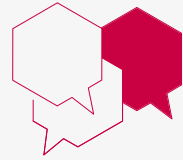
EXAMPLE

The Knowledge Mile is a community project that aims to make one of the most polluted areas of central Amsterdam into a thriving, healthy innovation district through the combined efforts of knowledge institutes, local residents, businesses, city makers and government. Founded in 2015 by AUAS, Amsterdam University of the Arts and Inholland University of Applied Sciences, the initiative is an example of the Open Innovation 2.0 approach: a multi-stakeholder network set up around a clear, inspiring goal as a means of accelerating meaningful innovation. Matthijs ten Berge, Sabine Niederer and Ruurd Priester came up with the original idea for the Knowledge Mile.

knowledgemile.org



ENTROPY



ENVIRONMENT

Online as well as offline, open environments stimulate social interaction, new encounters and discovery. By designing their office spaces and online platforms to make new exchanges more likely to take place, corporations can foster the exchange of ideas and accelerate the incubation of new innovations.

BACKGROUND

How can you nurture a sense of intimacy and accessibility in a large organisation like a corporation? You need spaces that encourage people to meet, connect and share ideas. Perhaps the best example of an inspiring, open infrastructure is the university campus, where people with a range of backgrounds and interests come together to learn and create. Architecture plays an important role here – for example, glass walls increase transparency and a sense of working together. Alongside the offline environment, online tools can help people to exchange ideas and work together – even if they're on opposite sides of the world.

CHARACTERISTICS

- Working spaces with a *contemporary design*.
- An open, inviting *infrastructure* of office spaces and buildings that foster interaction between colleagues as well as with people from outside the organisation.
- Policies and *working practices* aimed at promoting networked collaboration. For example, people are given an incentive to reach out to others.

- A *state-of-the-art software platform* enabling staff to effectively work with colleagues and engage in project-based network collaborations.
- *Facilities*, both online and offline, to help people maintain their well-being and work-life balance.

EXAMPLE

Branded “the smartest square kilometre in Europe”, the High Tech Campus Eindhoven is home to more than 160 companies and institutions. There, 11,000 researchers, developers and entrepreneurs work to build the new technologies and products that will shape the society of tomorrow. At the heart of the campus is The Strip, a 400-metre-long building designed to connect people and stimulate the exchange of knowledge and new collaborations.

hightechcampus.nl

Next steps: Learning together

Quantitative, qualitative and design research

In closing this chapter, and before moving on to the case studies and essays, we want to elaborate on the possible next steps in our search for ways of future-proofing the traditional corporation, following 1) our construction of a conceptual framework in 2016 to help us understand innovation processes in 21st-century organisations and 2) our subsequent connection of those ideas to the practical realm in 2018 and our translation of our findings into 10 specific indicators that leaders can use to increase magnetism and entropy in their organisations. We see three possible ways of further developing and researching this model.

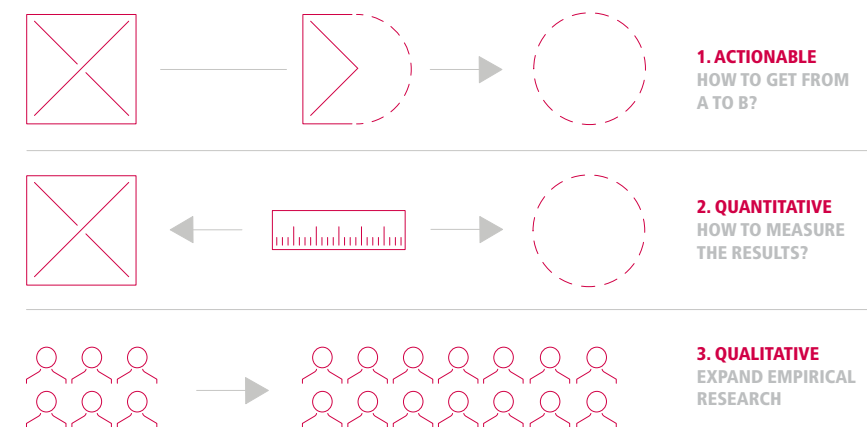
First, the indicators do not tell us how an organisation can move from the status of traditional corporation to that of a future-proof one. So we need to determine how you get from A to B. How can we design this process? What does it look like in corporations that have successfully future-proofed themselves for the 21st century? What can we learn from their journeys? Which successful design methods for organisational transformation exist, and what are the specific elements and design principles that underlie these methods and make them work?

Second, quantitative research will allow us to measure the results of an organisation’s transformation. We should determine how to use the 10 indicators to score a corporation at the start of its transformational trajectory, and to show what happens once it decides to – for example – define a clear purpose, or foster cascading leadership and increase individual autonomy, or reshape environments. And of course, we need to determine

how to define when an organisation has actually succeeded in becoming a 21st-century, people-driven organisation.

Finally, qualitative research will enable us to build a stronger foundation to support the conceptual framework of magnetism and entropy. Bringing together the views and experiences of experts and leaders will help us to critically examine the two concepts. A multidisciplinary approach is important here: we will need to bring together experts from a wide variety of fields, such as design, psychology, marketing, organisation theory, physics and strategy, and connect them to professionals working in specific corporations, industries and supply chains.

In all this, what is most important is that our next steps – like 21st-century innovation itself – help to break down the walls of the corporations. We aim to create and expand a knowledge-sharing network around the topic of corporate innovation in the 21st century, in which we can learn together how traditional corporations can overcome the unprecedented challenges they face today and transform into future-proof, people-driven companies. We invite you to join us.



Endnotes

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CASE STUDY

**Transformation
in the semi-public
sector: Education
and applied
sciences**

Geleyn Meijer

Amsterdam University of Applied Sciences (AUAS) is a group of educational institutions that have been brought together in the past few decades to form a single organisational and legal entity. AUAS is legally a foundation, subject to Dutch parliamentary legislation as a so-called semi-public body. It therefore must serve the public interest and is bound by certain legal frameworks. Dos and don'ts relating to students, personnel and financial control and a set of performance indicators that are reviewed by parliament reflect the university's public nature.

Its governance, however, resembles that of a private body. The board of directors reports to a supervisory board whose members are co-opted. There is no involvement in the university's governance by any public servant or political representative. The board of directors appoints the deans of the faculties, who in turn direct and administer the educational and research departments. Because there is no outside involvement in its governance, the organisation functions similarly to a business. There is entrepreneurial experience in the leadership team, and there are business-like organisational structures, including the primary processes and supporting services. This typically Dutch approach to governance aims to bring together the best aspects of public responsibility and entrepreneurial ownership. Publicly funded hospitals in the Netherlands are run in the same way.

The mergers that have taken place over the years have brought strong smaller schools and larger ones together under unified governance. The smaller schools were characterised by highly differentiated profiles in the market, often outspoken views on their own qualities (justified or not), and competent groups of professional teachers and guardians of the core bodies of knowledge being taught. They were motivated to join the merger by a lack of manoeuvring space for further development. Limited budgets and strict annual teaching cycles make innovation hard to achieve. Looking for others to join forces with enables a school to gain manoeuvring space. Institutions can jointly invest in professors, teaching facilities, renewal programmes and housing. Meanwhile, the larger schools that took part in the merger did so for reasons of effectiveness and quality assurance; they sought to enjoy the professional services enabled by an economy of scale. In any merger, the essential ingredient is a common cause, a shared motivation. In the case of the AUAS, this consists first and foremost in a public-spirited calling to educate young people. This drive is shared by all personnel. It makes the AUAS a place where a common purpose is palpable, like a magnetic force that binds people. And in order to intrinsically contribute to this common goal, people need freedom to move.

Borderless education in Amsterdam

In the 1990s, the directors of the University of Amsterdam (UvA) and AUAS envisaged an increase in collaboration between the two semi-public organisations that would allow them to offer students a “borderless” learning environment on an unprecedented scale – that is, one that would enable them to easily study at both institutions simultaneously or sequentially. It was a noble intention. The first step in the plan consisted of creating a governance structure comprising a joint board of directors and supervisory board for the two organisations. They also succeeded in creating joint service departments for administration, housing and ICT. At first, the new cooperation provided a fresh stimulus for faculties to seek out new ways of working together and to explore the possibility of borderless study tracks. By 2011, though, the partnership had proved unable to make lasting arrangements for students to move from one educational track to another. Implementing the vision of borderless education turned out to be more difficult than expected.

What happened? It seemed that a common calling among personnel to educate students did not create a magnetic field strong enough to propel the entire community forward together. The vision of borderless education remained too abstract an addition to the common cause. While it worked in the politically oriented boardrooms, it lacked the power to move those in the teaching and research community.

To begin with, the magnetic field generated by the vision of borderless education was not the only one in play. For example, around the same time, faculties also started working with their counterparts in other Dutch universities outside the UvA-AUAS alliance, seeking to raise their academic esteem or student influx. These alliances between departments constituted serious competition for the vision of borderless education and ultimately proved to be stronger. In 2011, the dean of the UvA science faculty switched focus to joining forces with other universities in order to compete

with science faculties outside the Netherlands. While this is a strong and justifiable reason to seek horizontal integration, it took away the energy needed for the process of vertical integration and the goal of borderless education in Amsterdam.

Another magnetic – or in this case repulsive – force was the personal networks of employees. These exerted a stronger attraction than the vision of inter-institutional collaboration. The board of UvA-AUAS was well aware that leadership in academic institutions does not work if it is based on hierarchical relationships. Hierarchical leadership implies a certain responsiveness – an urge to follow – by those a step below in the hierarchy. This may work to a certain extent in traditional, process-driven organisations. It certainly doesn’t work in organisations made up of professionals, let alone in universities or hospitals. Rather, inspiration, guidance, motivation and a respect for professional responsibility must be the guiding principles.

This truth certainly is not unique to Amsterdam or the Netherlands. On 19 May 2018, after Lino Guzzella, the president of the science and technology university ETH Zurich, stepped down before the end of his first term in office, journalist René Donzé wrote in the newspaper *NZZ am Sonntag* that Guzzella’s departure showed that a university is not a company that can be led from above. Rather, it requires a leader who does not govern but assumes the role of a moderator¹. In fact, it is the core premise of this reader that hierarchical leadership and its accompanying structures are no longer an effective means of energising people within a networked constellation of professionals.

Getting back to our story, the UvA and AUAS leadership took on the role of a moderator and tried to stimulate an exchange between UvA and AUAS researchers, educators and support staff. They were encouraged to meet, share their ambitions, discuss borderless education, and generally move the plan forward. This worked fine as a first step in getting them acquaint-

ed and creating a sense of family. However, it is usually the case that for members of a family to truly come together, they have to express interest in each other's endeavours and share responsibility.

The most fruitful aspects of the collaborative relationship between AUAS and UvA were those in which the two institutions' expertise, knowledge bases and market access complemented each other. The initiators of these collaborations and those involved recognised the obvious benefits of working together. Examples include pairing AUAS's expertise in applied digital skills with UvA's knowledge of media culture and combining UvA's medical research with AUAS's understanding of residential care for the elderly. In many other cases, however, the match ultimately did not come to fruition. People seemed to prefer other forms of collaboration, and sometimes the faculties were just too busy dealing with everyday issues to have the time and energy to respond to opportunities to work with their counterparts.

In the end, the joint UvA-AUAS board of directors was unable to convey enough of a sense of shared direction and drive to make the merger really work. This is not to say that it didn't work at all; the above examples prove otherwise. However, these individual success stories failed to create the required snowball effect. With hindsight, it is also clear that the leadership team did not strongly encourage the various faculties to experiment with and innovate the concept of borderless education. Either financial or legal obstacles stood in the way or the investment in people required to make innovation work was lacking.

It's fair to say that there was no shortage of energy and good intentions on the part of individual board members and faculty deans. In the end, though, competing networks of interests, formal limitations on experimentation, and turmoil involving the student council and workers' council made it hard to effectively move forward. In 2016, the joint UvA-AUAS

board underwent an evaluation. The conclusion was that a board in support of collaboration among researchers and teaching staff at the two institutions was no longer needed.² In 2017, the board was dissolved.

The return to standalone status

As of mid 2017, AUAS was once again a standalone organisation. With a fresh board of directors in place, instead of formally pursuing a merger, the university now had space and energy to pursue more natural forms of collaboration that would benefit students, employees and society as a whole. AUAS had regained control of its own agenda, and as a result it could chart a new path for the future.

The obvious first task was to finalise the restructuring of the organisation, a process that had begun during the UvA-AUAS days. Two task forces were set up to bring the reorganisation to a close. One, code-named Sluitend – Dutch for “Sound” – addressed the university's efficiency by drawing up a new, clearer organisational chart with job descriptions, reporting lines and hierarchies. The other task force, code-named Slank – Dutch for “Lean” – analysed the situation from a human resources perspective and addressed overlap within the jobs defined by the Sound task force. AUAS was able to successfully complete the reorganisation without any layoffs; instead, personnel were reassigned. The result of this exercise was an organisational structure that was clearer and reduced the number of meetings and overhead costs.

Not only did the university gain a clearer layout, but the Sound and Lean task forces also played an essential role in increasing the movement of people and new collaborations. Every faculty now used similar job titles and had a similar organisational structure, allowing for more compatibility and, as a result, smoother flows within the organisation. Staff members now had counterparts in other faculties, making it easier to find the right people in those departments. In the end, the reorganisation was seen as

a necessary step, and there was a sense of understanding and acceptance among the majority of personnel.³

The reorganisation did not, however, appear to increase their sense of belonging or incentive to cooperate, which had also been a challenge in the UvA-AUAS merger. An efficient, clearly structured organisation is not automatically one that attracts people – in our case, new students⁴ and partner organisations. And similarly, in the case of AUAS employees, the pressing question was why they should choose to engage in multidisciplinary collaborative projects within their own organisation instead of working with people from their personal networks and professional fields. The task forces' work had improved the flow of people within the organisation; now a genuine, compelling joint purpose was needed to direct that flow. In short, what was needed was an attractive shared goal – and the freedom for people to move toward it.

The leadership's task of creating a common goal and facilitating the necessary freedom was fulfilled in part by a traditional process focused on defining a vision, mission and planning cycle. Using principles borrowed from marketing, the leadership team defined common values and keywords that were relevant to most faculties and schools. It is common practice in the organisation to conduct this exercise every six to eight years, with the result being a strategic plan. This plan stipulates the university's ambitions for each faculty for the years to come and often provides a basis for key performance indicators. Through a communication programme, personnel were informed about the key elements of the strategic plan. This process is similar to methods taught in the strategic communication literature and applied in most large organisations nowadays, but the effectiveness of such methods for rallying people behind a joint purpose is limited. We need other ways to do this. So what insights can we distill from this case study that could inspire genuine attraction to a shared goal?

The first insight is that the traditional method of branding – creating a vision and mission statement to define the common ground shared by the AUAS faculties and schools – no longer works as a way to mobilise and focus the efforts of its personnel. This is because every faculty, and in particular every school, now requires a strong profile to publicly present and distinguish itself. The schools especially have to stand out in the nationwide competition among similar institutions, as they depend on student applications. Additionally, each faculty and school needs a strong, unique profile to attract the right teaching and research personnel.⁵ Unless there is a direct translation of AUAS's vision and mission tailored to these needs, the meta-level strategic plan will lack appeal for most employees. As a result, the education and research teams, which increasingly aspire to take full responsibility for teaching and research tasks, demand the freedom to tell the stories of their unique approaches and to work on their own terms – and in their own words.

This disconnect is evident in the dynamic between the faculties' communications departments on the one hand and the corporate communications department on the other. Whereas AUAS wants a single recognisable brand identity for all its activities and schools, the schools themselves aspire to individual identities that are aligned to and optimized for their profiles and market positions. This leads to a continuing struggle over issues like whether to limit the number of logos or have one for every school, whether to have a standardised website and page layouts or put up the latest interactive site made by the school hero, and whether to follow approval procedures for external communication efforts or allow quick decisions in response to opportunities.

The second and more straightforward insight is that the perceived relationship between an employee and AUAS is much weaker than the connections that employee has with peers, competitors and actors in his or her professional field outside AUAS. Hierarchies are irrelevant; relationships and networks are what matter.

In conclusion, the insights gleaned from AUAS's reorganisation process are similar to those of the UvA-AUAS joint venture. The abstract notion of borderless education that guided the merger aligns with a traditional branding strategy rooted in a meta-level mission and vision statement. And connections and collaborations arising from personal networks turn out to be stronger than hierarchical internal structures.

Defining new directions for AUAS

Taking lessons from the past, the board and deans of AUAS acknowledged these insights early on and initiated a change in direction. From 2017 up to the writing of this case study in 2018, the leadership team has formulated new guidelines and working practices to be used in the strategic development and day-to-day operations of the university. I have used this case study to attempt to formulate the underlying principles and insights that have served as a basis for the new guidelines and practices. I will discuss these emergent principles in depth below.⁶ In future, education and research groups may be able to use these principles as a basis for new sets of working practices tailored to their specific situations.

The first three principles relate to organisational structure, as they increase movement and people's ability to work together throughout the university. The fourth and fifth principles address the importance of facilitating direction in the form of a common cause and a strong sense of identification with AUAS. Combined, these principles aim to provide staff with both the freedom and the guidance to help the organisation as a whole to move forward – or better, to innovate.

1. Movement

The first principle: Favour networks over hierarchies

AUAS embraces the fact that networks of people are more important than hierarchies or formal membership of an organisational unit. This position releases the energy of people who share a common cause or ambition and conveys the message that the university supports and welcomes people's efforts to involve personal networks in their work, bring in new ideas and innovate AUAS's services.

Implementing this principle via concrete practices is challenging, however, for both those letting go of hierarchical control (the board, and to a lesser extent the deans and school heads) and those accustomed to working in hierarchical task structures and assignments (teaching staff, researchers and support staff). An existing set of checks and balances is transforming into something new. For some, working in networks may feel first and foremost like a liberation: the "head office" is giving them some rope. But networks do not replace the need for accountability and professional responsibility. On the contrary, the freedom to work in networks rather than a hierarchy adds the challenge of defining one's own set of professional responsibilities while delivering the corresponding accountability towards others.

For instance, in one faculty, all the schools were encouraged to create their own visual identities, but at the same time required to reference the larger AUAS identity, which was based on the principles of an endorsed brand strategy. Being provided with space in this way significantly increased their sense of freedom. They were able to make the designs their own. At the same time, though, the schools were challenged to let go of their existing, often organically developed communications structures and channels – to open the door, so to speak, and connect with the wider world. Teachers, researchers and support staff were encouraged to set up professional net-

works with like-minded colleagues from other schools – and with individuals from industry, the municipality and other universities. Additionally, each school was invited to articulate its contribution to AUAS’s overarching goals and make it visible in its visual identity and brand story.

The second principle: Respect the smallest relevant unit

Replacing the hierarchy with the network as the dominant management structure does not imply that each individual acts alone in whichever networks he or she likes. A sense of commonality in organisations usually forms within the smallest relevant units – i.e., teams of professionals working on joint tasks. Therefore, to increase employees’ identification with the organisation and their job satisfaction, it is essential to respect the smallest relevant unit rather than the lowest common denominator.

If this principle is followed, teaching and conducting research are team efforts in which individuals need to make agreements about who does what, when and how – and to define how these elements will interact. Within each team, a manager or the members define and assign tasks in order to work toward a common goal. When decisions about what to do are made at the level of the smallest relevant unit, the quality of the work increases and people are able to do more. As a result, they become more satisfied with the work they are doing.

In terms of size, for educational purposes a team of around 25 teachers is most effective. This number is not surprising; the idea of a cell structure is gaining ground in organisational literature.⁷ This idea was formulated by the late Eckart Wintzen, the former CEO of the technology company BSO, as a guiding principle for organisations in the new millennium. Because of it, Wintzen was considered to be one of the few true management gurus in the Netherlands.⁸ For research purposes, slightly smaller teams are more effective: on average, a core staff of about six people per research unit seems to work best. When additional personnel are needed to work

on projects, temporary staff can be assigned for a limited duration. Ideally, they will be teaching staff or students in their capstone project phase.

The third principle: Form clusters of specialisms

In line with the second principle of respecting the smallest relevant unit, it is important that each team itself defines what its unique skill set is. Different developments in specific sectors, from media to business, health care to technology, require different team ambitions and skills. This does not mean a team cannot be multidisciplinary; indeed, a team generally harbours a cluster of specialisms to solve and progress challenges in its field of work. Teams following this principle naturally ask themselves questions like: How can we help to move the profession as a whole forward and, as a result of that, better educate students and develop their talents? What unique skills does our organisation possess that differ from those of other universities? What added value does our organisation bring to a specific field?

With teams defining their own skill sets and value propositions, the hierarchical structure remains relevant in terms of supporting the teams so they can do their best work. For educational teams, hierarchical leadership helps to distribute topics among team members and supports the coordination of learning tracks by optimising and combining a team’s various offerings. Those learning tracks, in turn, lead to degrees – i.e., value for students. For research units, meanwhile, hierarchical leadership supports the allotment of strategic research agenda focal points. As a result, each team can contribute to a specific sub-area of the overarching national research agenda. As you might have noticed, an organisation’s hierarchical structure functions to empower a team to perform to the best of its capabilities.

2. Direction

The fourth principle: Determine why, how and what

Principles one, two and three create the freedom necessary for people working for an organisation to act and contribute out of their own intrinsic motivation. The fourth and fifth principles provide direction to focus that energy toward a shared goal. The fourth principle is based on Simon Sinek's Golden Circle model, a simple idea for making organisations more inspiring by making them think about three questions: why, how and what.⁹ In other words, before thinking about *what* you create (the product or service, whether it's a computer, health care or education), you start by defining your organisation in terms of *why* it does something. Why does it exist? The idea is that people are attracted to an organisation not based on what it sells or provides but because of what it believes.

In the mid-term evaluation of AUAS's long-term strategic plan for 2015–2020¹⁰, the university's leadership made a thorough analysis of current societal developments and the quintessential role AUAS could play in them. Through a design-thinking process, many employees were able to act as co-creators, contributing their ideas to the university's "why" statement in various iteration cycles. This led to an agreement that AUAS's primary *raison d'être* is to coach new students to develop their talents so that they can become skilful, confident professionals who, upon graduation, are able to occupy positions that are personally fulfilling and add value to society. Meanwhile, it also helps professionals of all ages to be relevant in and contribute to a changing society.

This "why" statement leads to the question of *how* AUAS aspires to work toward achieving this purpose. The answer was formulated as follows: AUAS explicitly aims to develop itself as a knowledge institute that is open to all who qualify on the basis of prior education or acquired skills. Additionally, AUAS carries out practice-based research to ensure that its curriculum stays

at the cutting edge, and it offers students flexible study routes through the various subjects. After determining *how* you achieve your purpose, according to Sinek, you should look at *what* you create or provide for others. AUAS provides bachelor's programmes, professional master's tracks and research programmes. It runs these programmes and tracks in partnership with societal actors. AUAS's "what" is constantly evolving, and at the time of completion of this case study the next step was already on the horizon: an organisation-wide portfolio analysis to identify the future curriculum offerings – the new "what".

The fifth principle: Use cascading storytelling

The second principle for creating a shared sense of direction is related to the idea of cascading leadership (defined by Emile Jeuken as the co-occurrence of leaders' values and behaviours at different levels of a hierarchy).¹¹ Termed cascading storytelling, it is the practice of inviting people throughout an organisation to envision and create their own organisation-related stories. The idea is not to take the result of the why-how-what exercise as a given, use it to construct a cunning communication plan, and force it upon the entire population. Instead, the AUAS leadership kept its why-how-what statements at the abstract level of the university as a whole. The employees' statements were translated into an appealing narrative – a story – made up of written text, illustrations and four symbols (representing Student, Knowledge Institute, Flexibility, Amsterdam Society). There were no in-depth, multi-page policy documents or implementation guidelines.

Next, leaders in the organisation challenged and invited individual faculties, schools and research groups to create their own more detailed versions of this story. These were relevant to the employees and their professional networks in terms of scope, scale and field of view. Previously, hierarchical lines in the organisation have proved useful for stimulating storytelling in some cases, but in others, professionals' informal networks have taken ownership of storylines by themselves anyway.

The final step in telling the complete story of AUAS is to collect the individual stories of schools, professionals and students and select the examples that best serve to inspire and create pride. Disseminating these stories throughout AUAS and in the wider community around it will enable everyone to absorb and benefit from the collective sense of direction and the practical steps being taken to move forward.

At the time of completion of this case study, the storytelling process is well underway among numerous AUAS employees in all kinds of positions and networks. They are using a myriad of communication channels – vlogs, blogs, tweets, speeches, performances, opinion papers, Facebook, Instagram – and thus have a reach inside and outside AUAS that complements and amplifies the institution’s determined journey toward becoming a future-proof knowledge institute.

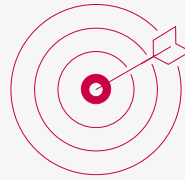
From insights to indicators

Education and the applied sciences

In the AUAS case study, I reflected on the workings of a semi-public organisation in the 21st century. At the end of the case study, I described principles based on existing processes and organisational qualities that could be used to increase the movement of people (from employees to students to partners) and provide a sense of direction. In this section, I will distil insights from the case study and connect them to the conceptual framework of magnetism and entropy and its indicators.



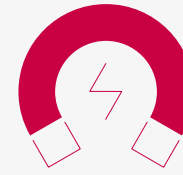
MAGNETISM



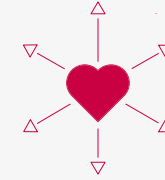
PURPOSE

Why does your organisation exist? Answering this question will lead to a better understanding of your purpose. The answer needs to be actionable and not organisation-focused: it should relate to a larger societal challenge the organisation wants to solve.

The purpose is expressed in AUAS's "why" and "how" statements. As described in the case study, these statements are the result of a co-creation process and deliberately kept brief and abstract. They leave room for interpretation and further elaboration while at the same time providing focus by making clear what sets AUAS apart from its peers. What is most important is that an organisation's purpose is able to touch the hearts and minds of employees, students and external partners. In defining a purpose, essential prerequisites to ensure it is felt and recognised by everyone are a co-creation process; a deliberate choice of words; a clear, visual presentation; and periodic reflection.



MAGNETISM



PRINCIPLES

In addition to knowing why your company exists, drawing up a set of indisputable guiding principles will help you to weigh decisions when they arise. It can also be viewed as a list of shared values that helps to create a stronger sense of unity and consistency for people in the organisation. For those outside it, showing what you stand for creates trust.

As part of its strategic plan for 2015–2020, AUAS defined three principles rooted in behavioural attitudes that would help to ensure quality in education and research: ambition, engagement and reliability. To encourage people in the organisation to adopt the values behind these words in their own work, leading by example is essential. The leadership must itself display ambition, engagement and reliability. These three words communicate the desired common attitude of AUAS staff, though in the daily reality of a semi-public institution they will evolve over time. Reasons for changes or additions to the organisation's principles can stem from a change in the political landscape or a rethinking of the organisation's purpose. For example, in previous decades, as a result of neo-liberal policies that focused on achieving goals set in line with key performance indicators, reliability and staying in control were regarded as important values. Nowadays, inclusivity, creativity and responsibility have become increasingly relevant. These new values are signs of the times. The challenge for corporations lies in communicating these principles effectively. Only when people come to understand these principles, or shared values, can they be attracted to them and use them in their daily work.



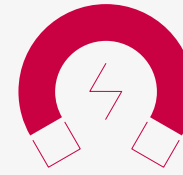
MAGNETISM



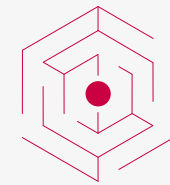
LEADERSHIP

Good leadership fosters creativity, ensures well-being, encourages excellence and provides direction through clear vision and strategy. When people connect with a strong purpose and principles, they can become leaders – energetic driving forces that move others inside and outside the organisation to join in.

The fifth principle I defined at the end of the case study, which involves the practice of cascading storytelling, is a clear example of implementing this indicator in practice. In addition, AUAS's leadership training programmes have evolved from skill-set training to learning communities, in which individuals (employees, students, partners) organise themselves and their own teams in order to create state-of-the-art educational programmes. These programmes support AUAS's goal of educating students to become proactive, accountable leaders.



MAGNETISM



CHALLENGES

To attract the best talent, you need to offer the best challenges. Opportunities to work on complex, advanced issues and make a real impact on the world attract new talent as well as experienced professionals eager to excel.

AUAS aims to attract new talent and challenge employees by connecting education and research to global and local sustainability goals. On a global scale, the UN's Sustainable Development Goals provide people with the opportunity to make a wider impact through the work they do. At the local and regional levels, the Amsterdam Economic Board has set various development goals for 2025 relating to topics such as digital transformation, the circular economy and sustainable energy. These goals provide a real challenge for anyone interested in making an impact in the world.

It is fair to say that the majority of AUAS's educational programmes are and will remain focused on transferring knowledge and developing the skills of individual students. However, the context of global and local societal challenges can inspire those who aspire to accomplish great things. New, more experimental AUAS education and research programmes, such as the Digital Society School, incorporate these shared challenges from the start. This means the programmes can quickly set up local and global networks by reaching out to other organisations working toward the same goals.



MAGNETISM

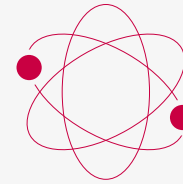


EXPERIENCE

Create unique, memorable experiences – in the form of products and services – that constitute proof of your organisation’s purpose, values and excellence. If people associate your organisation with a great experience, they’ll be drawn to your products and services in the future.

AUAS increasingly showcases inspiring success stories as proof points demonstrating the university’s excellence. The Teacher of the Year Award and the Research Award are clear examples of this approach. AUAS also communicates outstanding student achievements. Instead of simply presenting a list of its top students, it tells student stories based on personal achievements, for example, in entrepreneurship, sports and social emancipation.

Since egalitarianism is deeply rooted in the culture of the Netherlands and Amsterdam, however, the challenge is to strike the right balance in highlighting what is outstanding while at the same time respecting the mainstream. Along with individual achievements, inspiring institutional initiatives also serve as proof points for AUAS. Examples are the Amsterdam School of International Business, the Knowledge Mile and the Solar Challenge. Showcasing inspiring individuals and initiatives attracts people to the organisation, so that the best talent and top professionals will be more eager to join the AUAS staff.



ENTROPY



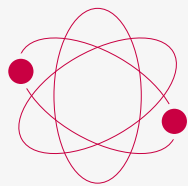
AUTONOMY

Autonomy is the amount of freedom individuals and teams have to achieve goals and tasks relevant to the organisation’s purpose. Removing restrictions such as prescribed working practices and process templates can free up people’s minds. They will feel more inclined to speak out and share their best ideas and can become drivers of change in rigid organisations.

Genuine autonomy and perceived autonomy are two different things. In reality, AUAS staff have a substantial amount of freedom to set up new initiatives and take responsibility for developing them. Dutch national education policy does not restrict autonomous action; it outlines what good education should achieve but leaves precise implementation to the organisations. To review this implementation, an independent institution audits AUAS’s educational programmes every six years.

The freedom afforded by this way of working, however, does not seem to be generally perceived in the workplace. There may be two reasons for this. First, members of the teaching staff show an incredible drive to excel in their work with students. Students deserve the best education possible, and the teachers are the ones that provide it on a daily basis. Encouraging staff to take a step back from this daily cycle and reflect on – and act to autonomously shape – educational programmes has proven to be a challenge. It means momentarily stepping away from what they love most: working with students.

A second possible reason for a lack of staff autonomy is that organisations in general can become overly structured. Vrije Universiteit Amsterdam public leadership professor Gerda van Dijk lucidly described this tendency in her lecture “Game of Thrones”¹². After going through phases of pioneering, growth and consolidation, organisations enter the relapse phase. This phase is characterised by an introverted stance, a lack of connection to the outside world, and too much structure. As a result, there is little room to breathe, and no room for autonomous action.



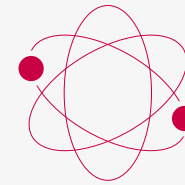
ENTROPY



MASTERY

People eager to become the best in their profession – masters – tend to make decisions not because they are easy but because they are the right things to do. Masters have the unique knowledge and insight required to move an organisation – and a profession as a whole – forward.

Through its learning communities, AUAS creates an incentive for people to become the best they can be. Each learning community consists of a critical mass of teaching staff, researchers, students and support staff. They engage in critical dialogue and go through a cycle of reflection and (re-) design of their core activities. There is one danger in learning communities: they can become disconnected from the outside world. Over time, learning communities can become echo chambers where members merely amplify their own beliefs and ideas without an influx of external expertise. Allowing in ideas and insights from outside the organisation should be a fundamental prerequisite for successful learning communities.



ENTROPY

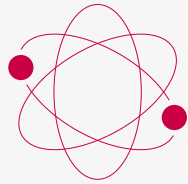


DIVERSITY

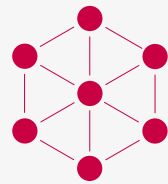
A high level of diversity in terms of knowledge, perspectives, backgrounds and areas of expertise helps to foster an open culture where new ideas can be shared freely. An open culture is one in which people respect and are genuinely interested in each other’s stories and ideas. As a result, more people connect throughout the organisation.

With a total student population of more than 50,000, AUAS represents a cross-section of the Amsterdam region’s diversity. Students from all backgrounds are welcome to apply for its courses. However, in reality, potential students do not all enjoy the same opportunities. In an effort to improve the situation, AUAS has set up a programme to identify the needs of students who, for example, have a physical impairment or a deficiency in the Dutch language. There is also Students in Motion, an annual project week in which first-year students use their skills to benefit the Amsterdam region. Participating students become familiar with the diversity present in the city.

Likewise, the AUAS staff as a whole would preferably be representative of the region’s diverse, qualified workforce. In practice, however, this is only true to a degree. Also, similarly to students, they tend to group together with like minds. Influencing and changing such traditional preferences requires a long-term effort rooted in a strong human resources strategy and a balanced set of recruitment guidelines.



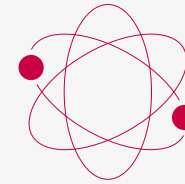
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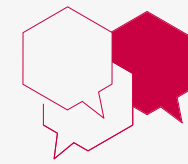
NETWORKS

Traditional corporations are mostly organised in silos, with hierarchical structures. A top-down control mechanism makes sense for organisations focused on predictability and specialisation. However, where innovation is required, creativity and interdisciplinary cooperation are essential. To achieve them, a company needs to set up and engage in networks.

Increasingly, AUAS teaching and research staff meet in semi-permanent and ad-hoc networks. These networks form around topics such as innovation in teaching methods, interfaculty master's programmes, and even age: young employees meet in the JongHvA network, older ones in the Goud met Oud network. In the research arena, employees in the faculties' hierarchically organised knowledge centres collaborate in various interfaculty research programmes. Membership in all these groups is open to anyone willing to contribute. The AUAS leadership encourages the formation of these networks and is experimenting with ways of creating accountability around their activities.



ENTROPY



ENVIRONMENT

Online as well as offline, open environments stimulate social interaction, new encounters and discovery. By designing their office spaces and online platforms to make new exchanges more likely to take place, corporations can foster the exchange of ideas and accelerate the incubation of new innovations.

AUAS has invested in a long-term programme to develop its main campus area in inner-city Amsterdam. As a result, four of the seven faculties are now based on this campus. The campus environment fosters serendipity and co-creation among employees and students and increases the visibility of their activities. Additionally, the Knowledge Mile, a community initiative launched in 2014 by the Digital Media and Creative Industries faculty and others, connects AUAS staff with entrepreneurs, SMES, government, citizens and city makers in the area surrounding the campus. The Knowledge Mile serves as a platform that can facilitate AUAS-wide partnerships.

The economics, healthcare and sports studies faculties are housed on separate campuses. Separation has its advantages, such as a collaborative relationship with a nearby hospital. The challenge is to connect these faculties to everything going on on the main campus so that they become aware of the various interactions, encounters and discoveries taking place there and can benefit from them.

Endnotes

1. René Donzé, “Wer die ETH regieren will, darf kein König sein,” *NZZ am Sonntag*, 19 May 2018, <https://nzzas.nzz.ch/hintergrund/wer-die-eth-regieren-will-darf-kein-koenig-sein-ld.1387250>.
2. “We attach great value to the partnership between UvA and AUAS,” says executive board president Geert ten Dam, “but the reports show that a single board is not needed to achieve this.” Kaya Bouma, “UvA en HVA zetten punt achter bestuurlijke samenwerking,” *De Volkskrant*, 8 September 2016, <https://www.volkskrant.nl/nieuws-achtergrond/uva-en-hva-zetten-punt-achter-bestuurlijke-samenwerking>.
3. An effort is underway to further harmonise educational logistics. It is understood that this is needed to enable a borderless experience for students within AUAS. The prevailing attitude, however, is that individual schools tend to agree to more harmony in the educational experience as long as the other schools adjust their logistics to their own. This process is still ongoing.
4. It can be noted that in the public sector an organisation can survive and do reasonably well just by functioning in an efficient, clear manner. “Client” ratings will not be high on average, but that may not be a problem for the organisation’s continuity. However, since AUAS is a semi-public entity, its entrepreneurial nature spurs the leadership to aspire to high client ratings. Achieving these proves quite a challenge in light of the overly critical attitude generally present in Amsterdam.
5. In his book *The Magnetic Organization: Attracting and Retaining the Best Talent* (London: SAGE Publications, 2015), author Dipak Kumar Bhattacharyya defines “magnetic” organisations in the context of attracting and retaining talent.
6. The formulation and structuring of the principles is the result of a study of these guidelines and working practices by the author, who takes full responsibility.
7. Raymond E. Miles et al., “Organizing in the Knowledge Age: Anticipating the Cellular Form,” *Academy of Management Perspectives* 11, no. 4, 1997: 7–20.
8. Eckart Wintzen, *Eckart’s Notes* (Amsterdam: Lemniscaat, 2007).
9. Simon Sinek, *Start with Why: How Great Leaders Inspire Everyone to Take Action* (London: Penguin Books Ltd., 2011), 37–51.
10. Amsterdam University of Applied Sciences, “Nieuwsgierige Professionals: Instellingsplan 2015-2020,” accessed 28 November 2018, <http://www.hva.nl/binaries/content/assets/hva/over-de-hva/plannen-feiten-en-verslagen/instellingsplan-hva-versie-2018.pdf?1539863468031>.
11. Emile Jeuken, “Cascading Leadership” (PhD thesis, KU Leuven, 2016), ii, <https://www.wilmarschaufeli.nl/publications/Schaufeli/PhD/PhD%20Emile%20Jeuken%202016.pdf>.
12. Gerda van Dijk, “Game of Thrones, regels en bedoelingen,” lecture, Vrije Universiteit Amsterdam, 21 March 2018, <http://www.gerdavandijk.nl/uncategorized/game-of-thrones-regels-en-bedoelingen/>.



CASE STUDY

Is the professional services industry on the verge of disruption?

Artemus Nicholson

I have been working in the professional services industry for over 20 years. To me, it is a dynamic sector, and it seems to appeal to many people seeking interesting and exciting careers. In these 20 years I have been part of many different firms. I would describe a professional services firm as a group of experts in a certain field who provide (often advisory) services to customers who require specific knowledge or expertise. These customers need a specialist with the experience to support and guide them in a field or domain they are not at home in themselves, such as accounting, consulting, IT, advertising, marketing or legal services. This is the added value of a professional services firm in today's society and markets.¹

As providers of professional services to others, we are part of the tertiary industry. This industry, despite periods that have been dominated by economic crises, has enjoyed steady growth over the past few decades. This instantly brings me to an important characteristic of the industry: we are vulnerable to recession, as many of our customers will reduce costs by significantly lowering their demand for professional services. If you work in the industry yourself, you will certainly recognise this. And you can probably think of a time or two when your firm went through a period of recession.

Zooming in from industry to company level, what specifically characterises the work of a professional services firm? David Maister, a renowned author on the subject, distinguishes two traits that set such businesses apart from most other companies: "First, professional services involve a high degree of customization in their work. [...] Second, most professional services have a strong component of face-to-face interaction with the client."²

Our firms do not have many assets to rely on. We do not have valuable production facilities or tangible materials for manufacturing products. Our main asset is our knowledge. If we combine this knowledge with (1) experience and (2) a high degree of customisation, we have arrived at what is probably the most valuable intangible asset in the tertiary industry: the reputation of the firm's brand. Trust is the foundation of the relationship between us (professional services firms) and our clients. If a client trusts you as an advisor, lawyer or accountant, the result is a mutually beneficial and long-lasting relationship. In turn, this adds to the reputation of the firm as a whole.

Professional services and innovation: a paradox?

We've briefly discussed the industry as a whole and the unique qualities of professional services firms. But why do clients choose to work with us? In my experience, while the reasons vary from case to case, there are some

commonalities. Beside legislative reasons, such as the accounting obligation, other primary reasons clients approach us are:

- a. A lack of the expertise needed to deal with a specific business-related challenge.
- b. A sense of uncertainty about what to do in a complex situation.
- c. A need to understand the impact of a future development.

If we look a little more closely, what these three types of client demand for professional services share is that they all relate to some form of innovation closing in on the organisation. An innovation can be many things, from a product or service to a technology or business process. The innovation is either close in time, such as a forthcoming innovation that is about to impact an entire industry, or is closing in on the client's market – new competition from a start-up, a new technology developed by a competitor. Urgent action is required, as the innovation has the potential to disrupt the existing way of working. For example, artificial intelligence technology will lead to increased automation of processes in organisations.

Regardless of the urgency, a client's challenge typically originates from the advent of a new innovation (what does it mean for us?) or changing market circumstances (what opportunities exist for us; what threats do we face?). This is where most of the demand for consultants and lawyers and their expertise comes from. Consequently, in order to provide solutions to a client's challenges, a firm has to rely heavily on its collective knowledge in order to offer high-quality, state-of-the-art services. This is also why firms invest substantially in human resources: they need the best people, the best knowledge and the best expertise.

But what if professional services firms now face these questions themselves? What if innovation is about to disrupt our own industry? For this case study, I talked to several executives in the sector about the future and

how they believe it will be different from today. What I learned is that firms often help their clients to deal with innovations. In light of the digitisation of society, clients increasingly ask for guidance and advice on IT-related innovations. Many firms therefore now offer technology-related services to help their clients. Consultancies provide knowledge and expertise on topics ranging from cybersecurity to social-media business opportunities, and law firms guide their clients through legal issues around matters such as intellectual property and privacy. And of course IT firms support clients, including professional service firms, in many technology-related areas, such as the Internet of Things and artificial intelligence.

In short, today the professional services industry often deals with challenges related to innovations in other industries. With the increase in technology-related services we offer others, you would think we would be more than capable of developing new innovations and responding to imminent disruptions to future-proof our own firms and industry. But here comes the interesting part: although we are very much focused on innovation in the work we do for our clients, we hardly innovate in our own business.

In essence, our business model has remained the same for the last several decades. Clients choose a firm and hire expertise for an hourly rate or a fixed fee. Because they expect state-of-the-art knowledge, firms have to keep their resources up to date. Demand for specific human resources also varies over time. No one wants Pascal programmers these days, but data scientists are hot. So innovation within firms, for the most part, has to do with (1) acquiring new or improved knowledge and (2) creating new propositions based on this knowledge in order to offer services that are in high demand.

In recent times, however, a number of developments have taken place that will lead to disruptive challenges for all professional services firms. In talking to consultancy, accountancy and law firms, I have had my views

confirmed: there is a shared sense that real change is coming, and growing uncertainty about how this might play out for the firms. We are about to face a challenge ourselves, and it will not be one that can be solved by resorting to old ways of working. Let's look in more depth at four fundamental developments that are starting to have an impact on professional services firms.

1. Technology is replacing work previously done by people

The professional services industry is not the most innovative sector when it comes to using new technologies. CRM systems and knowledge networks have been implemented by firms for some time now, but most clients have adopted more advanced innovative technologies than their consultants, lawyers and accountants have. Right now, services firms are increasing their big-data capabilities to better support their clients. This is leading to increased hiring of data specialists, shifting the focus away from hiring the usual people: consultants, lawyers and accountants.

Many analysts and experts predict that technology will have a fundamental impact on the professional services industry. Rufus Franck, the founder of the business-advisor marketplace Consulting 500, for example, foresees that “[t]echnology and artificial intelligence will both be a substitute and complement for certain professional services and the impact will likely be more dramatic than anticipated.” According to Franck, “[h]ighly complex tasks and processes will be simplified through technology; analysing and research processes will be impacted; the use of all types of knowledge platforms, crowdsourcing models and knowledge sharing models will be common practice.”⁵

Uschi Schreiber, EY's global vice chair for markets and chair of the global accounts committee, highlights an interesting survey of professional services employees, which was carried out using an interactive tool launched by media organisation NPR and based on research by Oxford University.

The tool asked respondents, “Will your job be done by a machine?” Schreiber writes, “The results among professional services employees were stark. According to the tool [...] there is nearly a 94% probability of some accounting and auditing jobs becoming automated in the next 20 years. For some tax preparation roles, this likelihood climbs to almost 99%. Many other (and non-related) industries saw similarly high estimates.”⁴

These predictions show that the pressure is being felt broadly across the sector. Looking at various disciplines in the professional services industry, these are the trends that I see and have heard about from other experts in the field:

Accounting firms

- Many activities can be automated to offer customers insight into their financial and accounting situations.
- Clients themselves now use digital instruments to help solve their own financial challenges.
- Several accounting firms are experimenting with a new digital proposition: the digital accountant. Smart software analyses a business's financial system to gain insight at a much faster pace and cheaper rate than any person is able to.
- Due to the increasing digitisation of the accounting profession, firms (1) have to provide high-quality added value and (2) cease focusing on operational accounting activities.

Law firms

- Lawyers are in a similar situation to accountants. Many operational and research activities can be automated. Communication in court cases is increasingly digital, and customers are able to do more of the work once done by lawyers.
- With the rise in digital litigation, there is much more transparency than before for all parties involved in a court case, including the clients.

- New technologies can help a lawyer to plan the best strategy for a client on the basis of past outcomes. Combining big data and artificial intelligence enables thousands of similar cases to be analysed.
- As a result of these developments, lawyers will shift their focus from formerly time-consuming operational activities to the application of valuable information technologies and digital aids, with the goal of better supporting their clients.

2. Information availability and self-employed professionals

Thanks to the rise of the Internet and knowledge platforms, all the relevant information needed to do the jobs of many professional services workers is publicly available these days. Today, you don't need an extensive library containing all the proper specialised management or law literature – all the information is online.

A related development is the recent increase in the numbers of freelancers and other self-employed professionals. These one-person businesses now have access to large amounts of publicly available information. As a result, they can offer the same core services as the large firms; the competitive advantage of proprietary knowledge is gone. Large firms and self-employed professionals now have access to roughly the same information and data. What distinguishes one business from others, then, is the value of the individual. A self-employed lawyer, accountant or consultant can be just as good as a firm-employed expert – in fact, of course, many experts who used to work for firms have now set up their own enterprises. In my talks with two law firm executives, one from a regional firm and the other from a global one, they confirmed that the increasing availability of information online and the rise of the self-employed professional have affected their work.

Law firms

- If there is no fundamental distinction between a self-employed lawyer and a law firm, there is no need for a firm to be of a certain size. This results in an increase in both specialisation and globalisation.
- A specialist firm can build a reputation for being the best in a very specific area of the law.
- Global law firms can instantly help clients in every country. Previously, this would have been a real challenge: a firm would have had to build a network of individuals in countries across the globe.

Consulting firms

- Online marketplaces allow clients to source services and gain insight on available expertise and talent, leading to several changes in the consulting sector.
- First, the cost of so-called body shopping (acquiring the services of an individual for a certain period of time) has gone down significantly.
- Second, new brokers have surfaced who search for clients in need of consultancy services and connect them to the experts they need.
- As a result of these developments, consulting firms are being forced to offer added value to their clients or lower their rates. However, they can hardly compete with the cost base of a free agent.

3. Competition is coming from all directions

One of the effects of an increasingly digital society is that numerous services can easily be provided all over the world. In the 2000s, this meant that, for instance, many corporations were able to outsource business and IT activities to low-cost countries. Nowadays, the threshold for entering the professional services sector has decreased even further, except with respect to the required licences and certifications. As a result, we see more global competition than ever before. At the same time, the face-to-face side of the business is still important, as you still have to work closely with clients. Back-end operations, however, can be done from anywhere.

IT services firms

- The rise of Asian IT service providers is a significant development in this industry. Companies like TCS, Wipro and Cognizant work on a global scale and offer knowledge, experience and the capacity to develop technologies, often at lower prices, an aspect that should not be underestimated.
- Increased competition has traditional Western European system integrators struggling to maintain their current market position, let alone grow.

4. Employees are changing

A lot has been written about the advent of Generation Z and millennials in education and the workplace.⁵ Most importantly, we know that they are motivated by different incentives than previous generations. For instance, talented young lawyers no longer see the firms in Amsterdam's Zuidas business district as their preferred employers. Why? Because the traditional organisational culture present in these companies no longer appeals to them. I've noticed and heard that younger employees are increasingly sceptical about corporate career paths. They prefer the start-up economy and want to work for hot new companies that started life in Silicon Valley and other innovation hubs around the world. Others do join corporations but stay for only a few years, to gain the relevant experience before moving on.

This is a real challenge for traditional firms, because soon the majority of the workforce will consist of people from the millennial generation and Generation Z. And although it is still unclear how this group's careers will play out, I – and others⁶ – see that these people tend to value meaningful work, autonomy and experiences over more traditional incentives, such as moving up the corporate hierarchy.⁷

To future-proof themselves, firms should take into account the fact that young people (and older ones) want to work for companies that pursue a higher purpose in addition to profit. Executives are gradually becoming aware of this as they talk to young workers and come to understand what drives them. As a result, a growing number of executives are starting to see a higher purpose not as a side issue or soft topic but rather as a central component of their culture and their people and customer strategies. The big challenge firms now face is figuring out how to systematically attract the right people.

Law firms

- To increase commitment in the younger generation, firms can allow employees to choose causes to support by offering their expertise. This idea was applied by one regional law firm. As a result, its professional network will grow and clients' attraction to its brand will increase.
- Time to work on self-initiated projects is much appreciated by employees and creates stronger engagement with the firm. This is good for a firm's reputation among potential new hires.

Accounting firms

- Accounting firms struggle to attract the right talent, because the profession is not as attractive to new graduates as it once was.
- Firms need multitalented professionals. They should not only be accurate in their financial work but also excel at the business side. For the most part, however, those with this valuable combination of skills tend to choose other professions.

In summary, the complex challenge professional services firms now face is brought about by: 1) the rise of digital technology; 2) free, open access to information and the rise of the self-employed professional; 3) competition from all directions; and 4) changes in what employees most value in their work. Now that we have pinpointed the challenge, the question is: what

can professional services firms do in anticipation of these disruptive changes? What I observe are three types of responses:

- a. Do more of the same (in firms that don't acknowledge what's going on).
- b. Differentiate the business somehow (in firms that are updating their unique selling propositions).
- c. Innovate in one direction (in firms that are creating new unique selling propositions).

Not many businesses, however, are making the structural transformations that will be required to survive in the radically changing field of professional services. If firms do not fundamentally transform their organisations, they risk ceasing to be of value in today's society and markets. They will no longer be able to attract new talent – and thus essential expertise and knowledge – and their brand reputations will fade as a result. It even makes me wonder if professional services firms will still be around in ten years' time. And in writing and researching this case study, I've heard executives express the same doubts. Why is the professional services industry necessary in a digitised world? And what can professional services firms do to rethink and reinvent their value propositions? Let's start the discussion now. I invite everyone to join in.

From insights to indicators

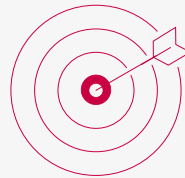
The professional services industry

In this section I will reflect on the current situation in the professional services industry as described in the case study and connect it to the concepts of magnetism and entropy. My intention is to start a discussion on the best way forward for this sector, which is under pressure from new competition and is feeling the impact of a technological revolution that has led to changes in clients' needs. Combined, these challenges will shape the ways in which professional services will be offered and performed in the future. To meet these challenges and ensure continuous success in the future, professional services firms could apply the magnetism and entropy framework.

As will become evident in the descriptions below, the framework and the associated indicators can help leaders of firms to reflect on the current state of their organisations. Reflection will allow them to make the choices needed to expand and speed up the implementation of new ways of working, use new technologies to help future-proof the business, and increase employees' commitment and engagement. On the basis of these choices, a firm will be able to define a better value proposition that fits the needs of today's and tomorrow's clients and ultimately results in long-lasting collaborations and a sustainable business.



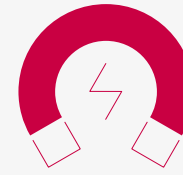
MAGNETISM



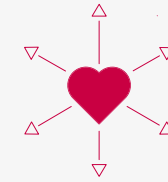
PURPOSE

Why does your organisation exist? Answering this question will lead to a better understanding of your purpose. The answer needs to be actionable and not organisation-focused: it should relate to a larger societal challenge the organisation wants to solve.

Businesses that focus only on increasing profits and lack a clear definition of their reason for existence will end up with poor customer service and unhappy employees. If there is no clear purpose, highly skilled professionals will be more likely to leave the firm. They will feel constant pressure to deliver financial results but have no underlying greater goal to align themselves with or aspire to. A clear purpose besides making money will give employees an opportunity to help make the world a better place. It will not only make the organisation a more appealing place to work but also attract clients who share the same purpose.



MAGNETISM



PRINCIPLES

In addition to knowing why your company exists, drawing up a set of indisputable guiding principles will help you to weigh decisions when they arise. It can also be viewed as a list of shared values that helps to create a stronger sense of unity and consistency for people in the organisation. For those outside it, showing what you stand for creates trust.

Values and principles lie at the core of all human decision-making. They provide people with an internal compass. An organisation needs a compass, too, so that its employees will know which decisions to make and its clients will know what it stands for. Knowing which principles they can fall back on can feel liberating for employees. It means they don't need to discuss everything with a boss and are able to decide for themselves, resulting in more creativity and positive energy. Clients can hold a business accountable when it does not act in line with its principles.



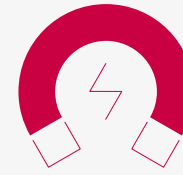
MAGNETISM



LEADERSHIP

Good leadership fosters creativity, ensures well-being, encourages excellence and provides direction through clear vision and strategy. When people connect with a strong purpose and principles, they can become leaders – energetic driving forces that move others inside and outside the organisation to join in.

Organisations don't transform by themselves, people make transformation happen. This is why personal leadership – someone using his or her acquired experience and skills to progress and inspire the organisation – is essential for creating a thriving organisational culture. Furthermore, organisations with a high-performance culture tend to replace leaders with people from within, whereas organisations with a low-performing culture are more likely to replace leaders with external candidates. A leader familiar with an organisation knows its strengths and will be able to expand them. For professional services firms, the best leadership style is one that gives experts clear guidelines while providing them with the freedom to make decisions. Hierarchical leadership alone will not help experts to perform at their best; they need the freedom to apply their knowledge.



MAGNETISM



CHALLENGES

To attract the best talent, you need to offer the best challenges. Opportunities to work on complex, advanced issues and make a real impact on the world attract new talent as well as experienced professionals eager to excel.

Make your challenges visible to the outside world; they will attract people eager to solve them. People who choose to work in the professional services industry, from marketeers and consultants to lawyers and accountants, tend to do so because they are attracted to challenges. The most talented people want to solve the most complex organisational, financial and judicial challenges, as this brings the most satisfaction. This is why, for example, talented young lawyers are still attracted to the big firms: there, they can work on cases that have global impact, even if they play only a minor role in a large team.



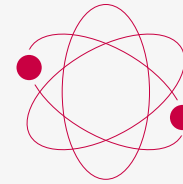
MAGNETISM



EXPERIENCE

Create unique, memorable experiences – in the form of products and services – that constitute proof of your organisation’s purpose, values and excellence. If people associate your organisation with a great experience, they’ll be drawn to your products and services in the future.

Create appealing, insightful presentations. In consultancy, when presenting results, go beyond the traditional format of a PowerPoint presentation made up of a large number of slides. Think outside the box when creating a presentation, and make sure it’s line with what your organisation stands for and how it wants to come across. Apply design-thinking principles to create appealing visualisations so clients can quickly gain new insights, or create a prototype to show that your idea works in practice. An appealing presentation is one of the best ways to market your firm. In the end, what clients remember first and foremost is the final impression you leave them with.



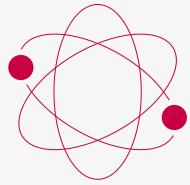
ENTROPY



AUTONOMY

Autonomy is the amount of freedom individuals and teams have to achieve goals and tasks relevant to the organisation’s purpose. Removing restrictions such as prescribed working practices and process templates can free up people’s minds. They will feel more inclined to speak out and share their best ideas and can become drivers of change in rigid organisations.

Facilitate more autonomy for professionals. Experts in the professional services industry who are encouraged to operate autonomously will feel free to connect and act beyond the traditional organisational boundaries, the office walls. This might sound easy, but pressure to meet a range of goals means employees can become anxious to deviate from those goals and make connections and set up new collaborations on their own. Setting the bar too high reduces freedom to act autonomously.



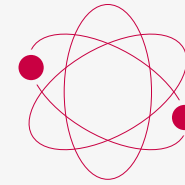
ENTROPY



MASTERY

People eager to become the best in their profession – masters – tend to make decisions not because they are easy but because they are the right things to do. Masters have the unique knowledge and insight required to move an organisation – and a profession as a whole – forward.

Expand the boundaries of the profession. Most professional services firms prioritise improving employees' skills so that they will become true experts in their fields. A focus on mastery results in a better value proposition for customers, so from a financial standpoint, investing in it makes sense. In addition to providing advantages for the organisation, this also benefits employees. They feel better equipped to take on clients' challenges and gain a better understanding of how processes work. Gaining mastery and advancing the profession as a whole are what motivates the best people in the professional services industry. Mastery is therefore not limited to an organisation or an educational programme; it is an industry-wide effort to collaboratively think about and create future-proof services.



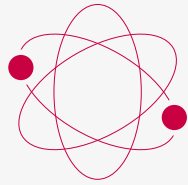
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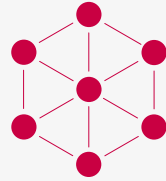
DIVERSITY

A high level of diversity in terms of knowledge, perspectives, backgrounds and areas of expertise helps to foster an open culture where new ideas can be shared freely. An open culture is one in which people respect and are genuinely interested in each other's stories and ideas. As a result, more people connect throughout the organisation.

A global firm is made up of people from a wide range of cultures. They all bring their own ideas to the table and are able to connect with clients in different parts of the world. New solutions require fresh perspectives, and the presence of a wide range of cultures ensures that these perspectives will be available in the organisation itself. The task for firms is to facilitate exchanges between cultures and perspectives. For example, setting up an international exchange around a specific subject or challenge brings a diverse group of people together to exchange knowledge and work on new joint projects.



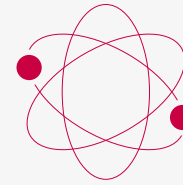
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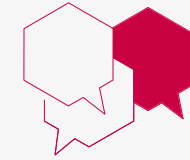
NETWORKS

Traditional corporations are mostly organised in silos, with hierarchical structures. A top-down control mechanism makes sense for organisations focused on predictability and specialisation. However, where innovation is required, creativity and interdisciplinary cooperation are essential. To achieve them, a company needs to set up and engage in networks.

Set up networks and collaborations that go beyond the confines of your own industry and commercial goals. The idea that networking should focus only on meeting potential clients is outdated. In these times of multi-disciplinary collaboration, networking in the professional services industry should mean engaging in unexpected conversations that can lead to new ideas, inspiration and even partnerships. Instead of a strict objective that might result in a new assignment, networking today is about employees being inspired to set up new collaborations with all kinds of organisations and parties, from non-profits to engineers and everything in between.



ENTROPY



ENVIRONMENT

Online as well as offline, open environments stimulate social interaction, new encounters and discovery. By designing their office spaces and online platforms to make new exchanges more likely to take place, corporations can foster the exchange of ideas and accelerate the incubation of new innovations.

Balance personal and professional environments. In professional services firms, the environment is usually that of a dynamic setting for social and professional encounters. The office dynamic is different at various times of the day, as employees come and go – for example, to meet others or work in clients’ offices. Along with the physical environment, the digital environment is increasingly important. An organisation’s internal online community and knowledge base are places where everyone can meet and find information. In consultancy, the use of external social networks is often discouraged. In the field of law, digitisation of information has resulted in more information being publicly available. For example, digital litigation is now available to everyone. For law firms, this means that instead of having someone go through books in a physical library, the process can be automated. It also means losing low-level work, as clients and self-employed professionals are now better equipped to research cases on their own. As a result, firms increasingly focus on more complex cases.

Endnotes

1. *POST*SHIFT* co-founder Lee Bryant discusses the value and future of professional services firms in depth. He also mentions a lecture by IT adviser Richard Susskind, in which Susskind said that professions exist because society cannot know everything and therefore needs specialists with “practical expertise” to help. I agree with this view. Lee Bryant, “The Future of the Firm in Professional Services,” *POST*SHIFT*, 16 February 2016, <https://postshift.com/the-future-of-the-firm-in-professional-services/>.
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IV

CASE STUDY

Networked collaborations in the Dutch energy transition

Ruurd Priester

How can change agents of the energy transition in the Netherlands inspire corporations looking for ways to organise their own transition to a new value proposition and business model? This case study, written from a personal perspective, tells the stories of three networked initiatives that have accelerated and improved the energy transition process in the Netherlands between 2017 and mid-2018. At the end of this case study, key insights from these stories are mapped onto the ten characteristics of magnetism and entropy. The leitmotif is that in the end, transformation is “the people’s business”.

As a research fellow in the Citizen Data Lab at Amsterdam University of Applied Sciences (AUAS), my daily practice consists of two activities. The first is research; the second is participating in networks that focus on social and ecological change. Driven by my growing concern about global warming, I decided in mid-2018 to focus all my efforts on helping to reverse climate change. In this case study, I share the stories of my involvement in three collaborative projects rooted in networked activity.

The first two – respectively the Nationale Energiecommissie (National Energy Commission) and o2o25 – were formed by concerned and impatient people with a drive to try to help speed up the energy transition. The first took place at the national level and the second at the level of the Amsterdam metropolitan area (abbreviated as MRA in Dutch). The third, the Club van Wageningen, was also initiated by concerned and impatient people but focused on a specific challenge: how can we ensure that online platforms in the new energy marketplace will be honest, inclusive and democratically controlled? My role in each of these networks is slightly different. I am a co-initiator of o2o25 and the Club van Wageningen and an active participant in the National Energy Commission. What follows are three short stories, told from a personal perspective, recounting the origins of these networks and how they have developed over time.

1. The National Energy Commissioner:

Clean, honest, safe power in the Netherlands by 2030

In early 2017, at a networking breakfast in Amsterdam organised by a mutual acquaintance, I encountered Pauline Westendorp. She has long been an inspiring leader within a large informal network of leaders working to transition Amsterdam to clean forms of energy. Many people know Pauline from famous bottom-up initiatives such as Wij Krijgen Kippen (We’re Getting Chickens) and NewNRG. Around that time, my research at AUAS focused on local networks’ use of online platforms in the urban environment.¹ This led me to help found a cooperative online platform called

Gebiedonline (Area Online). Pauline and I decided it would be a great idea to use Gebiedonline to facilitate the further growth of her informal energy-transition leaders' network. That's how our collaboration started.

In 2017, there was also a Dutch general election. Leading up to this, the political parties' election programmes painted a bleak picture of the national ambition to transition to clean energy. I was increasingly concerned about global warming and knew that the Netherlands wasn't doing well in relation to other European countries. In fact, it was close to the bottom of a list showing the share of renewable energy in each country's gross annual energy consumption.² The first meeting of Pauline's network took place amid these national developments. At that meeting, Gideon Goudsmit, a clean-energy entrepreneur from the suburb of Amstelveen, observed that the Netherlands urgently needed leadership. The team decided the country was in need of the kind of vigour and perseverance that led to the construction of the Delta Works after the disastrous flood of 1953. After the flood, a Delta Commission and Delta Commissioner were appointed. The act was a national success, resulting in flood prevention, added employment, an improved reputation and increased exports. Today, the emergency is a dearth of clean energy. Therefore, we decided that along with a Delta Commissioner, the Netherlands needed a National Energy Commissioner.

Appointing the first National Energy Commissioner

The team approached the successful and well-known sustainability entrepreneur Ruud Koornstra and appointed him the first National Energy Commissioner on behalf of the people. The idea was simple: even more than the 1953 flood, global warming is a major disaster, and our political system is incapable of turning it around. It is too slow and unable to create a deliberate long-term plan lasting longer than four years. To reverse this disaster, we need a new entity with a long-term mission and mandate. Ruud said yes – he had planned a sabbatical year anyway and agreed to do the work at no cost – and we applied to the DOEN Foundation for funding.

This would provide us with the initial funds required to start up the project. And so the adventure began.

With the general election behind us, our main objective was to ensure that the coalition agreement included a firm commitment to accelerating the transition to clean forms of energy, even though the parties' individual election programmes lacked this ambition. To achieve this mission, we came up with a single, clear goal: clean, ethical, safe energy in the Netherlands by 2030. As a creative and internationally oriented economy, the Netherlands should become an internationally renowned clean-energy front runner. Additionally, we prioritised two types of action.

First, there was Ruud's continuous energetic, inspirational lobbying. His role was partly a public one: as the semi-official National Energy Commissioner, he was increasingly asked to speak at meetings and conferences and give interviews to magazines and TV shows. But he also worked behind closed doors in The Hague, meeting people in the higher echelons of Dutch business and government – places where Ruud, with his business reputation, knowledge, unconventional approach, charm and humour, thrived. Second, we campaigned to raise awareness and rally people behind the National Energy Commission's cause. The website listed a growing, diverse group of (relatively) well-known Dutch people who supported that cause.³ Visitors to the website could leave their names to show their support, and between March 2017 and October 2018 more than 17,000 did. We continued to spread our message and promote the website via online campaigns, social media and our own events, such as the many Energy Breakfasts we organised through Pauline's network, as well as through Ruud's many appearances in the media and at other events.

In December 2017, an episode of the renowned TV documentary series *VPRO Tegenlicht* was dedicated to Ruud's experiences as the National Energy Commissioner.⁴ The footage shows him driving his Tesla, talking as

he travels from meeting to meeting. He visits entrepreneurs with ground-breaking ideas, like using seaweed as an alternative source of energy and food.⁵ At one meeting, he passionately tries to get his urgent, positive message across as he gives a presentation to a group of people. Finally, we see him talking one-on-one with business and political leaders. They include Dutch Prime Minister Mark Rutte, with whom Ruud shares some creative ideas on the business aspects of the energy transition. He tries to persuade and cajole Rutte to speak out on the need for a comprehensive clean-energy plan.

Analysing the “Ruud method”

What the exact results of Ruud’s lobbying and the supporting campaign were we will probably never know. Having witnessed Ruud’s performance – and many people’s positive reactions – I think it is fair to say that his unconventional presence, positive storytelling style and focus on sharing practical inspiration contributed at least a little to the relatively ambitious goals included in the government’s final coalition agreement. At its presentation in October 2017, Alexander Pechtold, the leader of coalition party D66, proclaimed that the ambitious climate agenda would allow the Netherlands to go from being at the bottom of the class to being leader of the pack in Europe.⁶

It is interesting to look at how the “Ruud method” actually works. First, it is typical of Ruud that he does not belong to any official organisation. The National Energy Commission and Commissioner are fictional entities and initially had no status whatsoever. Ruud’s only boss is his goal: clean energy in 2030. That makes him a free and independent person. He doesn’t have to take a lot of complicated interests into account. The story he tells is authentic, clear and inspiring. And his authority isn’t rooted in any formal status or function. Instead, his credibility is derived from his professional track record as an entrepreneur in the field of sustainable energy and his intrinsic drive. People with different interests tend to find this difficult,

because this also makes him in a sense untouchable. Nobody can disqualify or dismiss Ruud on the basis of a hierarchical power structure. He cannot be fired.

Second, Ruud not only has a clear goal, he also has a clear idea of how to achieve it. He’s convinced that breakthrough innovations are necessary to make the energy transition a success – and that these will not be developed by the energy industry, because it is too invested in the energy market of the past and lacks the creativity needed to come up with such innovations. According to Ruud, real renewal comes from smart small to medium-sized enterprises (SMEs), start-ups, and local citizen initiatives. They are the niche innovators. The trick is to figure out where the potential lies. Ruud does this by keeping in close contact with these types of organisations – for example, via the busy consultation sessions we organised at various locations in the Netherlands. And once you see where the potential is, you need to support niche innovators in getting what they need: connections, knowledge and funding, but also the removal of unnecessary regulations and other barriers.

Communication is the third ingredient in the “Ruud method”. He deliberately avoids using formal business or political jargon. Instead, he uses straightforward, clear language peppered with stories and examples to get his messages across. He can be quite funny at times and is unafraid to make fun of himself. And perhaps most importantly, he knows how to talk on a deeper, almost emotional level about the urgency and seriousness of global warming without becoming overly emotional about it himself.

In sum, a clear goal, focus and approach and an ability to inspire through clear speech are important factors in the “Ruud method”. Despite all his efforts, however, Ruud remains a somewhat controversial figure. In addition to his many fans, there are certainly people who find his personality and approach somewhat uncomfortable. Yet it has struck me that

over time, almost everyone seems to get along with him. His key strength is probably that he is able to get a radical message across and dares to confront those in power without losing his ability to connect and inspire. In practice, this means some people may find him somewhat irritating and complacent, while others are attracted to his message.

I have so far mainly written about the National Energy Commissioner and less about the supporting team, the playfully titled National Energy Commission. The core members, operating behind the scenes for the most part, were the social media and communications expert Linda Vosjan, the all-round organiser Peter Hoogendijk, and “strategic secretary” Sven Jense, all of whom aided Ruud in his quest – as did Thijs Haverkamp, Pauline Westendorp and myself. We combined a joint entrepreneurial spirit with various individual roles such as planner, producer and adviser. In addition to the fairly solid core of people working with Ruud, others joined in at various times, generating a wealth of networked activity. This supporting circle, or swarm, was heterogeneous and dynamic. At the start, it consisted more of strategic thinkers, public relations experts, and people from the design agency that had created the visual identity and website. Later in the process, the core group transformed into more of an operational support team. It remained constantly on the lookout for media opportunities and other ways to get the National Energy Commissioner’s message across, for example at meetings and conferences.

The activities of the supporting circle and core team intertwined and involved regular coordination or cooperation with others who wholly or partly shared our objective – for example, leaders of regional and local networks and collectives, NGOs, and individual thought leaders. In contrast to the broader strategic planning activities, which focused on what messages to communicate, what networks to set up, and how to draw attention to our cause, most networked activity was entirely or mostly unplanned. Instead, it happened on an ad hoc basis and mostly related to day-to-day

events, such as climate-related news, technological breakthroughs, or progress made in the formation of the new national government. Actually, looking back, things were pretty chaotic in the networks around Ruud. However, we considered the resulting contacts and collaborations to be crucial parts of the project, since the National Energy Commissioner was meant to represent and support all the people and networks that shared the goal of radically accelerating the energy transition. We have often referred to the National Energy Commission as being like “a network of networks”.

Structure and friction

In hindsight, what can we say about the effectiveness of all the networked activity engaged in by and around Ruud? We have reflected on this in open, critical discussions with people involved in the process. In general, mainly because of the results we have achieved, we feel positive about the initiative’s effectiveness. The National Energy Commissioner and National Energy Commission have definitely managed to create a stir and helped to raise awareness and spark discussion on the topic of the energy transition. Ruud was formally invited to join the energy industry round-table meetings in the context of the Dutch national climate agreement. He was also asked to act as a cross-sectoral climate advisor to all the round tables. Together, we have attracted media attention and connected, influenced and inspired people – some of them in high positions.

On the other hand, the process was arduous at times. Conversations about which steps to take next and the best ways to spend our time could be tense. We had difficulty finding the right balance between flexibility and speed on the one hand and clear decisions and focus on the other. This was partly the result of key choices we had made: we aligned our efforts with the closed process of the Dutch cabinet formation and coalition agreement, our organisation was semi-improvised, and we elected to operate as a node in a web of organic activity. Looking at the process on a more fundamental level, the tensions might also have had to do with the fact that

the National Energy Commissioner and Commission started out as a bit of a joke – albeit one with a serious goal. However, that joke managed to find its way into the DNA of our collaboration, with a certain degree of structurelessness as a result. And a lack of structure leads to friction by definition – especially when the perceived sense of urgency and the ambitions are great, and serious.

In the end, what kept our fluid, constantly changing team together was not only our shared goal and the results we achieved but the freedom that allowed us to do our work and – perhaps most importantly – our decision to celebrate small and big successes together. For me, this is one of the most beautiful observations: that we have managed to get this far based on a serious joke, with passionate people and a good party now and then.

2. 02025: Amsterdam as a clean-energy front runner

The initiative that led to the National Energy Commissioner arose out of the network around Pauline Westendorp. For 15 years now, this network with its roots in the borough of Amsterdam Zuid has been organising activities under various names, such as the aforementioned Wij Krijgen Kippen (We're Getting Chickens) and NewNRG. These activities are attended and organised by people actively involved in making the transition to clean energy at the local level – a house, an office, a neighbourhood. Along with Pauline, others at the heart of this network include Frank Boon, Thijs Haverkamp, Linda Vosjan, Peter Hoogendijk and many more; its composition is fluid and varies over time. And yes, you might remember these names from the National Energy Commission.

The network's best-known activity is the Energieontbijt (Energy Breakfast). It takes place every two weeks at the network's base of operations at Old School, a building in Amsterdam Zuid dedicated to art, culture, food and creative entrepreneurship. Each session hosts about 30 to 100 people. To publicise the meetings, the team sends out open invitations to a mailing

list of about 3,000 people. Each breakfast starts with coffee, croissants, chat and networking, followed by a deep dive into a trend or topic, perhaps with a guest speaker. In the final part of the meeting, people wishing to make the transition to clean energy can get practical advice from experts.

Saving our city

By June 2017, the National Energy Commissioner initiative, which had originated in the network six months earlier, had become quite successful. Now we decided it was time to focus on Amsterdam. This choice was based on the realisation that Amsterdam had everything it needed to become a true leader in clean energy – knowledge, culture, innovation – and could set an example for other cities. Also, after all our efforts at the national level, we felt it was time to shift our focus to Amsterdam, the city we call home.

In a creative brainstorming session, the idea and the name 02025 were born. The number symbolises the transition to clean energy of 020 (greater Amsterdam's area code) by 2025, the city's 750th birthday year. We decided that becoming a front runner in clean energy would be the most beautiful gift the people of Amsterdam could give each other in this special year. It will also provide a great theme for the anniversary celebrations, as it will immediately set the tone: we face the unprecedented challenge of global warming, but instead of spreading a depressing message – as anyone who's read anything about global warming knows, it can sometimes make you feel hopeless – we want to turn that challenge into a positive, optimistic message that brings people together. We aim to create a sense of community and belonging. We are a movement of *want to-ers* and *can do-ers* who are committed to the six Os (in Dutch all these words start with the letter O⁷): government, entrepreneurs, research and education, societal organisations, old and new SMEs, and unorganised citizens. In short: all stakeholders.

One key premise of 02025 is that there are already many clean-energy front runners active in the city. These are people who have already partly or completely switched their homes or offices to clean energy, often in a tedious, difficult process. An indispensable quality they all share is a high degree of perseverance. We've noticed that these people are similar to those who come together at the Energy Breakfasts. First, they're eager to share their knowledge. And second, they're highly motivated to work with others to transition their neighbourhoods and local surroundings to clean energy. The idea of 02025 is simple: let's make these front runners and their work visible to others, connect them with others, and empower them. The resources we as a network can offer them are the meetings we organise and an online platform. And by collecting the lessons they've learned and presenting them in the form of accessible how-tos, we can help others transition to clean energy faster and more effectively.

Despite our focus on 2025, we chose not to set a hard deadline for Amsterdam to free itself of natural gas and become an energy-positive city. Rather, we committed to giving our strong, broad support to a new way of thinking: one that emphasises the need for Amsterdam to become an international front runner and champion of clean energy. To help it catch on, we formulated a positive statement emphasising the benefits and opportunities clean energy brings to people: clean air, affordable energy, jobs, social innovation in neighbourhoods, and independence from unstable regimes. It all came together in our motto: "All together now." We also wrote a manifesto⁸ outlining our guiding principles. The goal of this document was to make it clear to everyone what we stand for and how we as a network operate.

Moving forward, step by step

In setting up 02025, we wanted to be thorough and not rush into things. We already had activities that worked, so we didn't need a lot of new ones. We just had to build on what we were already doing. The challenge for

us was to reach a broader audience. This required us to build a brand, raise awareness, and get other major stakeholders (such as the municipality, companies and knowledge institutions) on board to join in a shared effort. To do this, we set up two launch events: a soft launch at the end of 2017 and a big launch at WeMakeThe.City, Europe's largest city festival, planned for June 2018 in Amsterdam.

Step by step, we worked toward the soft launch. We founded the entrepreneurial cooperative⁹ Oranje Energie (Orange Energy) in order to become a legal entity. We rebranded the Energy Breakfasts with the 02025 name. And to support community members in their peer-to-peer activities and need for information, we gave them an online platform.¹⁰ We were on a tight budget, but we managed to make things work through reallocation of part of the Energy Breakfast's budget, some additional project funding and a lot of voluntary work. The result was a successful soft launch at an event looking ahead to Amsterdam's 750th birthday held at Pakhuis de Zwijger¹¹, a well-known meeting place for creators and innovators. It was at that time that we noticed that the name and the ambitions of 02025 were starting to generate some buzz.

Probably as a result of these efforts, shortly thereafter, at the end of December 2017, the 02025 team was invited to take part in an official municipal project to help Amsterdam break free of natural gas. It was part of the Amsterdam City Deal¹², a 2016 agreement between the municipality, energy providers, energy infrastructure companies and housing associations that included a step-by-step plan to end the city's dependence on natural gas. The programme consisted of two tracks. In one, neighbourhoods were selected in a top-down process to take part, based on existing opportunities such as an outdated energy infrastructure. A separate organisation, The !WOON Foundation, was tasked with involving, engaging and supporting citizens in these areas.

The second track focused on neighbourhood participation and empowering local front runners. For this track, o2o25 was asked to lead the implementation of the programme. After the writing of proposals and a series of negotiations, we reached an agreement with the leadership of the programme. Despite a limited budget and the prospect of the programme becoming tender-based from 2019 onward, we agreed on a just and feasible scope for our work. Then we started – or better, continued – our operations, increasing the pace. We hired a senior project manager and started a new project phase that would last until the end of 2018.

The launch and what comes next

At the moment of writing, it is the end of summer 2018: a good time to look back on what has happened since, and what we have achieved and learned. First, the most important events have probably been the elections and the official launch of o2o25 at the WeMakeThe.City festival in June.

On 24 May 2018, two months after the municipal elections on 21 March, local political parties D66, PvdA and SP presented the new coalition agreement for Amsterdam. It put forward the ambitions of radical sustainability and a fairer Amsterdam, in which everyone would benefit from the city's successes. At the time, a happy Rutger Groot Wassink of the largest local party, GroenLinks – a green party that is also active on the national political stage – said in a statement that he was proud of the agreement. From now on, he continued, Amsterdammers could work together to make the city more sustainable and turn it into a green front runner¹³. The coalition agreement included the goal of setting up a €150 million fund to help Amsterdam make the transition to being natural-gas-free. Another important target was also set: that three neighbourhoods in the city would break free of natural gas within the next four years (the duration of the coalition agreement). The agreement was of course considered a major statement of support for o2o25. However, many people still wonder how a city-wide cooperative effort, or movement – which will be essential for a successful transition – will be organised.

In June 2018 we officially launched o2o25 at the WeMakeThe.City festival. Pauline, Thijs, Linda and all the o2o25 team members had worked hard to make sure the launch would be a pivotal moment for everyone involved. On stage, three children assigned o2o25 the task of safeguarding their future by ensuring the city's swift transition to reliance on clean energy – they became our “clients”. We took on the assignment, and a group photo cemented this key moment in history. Now the assignment had become a reality for all of us: Nina Tellegen (director of the Amsterdam Economic Board), Joos Ockels (citizen), Hannah (client, 10 years old), Luca (client, 10 years old), Timo (client, 10 years old), Marieke van Doorninck (Amsterdam's alderwoman for spatial development and sustainability), Pauline Westendorp (o2o25) and myself (o2o25).

After this official moment, alderwoman Marieke van Doorninck, a member of the GroenLinks party, congratulated us and gave a speech in which she shared her view on the energy transition. Her message was crystal-clear: the municipality had decided to say goodbye to fossil fuels as soon as possible and was fully committed to achieving its targets. She also emphasised the importance of a strong, broad collaborative effort and the urgent need for all parties involved to come together in the very near future to organise it. Her call to action fit nicely with the premise on which the WeMakeThe.City festival was founded: a broad, multi-stakeholder approach to innovation that is characteristic of the city and has been dubbed “the Amsterdam Approach”.¹⁴ This distinctive method won Amsterdam the 2016 European Innovation Capital (or iCapital) award¹⁵, given by the European Commission to the city “best able to demonstrate its ability to harness innovation to improve the lives of its citizens.”¹⁶

The Amsterdam Approach reflects the idea that true innovation in the city has to come from collaboration by a much broader group than the “triple helix” (governments, large companies and knowledge institutions): active citizens, collectives, SMES and start-ups are equally important. The Amster-

dam Approach acknowledges that what is most important is not organisations but rather the people who act as leaders and innovators, regardless of where they come from. They are the city makers.

As for the people of 02025, this was all music to our ears. At the same time, everyone involved, myself included, is curious to see if and how the Amsterdam Approach will actually take shape. Can we help shape this citywide cooperative effort, and if so, how? And will the funds not end up in the pockets of the triple helix, as they usually do? At the time of writing, a sufficient number of open conversations have been started and planned that we remain hopeful about the future.

Achievements and challenges

Moving on from the events to the real work of 02025, what have we achieved so far this year with regard to our goal? First, the most important result is that people interested in the energy transition in Amsterdam now know how to find us – and each other – better than before. We noticed this after a number of people contacted us to ask about ways to organise the energy transition in their neighbourhoods. Back in January we received about three such requests a week; now there are four a day on average. Second, the group of people who come to the Energy Breakfasts continues to grow and is becoming increasingly diverse. And without additional communication efforts, we now have a waiting list for the consultation sessions. We also have a waiting list for on-site Energy Breakfasts. We planned ten of these breakfasts for 2018, but we already know that number will not be sufficient. Third, 300 people have created profiles on the online platform, and we are seeing a steady increase in online visits and usage.

Fourth, on average, someone in the network receives a new request every week to share knowledge or set up a new collaboration in his or her role as an expert or a representative of Amsterdam's local energy-transition front runners. We are invited to meetings by neighbourhoods and boroughs

(such as Nieuw Sloten, IJburg, and the Binnengasthuis premises of the University of Amsterdam) and asked to attend more strategic meetings; for example, ones organised by the Amsterdam Smart City platform. And the fifth and final achievement: we have started work on what we call the Travel Guide, a collection of how-tos and knowledge for people who want to make their neighbourhoods natural-gas-free. The first version of the guide is now finished, and the interactive version will be available online in late 2018.

Even though these are positive results, it is clear that the real acceleration required to transition the city to clean-energy use is still on the horizon. Many people are now clean-energy leaders or want to become leaders; 02025 is known among front runners and seems to have a good reputation. But at the same time, we cannot yet speak of a citywide movement in which the majority of Amsterdammers have adopted the goal of a natural gas-free neighbourhood, nor do most appear to see themselves as co-owners of the challenge or feel a strong sense of agency. The citywide programme aimed at making Amsterdam natural-gas-free did bring about some good progress. Now it will be especially exciting to see whether we can succeed in implementing a true Amsterdam Approach, in which all city makers – and not just the triple helix – play an important role. We need one plan that conveys a powerful, positive story, with citywide communications and involvement, and it has to be born out of a desire on the part of the neighbourhoods and city makers themselves. And if all the pieces fall into place, we just might have one of the biggest parties you can imagine in 2025, the year when the city of Amsterdam turns 750 – a party at which all Amsterdammers congratulate each other on being true clean-energy champions.

3. The Club van Wageningen: Fair, safe, democratically controllable online energy platforms

The final case study is more compact, as it revolves around a single event. It is nonetheless very interesting, as it is an example of how a multi-stakeholder group can work together toward a joint goal or outcome. The story starts with a group of people who decided to come together to organise a multi-stakeholder conference to address the current and future state of online platforms used in the energy market. They saw an urgent need for such a conference; they realised that if measures were not taken, these platforms would soon not be fair, safe or democratically controllable. To the conference's initiators, it was clear from the start that any solution to this issue had to come out of a multi-stakeholder effort. So not only did the issue have to be crystal-clear to everyone after the conference, possible solutions and plans of action also had to be created – and those plans had to have broad, multi-stakeholder support. Let's take a few steps back to see how we arrived at these insights.

In March 2018, Martine Verweij, Pallas Achterberg and John Post¹⁷ approached me to ask for my help in organising a conference on this issue. I had known them for a long time and had recently gotten to know them even better through the research I conducted between 2015 and 2017, in my first period as a research fellow at the Citizen Data Lab of the Amsterdam University of Applied Sciences. My research focused on how online platforms could empower local networks in cities. During this research, I developed a critical view on the workings of the global online-platform ecosystem. My most vivid insight was that while many social-media and sharing-economy platforms are social in name, in practice they are extremely powerful and rich, use extractive models, undermine democratic rules and have many socially undesirable effects, such as fake news and privacy violations. Also, I came to realise that the way the ownership of a platform is organised is key to how it behaves – and that there are alternatives to the dominant extractive model. During my research, I came to know and

respect many interesting alternative online platforms and the movements behind them, such as platform cooperativism¹⁸.

The Club van Wageningen narrative

When Martine, Pallas and John contacted me, I immediately understood the importance and urgency of drawing attention to and addressing the issue of the current and future state of online platforms in the energy market. And as a group, we recognised from the start that a broad multi-stakeholder approach and conference would be necessary if we wanted to accelerate our initial efforts and have an impact on the energy market. A vital ingredient for making the conference a success would be a method that would help us achieve our goals. Martine suggested using the Future Search method¹⁹, which I will discuss in more depth later. With all this in place, we quickly put together a broader steering group.²⁰ This group then talked about the core issue and how to frame it. The resulting statement would serve as a basis for the conference narrative and invitation. After a couple of rounds of talking and writing, we agreed on the following text, which we originally published in Dutch.

The Netherlands is rapidly switching to a distributed energy system, whereby in principle all citizens and many companies become prosumers. This creates new – mostly digital – markets, which are based on platforms. However, there are no clear rules in place for these platforms. As a consequence, major dangers loom, such as an undesirable concentration of power, manipulation of users, and even human rights violations. But a great opportunity also exists to organise this new energy system on the basis of democratic principles. We therefore invite you, along with leading thinkers on this subject, to design the rules for a fair digital-energy market.

A quick energy transition is needed. Fortunately, more and more people are aware of this. In this transition we will switch to an effi-

ciently distributed, digitised energy system. This means that energy will be generated, stored and used on many and various scales – from large wind farms to buildings and cars.

As a result of the Internet of Things, all components that generate or use energy within this system will become connected in a data network. This will give us better insight into current energy supply and demand and will help us to better predict and anticipate future supply and demand.

The image of a few large producers and a high number of buyers is a thing of the past. In principle, every citizen will become a prosumer, not just a consumer. The energy network, with every household as a participating prosumer, will become a completely new kind of market – one in which technological platforms and data will play a key role.

The central question is how we want to organise this market. Will we stand by and allow the platforms and data to fall into the hands of a few companies? This will mean risking unwanted concentrations of power (as we have seen with platforms in other sectors) and the violation of human rights (companies gathering information inside your living room, or offering less attractive customers worse conditions). Or will we make sure that we organise this new market in a fair and democratically accountable way?

The Future Search method

Whereas the narrative allowed us to awaken in others the same sense of urgency we felt, the Future Search method would allow us to work together to chart the way forward. We decided on this method at the start because we understood the importance of a broad multi-stakeholder involvement in relation to the issue. The energy sector relies on many different organ-

isations all working together in a system: government, energy companies, infrastructure companies, end users, knowledge institutes and so on. The energy transition is therefore a systemic transition, and we viewed it as such. In a system, all stakeholders work together. So if you want to change a system, you have to change how all the actors – including potential new ones – work together. This is why all stakeholders must learn to understand the issue, recognise that change is necessary and possess the motivation to make that change by jointly creating plans and executing them. Otherwise, the systemic transition will not happen – or it will, but too late. Martine had used the Future Search method previously and was trained in it. For professional guidance, we decided to hire experts from the well-regarded company *Perspectivity*²¹.

To provide some context, I will describe what the Future Search method is, how we applied it, and the challenges we encountered. First, a bit of history: the Future Search method is derived “from well-researched theories on the conditions under which diverse groups will cooperate”²² and was presented in a 1995 book by Marvin Ross Weisbord. Second, on futuresearch.net – the website of the Future Search Network – the method is described as follows:

Future Search is a principle-based planning meeting that helps people transform their capability for action very quickly. The meeting is task-focused. It brings together 60 to 100 people in one room or hundreds in parallel rooms. Future Search brings people from all walks of life into the same conversation – those with authority, resources, expertise, information and need. They meet for 20 hours spread across three days. People tell stories about their past, present and desired future. Through dialogue they discover their common ground. Only then do they make concrete action plans.²³

To me, the most distinctive features of the method are its unique princi-

ples and conditions for success.²⁴ One such condition, for example, is the requirement to get the whole system – i.e., a significant cross-section of the parties involved – together in a room, with everyone invited having a stake in the outcome. The method also provides guidelines on the required time investment: three days, sleep twice. Furthermore, it requires people to attend the sessions full-time. If you are interested in using the Future Search method and its principles and conditions, I recommend you visit futuresearch.net for more information.

In the end, for us the biggest challenge in using the method was to get a large group of representatives from the different stakeholder groups together for a minimum of three days. We started by defining the stakeholder groups: IT companies, the scientific community, end users, government, energy companies and energy infrastructure companies. Then we created a spreadsheet in which each of us could list candidates and keep track of registrations. Everyone started by sending out invitations to people in their own network, and we took great care to invite people who were not only experts on the subject but were also motivated to help – and had a mandate to ensure that the resulting action plan would be implemented.

The results of three days in Wageningen

The invitation resulted in many positive reactions. Most people from our networks recognised the issue, and we succeeded in getting enough representatives together to form the necessary groups at the conference. A diverse group of 60 people attended. The event took place from 26 to 28 June 2018 at a hotel in Wageningen, the Netherlands. The weather was warm and sunny, and the hotel offered a beautiful view of the Rhine. A very large conference room ensured that everyone could work together at the same time. People often used large sheets of paper on the walls to share insights and ideas in plenary sessions and in smaller groups. In contrast to the openness of the space and what you might expect given the creative atmosphere in the room, the approach was highly structured, thanks

in part to the process supervisors, who kept everyone on a tight schedule. And though there were occasional irritations, the three-day journey eventually took us from the past to the present and the future.

The final goal of the conference was to draft the action plans – and to ensure that those in attendance would actually implement them. To this end, owners and contact people were added to each action plan. We also agreed on specific follow-up actions, such as steering group meetings and the creation of a website where we could publish an extensive report of the conference.

Looking back, I am positive about both the process and the results. A small and effective leadership team emerged around its members' shared concern about an urgent social issue. We were aware from the outset that the organisation of online platforms in the energy market is a systemic challenge, one that requires a swift multi-stakeholder approach. Only if we all come together will we be able to shape the energy markets of the future. For us, it was important to convey a sense of urgency in our narrative and invitation. In the end, I think we succeeded in describing the issue in such a way that a highly diverse group of stakeholders recognised it and attended the conference. Subsequently, the Future Search method helped us move from describing the issue to formulating a set of action plans, created and supported by a broad and diverse multi-stakeholder group.

From insights to indicators

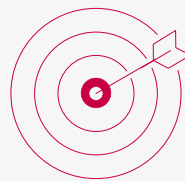
The energy transition

The case study on networked collaborations in the energy transition is part of a shared journey in which Geleyn, Artemus and I are looking for ways corporations can transform themselves in order to succeed and play a meaningful role in the turbulent, dynamic 21st century. The three initiatives I have described have not taken place within corporations. Rather, they started outside the corporate setting and are all based on multi-stakeholder cooperation.

Yet corporations looking to future-proof themselves can find inspiration in the outward focus, determination, and fresh methods of collaboration these networks embody. These stories show how people in a greenfield situation can meet and work together to achieve something as a group, with no previously existing organisational frameworks. They constitute refreshing examples of how people can organise themselves in networks to work toward a heartfelt shared goal in the fastest way possible. These initiatives were conceived by people who were worried about social and ecological issues and chose not to wait for others to take action. They decided to do it themselves. So transformation, not only in the energy industry, is the business of the people. And what perhaps strikes me most is that none of these initiatives started because of an organisational or economic goal. It is now time to look at the key insights from these case studies in light of the ten indicators – five for magnetism, five for entropy – that we have defined in this reader. These indicators have been created to help you to design and lead a sustainable and successful corporation.



MAGNETISM



PURPOSE

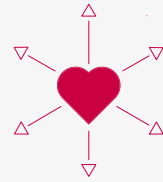
Why does your organisation exist? Answering this question will lead to a better understanding of your purpose. The answer needs to be actionable and not organisation-focused: it should relate to a larger societal challenge the organisation wants to solve.

In the context of these three cases, a common goal is a weak way to define what a purpose is. Goals are what you work to achieve – such as an acceleration of the energy transition – but a purpose works on a deeper level. Everyone involved in these three initiatives has major concerns about where the world is headed. They are well-informed on the subject of climate change and therefore know that humanity must make an unprecedented collective effort in the short term to keep the earth habitable for future generations. The world is in an emergency situation, and they see that not enough action is being taken.

This leads to personal feelings of fear, despondency and loneliness. Why don't democratically chosen representatives and governmental bodies take responsibility for averting a climate catastrophe? People have begun looking for hope, and they are finding it in networks that share their concerns, formulate ambitious goals, and take action to reach those goals. Together, they are refusing to wait for others to set the required transition in motion, and they are not held back by conventions or structures that prevent creative innovation. The personal stories of those involved show what it can mean when people come together around a common purpose, and how genuine purpose is about much more than setting a common goal. Rather, it can only truly be felt as part of a larger story about regaining hope, taking responsibility for changing the current situation, and undertaking collective action.



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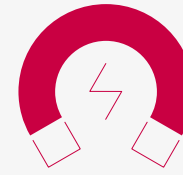


PRINCIPLES

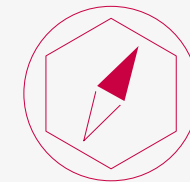
In addition to knowing why your company exists, drawing up a set of indisputable guiding principles will help you to weigh decisions when they arise. It can also be viewed as a list of shared values that helps to create a stronger sense of unity and consistency for people in the organisation. For those outside it, showing what you stand for creates trust.

An important element these three case studies share is that the people involved asked themselves the question: What kind of world do we want to live in? This question is about values (things one inherently stands for) and principles (guidelines that provide a sense of commonality) shared by the people working in the organisation. They indicate the things you and will and won't do in the pursuit of your goal. People find principles important because they feel that if underlying values are forgotten or subordinated, the earth will be a much less pleasant place to live.

Most corporations, especially large ones, have placed vision and mission statements on their websites, and sometimes also a section on values. The often rather hollow phrases therein rarely generate great enthusiasm and do not seem to influence strategic, tactical or operational decisions much. Consciously writing down concrete principles, on the other hand, confronts you with your choices and makes you accountable. This is something a future-proof corporation that wants to be credible should do.



MAGNETISM



LEADERSHIP

Good leadership fosters creativity, ensures well-being, encourages excellence and provides direction through clear vision and strategy. When people connect with a strong purpose and principles, they can become leaders – energetic driving forces that move others inside and outside the organisation to join in.

If anything has become clear to me during my time with the three initiatives, it is that leadership is something completely different from management (the term mainly used within corporations). Leadership is the ability to create something totally new out of nothing, or to break down walls to change an unwanted situation.

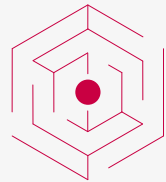
Leadership therefore has nothing to do with “minding the store” or “managing people”. Leadership means 1) having both a clear understanding of a problem and an idea of how to solve it; 2) being able to talk about it convincingly; 3) taking deliberate decisions and owning them; 4) making others enthusiastic and supporting them when they want to contribute to a goal; 5) giving confidence to others; and 6) keeping a sense of humour as a way of seeing one's own actions in perspective (though this can sometimes be disruptive and confusing to others, it can also be an effective if unconventional way to seduce people into taking action).

What can corporations learn from my experience? That seems to be a redundant question. I think that many large corporations have a great need for the type of leadership I describe here. Rather, the question seems to be

whether large corporations can offer such people the space they need to transform and future-proof organisations from within.



MAGNETISM



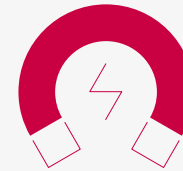
CHALLENGES

To attract the best talent, you need to offer the best challenges. Opportunities to work on complex, advanced issues and make a real impact on the world attract new talent as well as experienced professionals eager to excel.

The people involved in these cases tend to be curious and highly motivated. They see a situation they want to transform, and they decide to take on the challenge. At the start of the journey, they make an in-depth analysis of the problem. They know there currently is no answer, but they are highly motivated to know everything there is to know about the challenge, and they feel an urgent need to solve it. Whether solving it is realistically possible does not play a role. Where there's a will there's a way. Or, as Barack Obama would say, "Yes we can!" This adventurous, curious attitude, in turn, attracts others who challenge themselves – or at least want to become more courageous about taking on complex challenges.

To keep the group's energy high and make sure everyone stays motivated, it's important to look for ways of dividing the process of solving the big challenge into smaller steps. In this way, you can ensure a constant stream of successes. You don't only celebrate at the end of the process but every

time a small step has been taken. This way of working is also relevant for corporations, as defining a big challenge not only connects people around a common goal but also creates a lot of energy. Corporations know this. For example, in their 1994 book *Built to Last: Successful Habits of Visionary Companies*, James Collins and Jerry Porras described the Big Hairy Audacious Goal strategy, which companies can use to define an enormous challenge. In practice, however, corporations rarely set big goals. The rhetorical question is: What could explain this other than a lack of urgency or ambition on the part of the leadership?



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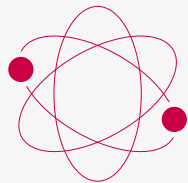
EXPERIENCE

Create unique, memorable experiences – in the form of products and services – that constitute proof of your organisation's purpose, values and excellence. If people associate your organisation with a great experience, they'll be drawn to your products and services in the future.

As people grow better equipped to meet their basic needs – food, housing, and so on – they start to look for new experiences. In what Joseph Pine and James Gilmore have called the experience economy, more and more people are doing things such as travelling to faraway countries to have adventures. The idea of the sharing economy is related in that it postulates that possessing things is becoming less important. Sharing one's own possessions with others is an experience in itself. Or, in the case of a company: you don't sell a product, you sell a subscription or service.

The three cases go beyond the kinds of experiences people gain through travel. They demonstrate that people feel an urge to witness first-hand, through active involvement, how existing systems can be changed. They do not participate solely for the sake of an important goal. They also do so because they believe such projects will make them part of an experience that will fundamentally change how things work. They will go above and beyond to contribute to the joint effort in order to live this experience of fundamental change.

For corporations looking for passionate employees, my advice would be to look for a transformative value proposition: one that has the potential to alter an existing situation and one to which people can contribute. Products and services will then be the outcome of unique experiences, not only on the part of employees but also of clients involved in the products' and services' development. These transformative experiences will shine through in the end results.



ENTROPY

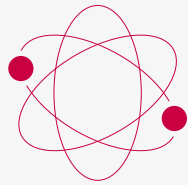


AUTONOMY

Autonomy is the amount of freedom individuals and teams have to achieve goals and tasks relevant to the organisation's purpose. Removing restrictions such as prescribed working practices and process templates can free up people's minds. They will feel more inclined to speak out and share their best ideas and can become drivers of change in rigid organisations.

None of the actors in these cases took action because someone else told them it was necessary. Rather, they started to move things forward because they were personally convinced that they needed to. How the work might fit in with their existing lives and jobs was something to worry about later. For example, Ruud Koornstra ended up serving as National Energy Commissioner during a sabbatical year. This made him a free man: with no pressure to earn money, he could act as an independent agent. I've never seen someone work so hard during time off from work.

The same was true of everyone involved. People managed to find creative ways to convince constituencies and employers that their work for the network fit into their existing formal roles and job descriptions. In the case of the Club van Wageningen, I was struck by how many attendees visited the conference on their own time or found ways to convince their employers of the necessity of their presence. Just imagine if motivated employees in corporations were allowed this degree of autonomous action. Their creativity and ability to innovate and add value to products and services would increase radically – even though management might not like it.



ENTROPY



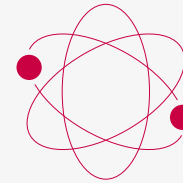
MASTERY

People eager to become the best in their profession – masters – tend to make decisions not because they are easy but because they are the right things to do. Masters have the unique knowledge and insight required to move an organisation – and a profession as a whole – forward.

Many people see problems, few see solutions, and even fewer know how to create solutions that work in real life. In my experience, people in the last category share a mix of competencies. First, they are either experts in professions related to technological or social innovation or have a lot of entrepreneurial experience. Second, they share an ability to collaborate. They understand that it is hard to achieve anything substantial on one's own or within the confines of one's own profession. They work effectively in interdisciplinary teams because they have the appropriate social skills, know how to communicate with team members, and are able to organise processes. Third, they are curious and eager to keep their knowledge and expertise up to date, as is crucial for those working in rapidly changing contexts and environments.

All these competencies increase a person's ability to take action and create real solutions. People who are eager to master their professions, then, are able to move organisations forward. The question for corporations is how to attract and retain these people. This can be difficult today, because experts in technological and social innovation who are highly driven, social and curious are mostly interested in working on the great ecological and

social challenges of our time. The only way a corporation can attract this kind of talent is to contribute to addressing these challenges.



ENTROPY



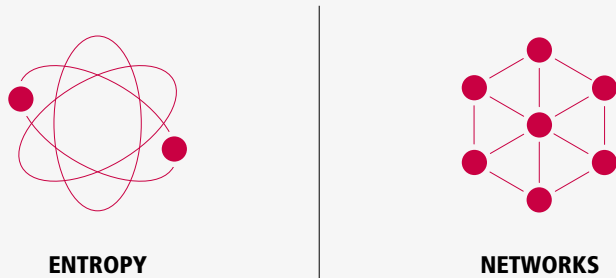
DIVERSITY

A high level of diversity in terms of knowledge, perspectives, backgrounds and areas of expertise helps to foster an open culture where new ideas can be shared freely. An open culture is one in which people respect and are genuinely interested in each other's stories and ideas. As a result, more people connect throughout the organisation.

To explore uncharted territory, you need to come up with creative solutions. And creativity requires diversity: it's about productive collaboration between people of different backgrounds, convictions, ages, sexes and types of expertise. Creativity is a collective effort. And multi-stakeholder approaches were therefore essential in developing solutions to the seemingly unsolvable wicked problems described in these cases. Everyone involved realised that solutions would emerge through the collision of different knowledge areas and perspectives; this process, in turn, shaped how the collaborations were organised.

However, in all cases, there was also a realisation that diversity in other areas besides knowledge and perspective – more heterogeneity with respect to things like cultural background, social class and age – might lead to even more creativity in the networks. This insight was often mentioned, but in

actuality they remained uniform in composition: well off, well educated and white. Although achieving true diversity is harder than it seems, a corporation can significantly benefit from having a workforce made up of people from varied backgrounds and cultures: this will increase its ability to create products and services that appeal to all.



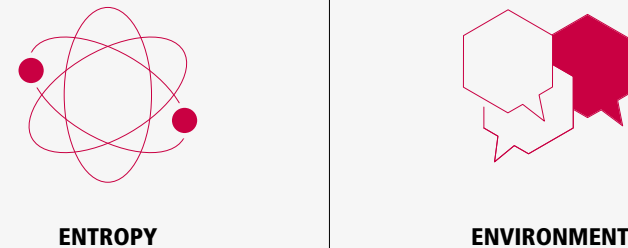
Traditional corporations are mostly organised in silos, with hierarchical structures. A top-down control mechanism makes sense for organisations focused on predictability and specialisation. However, where innovation is required, creativity and interdisciplinary cooperation are essential. To achieve them, a company needs to set up and engage in networks.

The strength of networks is that their activities cut through the boundaries of sectors and organisations. The multi-stakeholder partnerships described in the cases came to life when people who desired change and those who could make it happen came together, regardless of who they worked for or what their professions were. Though this makes it sound as if each participant was active in a single network, some took part in several – for example, ones operating on different levels, such as the national (National Energy Committee) and the local (o2o25).

So how do people actually find each other in order to form these highly dynamic networks? It all starts with personal contacts, and from there it

is mostly a rather organic process. In the case of the Club van Wageningen, however, the process was a structured one. We determined who we needed: people who recognised the problem, people with the knowledge to solve it, and people with a mandate to implement a solution. We made a list and approached everyone on it, and within a short time, we had a new network of 60 motivated, capable people.

Within corporations, this kind of fast, flexible, targeted networking is usually not possible. Rules concerning things such as preferred suppliers and outsourcing guidelines hinder the formation of new networks. However, an even bigger constraint for motivated corporate employees is leaders' doubt around the idea that setting up networks not primarily focused on making money can also be good for business. Who will be successful in the future? You guessed it: corporations capable of organising networks around important challenges in a heartbeat.



Online as well as offline, open environments stimulate social interaction, new encounters and discovery. By designing their office spaces and online platforms to make new exchanges more likely to take place, corporations can foster the exchange of ideas and accelerate the incubation of new innovations.

The physical workplace plays a key part in determining the type and amount of creativity present in a company: the design and overall nature

of a space can be productive or unproductive. A creative environment is more than an open-plan room with a wall for putting sticky notes on. It's an aesthetically inspiring place where people can work on their own, eat healthy food, breathe fresh air, exercise and so on.

Does it have to be an office? No. The National Energy Committee and the Club van Wageningen had no office space. Instead, they met in places that fit specific occasions: someone's home or office, a garden, a rented hall. Attendees of the conference in Wageningen appreciated the venue's enormous hall, terraces and garden, with its great view of the river and lowlands beyond. o2o25 did have its own office space in Old School (literally a former school building), but the team also worked in other places in and around the building, such as the garden and auditorium. The teams have acknowledged that their experience was shaped by the environment.

Corporate employees will find it difficult to develop products and services that provide special experiences for customers while working in a non-creative environment. To prevent this, start by offering them a working space that is designed to facilitate individual and collective forms of creativity. Also, create online platforms and tools that help them to work together as a group. Creativity should not be held back by the environment.

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17. Martine Verweij is the director of Topsector Energy's MVI-Energy programme, a social entrepreneur at Green Bridges, and a facilitator and trainer on the topic of sustainable systems change. Pallas Achterberg is director of strategy at the energy network company Alliander. John Post is the Digitisation programme director for Topsector Energy.

18. For more information on platform cooperatives, see the work of Trebor Scholz, scholar-activist and associate professor of culture and media at The New School in New York. Or visit the website <https://platform.coop/>.

19. A good starting point on this method is *Future Search: An Action Guide to Finding Common Ground in Organizations and Communities* (San Francisco: Berrett-Koehler, 2013) by Marvin Weisbord and Sandra Janoff.

20. The members were Anja de Graaf of the municipality of Almere; Anoushka Buijze of Utrecht University; Arash Aazami, an energy innovator at Universal Right; and Margrethe Bongers of the Netherlands Enterprise Agency, along with Martine, Pallas, John, Thijs, and again myself.

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ESSAY

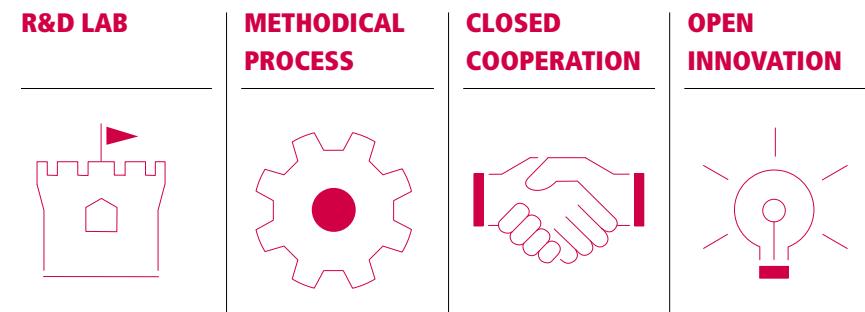
A history of innovation management within corporations

Artemus Nicholson

In the current era, leaders of corporations generally acknowledge that they will not survive without innovating. In a 2017 market survey, two-thirds of senior business and government executives confirmed this.¹ Indeed, it is hard to remember the time when innovation was purely performed by scientists in special labs tucked in the faraway basements of large organisations.² And yet that was not so long ago. The ways organisations innovate have changed significantly in the past few decades.

In this essay, I will present an overview of how this change has occurred. I will build upon the work done by Roland Ortt and Patrick van der Duin at Delft University of Technology, adding and using my own perspective and experiences relating to innovation in corporations. For example, I will deliberately deviate from their period classification and use my own, because in my opinion, the way organisations have tended to innovate has correlated closely with economic growth. In times of economic downturn, corporations have tended to focus on cost reduction and cut their research and development (R&D) budgets and projects. In times of growth, there has been more room for innovation, because they have been better able to support all kinds of new initiatives.

I will discuss four eras of innovation before arriving at the current state of affairs. The overarching theme throughout this historical discussion will be that innovation has moved from being very closed several decades ago to very open today. I find this historical overview particularly interesting because it puts experiences we have all had in our business lives coherently into perspective. Many people have played a part in developing some kind of innovation in their careers and will probably recognise the descriptions that follow.

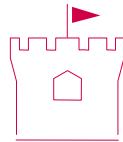


For the first three periods of innovation I will describe, I will redistribute some of Ortt and Van der Duin’s qualitative descriptions to fit my own

division of corporate innovation history into four periods of economic growth. I will complement their descriptions with my own interpretations, statements and additional characteristics to paint a complete picture of the periods in question.

1. R&D Lab

Period: Post-Second World War–early 1970s³



This period is characterised by extensive economic growth in many countries.⁴ The lives of many people also improved significantly.⁵ Two important reasons for economic growth were investment in new infrastructure and productivity growth within multiple industries. New technologies (e.g., automation methods and television) were developed and introduced, and earlier inventions were commercialised on a larger, sometimes even global scale in industries such as aviation and oil. The latter displaced coal.

Corporations created large R&D departments to carry out long-term plans to develop new products and technologies. Such work had to be done scientifically within units that were protected from the outside world and competition. Fearing corporate espionage, companies built fortresses to protect their intellectual property and specific innovations. Famous inventions from this period include the microprocessor and the first personal computers.

There was little theory and even less evidence available to guide organisations along their R&D paths. Most R&D-related decisions made by the leaders were based on their own experiences and insights.

Table 1: Context and innovation approach of the R&D Lab period*

CONTEXT: RECOVERY AND GROWTH

Governments subsidised R&D at universities and large companies to stimulate economic growth and gain a military advantage. Society was also biased in favour of scientific progress.

Every innovation was thoroughly tested and considered from every possible angle before being introduced to the market.

Organisations were mostly technology-oriented and focused on innovation and growth.

APPROACH: SCIENTIFIC/ TECHNOLOGICAL PUSH

The development process would start with a scientific discovery and subsequently follow a linear trajectory. As a result, the question of how to bring a new technology to market was dealt with only at the very end of the process.

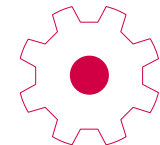
In an organisation’s structure, an R&D unit was usually seen as a central staff department. Such departments were protected through the use of strict security measures.

R&D units followed scientific principles and were structured to resemble scientific institutions. Because of this, the people working in R&D were predominantly scientists.

* Characteristics based on Ortt and Van der Duin’s description of the post-war-to-mid-1960s period⁶, supplemented by my own insights.

2. Methodical Process

Period: Early 1970s–mid 1980s



In this phase, economic growth was slowing down. There was a recession, caused mainly by a steep rise in oil prices (with origins in the 1973 oil crisis). This affected several sectors and many industrial areas throughout Europe and the rest of the world and led to high unemployment rates.

Companies therefore had to be more concise about their innovation approach. Often, their response was to use the so-called portfolio approach, which became the leading concept in thinking about innovation. It was based on the Boston Consulting Group’s strategic portfolio management method, with its recognisable terminology of cash cows, stars, question marks and dogs.⁷ The idea behind the approach was that a company had to maintain a balance between focusing on innovation opportunities and on the products and services currently on offer. Additionally, in making choices about which innovations to pursue, many companies tried to set a standard or chose to focus on one. The “format war” between the VHS and Betamax videocassette standards is a famous example of this.

Table 2: Context and innovation approach of the Methodical Process period*

CONTEXT: ECONOMIC DOWNTURN

Government policies aimed at stimulating economic growth primarily focused on the demand side of the markets.

Organisations managed to grow by focusing on economies of scale, cost reduction and diversification of their portfolios in an effort to reduce financial and other risks.

APPROACH: MARKET PULL

Innovation processes were managed as projects, often multidisciplinary ones, and followed a linear, step-by-step approach.

R&D departments were part of a matrix organisation structure, resulting in multiple reporting lines. Internal divisions became their clients and financed the innovation agenda. It was believed that this would lead to innovations the markets actually wanted.

Large companies tended to organise their efforts in business units. Every unit had its own product and was tied into its own market. Consequently, units had their own profit and loss statements.

Markets became more competitive because of an increase in international cooperation. For example, as a result of government action, the European Union expanded.

Taking the market’s wishes into account in developing innovations was now an essential prerequisite for success. This contrasted with the scientific and technological push companies had relied on up to this point.

* Characteristics based on Ortt and Van der Duijn’s description of the mid-1960s-to-late-1970s period⁸, supplemented by my own insights.

This era is not famous for producing many breakthrough innovations. Instead, companies mostly developed incremental innovations and renewed their existing products. This was the result of the project development process, in which each project was regarded as a separate item, often without much connection to any overarching company strategy or objectives. It seemed like a zero-sum game in which gains and losses were equal.

3. Closed Cooperation

Period: Mid 1980s through 1990s



During this period, the economy grew stronger, with the exception of a dip in the early 1990s. The Cold War was officially over, and the walls between Western and Eastern Europe literally fell. The personal computer entered our business and personal lives. Later, the World Wide Web came to life, and we started using the first generation of mobile phones. As a result,

markets became more internationally oriented and many organisations began dealing with innovation on a larger scale.

The world now needed a much more comprehensive innovation approach, which the concept of the development funnel was able to provide. In this process, a large number of new project ideas is collected and then narrowed down, so that the best project with the most potential eventually surfaces. Corporations saw the funnel as a good approach for gaining better insight into the wide variety and large number of innovation processes inside their organisations. They didn't mind that not every idea or initiative reached the end of the funnel.

Besides the funnel, corporate leadership increasingly valued the execution of a focused strategy. As a result, the Balanced Scorecard⁹ entered the corporate arena. It allowed leaders to ensure that project results were in line with their organisations' objectives. The development of new innovations was not part of this management tool in its first iterations, but it was added in later ones. Another change in the realm of corporate leadership was a growing interest in process innovation. This trend was driven by the idea of business process re-engineering.¹⁰

Also new in this period of economic growth was a willingness among companies to start working together on new products and services. In fact, the idea of taking advantage of each other's strengths in creating innovations quickly became popular among businesses. This was fuelled by various success stories, such as the Senseo coffee machine. Introduced in 2001, it is a good example of large companies (Philips and Sara Lee) collaborating on product innovation.

Table 3: Context and innovation approach of the Closed Cooperation period*

CONTEXT: ECONOMIC GROWTH

Organisations focused on their core competencies. This trend was for the most part a response to the classic management bestseller *Competing for the Future* by Hamel and Prahalad.¹¹

The liberalisation of markets and trade between continents resulted in new trade agreements. These, in turn, led to more international competition.

Corporations increasingly recognised the strategic importance of innovation. Many also began creating multiple, often autonomous units.

APPROACH: MARKET PULL

Companies increasingly took part in coordinated innovation processes with partners. These partners were often system integrators, suppliers or companies from other sectors.

The scope of innovation expanded. It was no longer confined to inventions and technology but also became part of, for example, business development. With the focus on more than just technology, the importance of market demand in innovation processes increased. This broader scope also led to innovation becoming an integral part of an organisation's strategy.

The building of networks between corporations became important. Businesses sought strategic alliances and joined external networks, if hesitantly. The result was new joint ventures and partnerships.

* Characteristics based on Ortt and Van der Duin's description of the period from the early 1990s to the early 2000s¹² supplemented by my own insights.

I started my career in this era. They were interesting times. I was involved in the development of several innovations. First, I was part of a business

unit that developed a new life insurance product for the consumer market. We developed the product with two insurance intermediaries and regionally tested several new product characteristics aimed at offering consumers more flexibility with respect to factors such as premium payments, duration and investments. Second, I was involved in a collaborative effort by a public transportation organisation, a telecom provider and an automobile association to develop new information services for travellers. Finally, I was part of a team that developed hybrid and electronic postal services that would enable people to communicate rapidly around the world.

The common denominator in these experiences for me was an observation that collaborative projects involving a number of organisations can be difficult, as each party has its own interests, timelines and objectives. Also, there was not a lot of experience around regarding multi-company efforts, and approaches for achieving results were lacking. Without exception, these innovations faced a long time to market.

I also discovered that gaining good insight into a company's innovation processes was a complex task in itself. Innovation expert Langdon Morris is right when he says that “[n]ew ideas are difficult to find and great ideas are rare. And turning them into useful valuable products and services is not straightforward.”¹³ Making things even more complex were the rise of the Internet and heightened customer expectations. Corporations sometimes developed successful new products and services, but when they did, it mostly came as a surprise. Instead, the underdogs seemed to be in a better position to create successful innovations. Corporations were no longer able to do it alone. And so this era marked the end of closed innovation practices.

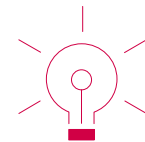
The period also saw the birth of many business giants that dominate the markets today. Amazon was one of the first large online stores. Google quickly followed the first wave of good search engines and eventually

wiped the floor with the competition to become the most powerful player in the market. Many of these companies grouped together in Silicon Valley, which is generally considered to have been the centre of Internet growth. They were founded in the mid 1990s and became examples for – and accelerators of – the many innovations that followed.

The success of Silicon Valley as an innovation accelerator for the world has often been mentioned. In his book *Chaos Monkeys*¹⁴, Antonio García Martínez shares his opinions on the tech world surrounding Silicon Valley. My interpretation after reading it is that the tech world can actually be seen as a bucket of coincidences; for the most part, its successes are largely driven by chance. He stresses something that I find very illustrative of the period: companies try out ten ideas based on their gut feelings. Out of these ten, seven fail miserably, two achieve average results, and one might go through the roof, for reasons that are only discovered in hindsight. Innovation has become less predictable and thus is approached very differently now than it used to be.

4. Open Innovation

Period: Early 2000s–early 2010s



After a short economic dip around the turn of the millennium and the introduction of the euro, by the early 2010s economic growth was booming around the globe. The rise of the Internet accelerated the shift toward open economies and open methods of innovation. In his book *New Rules for the New Economy*, Kevin Kelly, the founding executive director of *Wired* magazine, described how he believed companies should operate in a new economy based on a world of networks. He argued that traditional economic rules no longer applied and should largely be replaced with new ones.¹⁵

In these times, it seemed that anyone could start up a dot-com business,

and many did, some in their attics and garages. Most of the time, however, these entrepreneurs didn't get very far. The initial idea might be great, but the means to scale up were often lacking. Traditional companies also developed their online businesses but lacked innovative concepts or were too slow to get innovative products and services to the marketplace. The period ended on a low note because of the financial crisis, followed by economic recession.

The rapid rate at which science, technology and politics changed during this period forced most large companies to call upon a much broader range of ideas, talent and intellectual property to help drive their businesses. Combining internal and external resources in order to develop new products and services increasingly proved a successful approach. Although forming partnerships to jointly create innovations was not new, the level of strategic focus present in such partnerships had never been higher. As a result, many network alliances and full-value-chain innovations¹⁶ saw the light of day. As an example, in 2011, "DHL became the first in its industry to launch an Open Innovation competition focusing on City Logistics." The contest was "introduced by the new global DHL Solutions and Innovations (DSI) division" and invited "businesses, academics, politicians, public authorities and citizens to share ideas and recommendations for the implementation of sustainable logistics solutions in populated, urban areas."¹⁷

Open-source technologies came into being because people were now able to cooperate without being limited by the organisational and geographical boundaries of the past. Perhaps the best-known example is Linux, the open-source operating system. Many developers contributed to Linux, and it became serious competition for Microsoft's operating systems.

Enter the new era of open innovation: "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation, respectively."¹⁸ Making the transi-

tion was no easy task for organisations that had spent decades fortifying their corporate walls and developing new products and services behind closed doors. At the end of this era, the mobile economy started to take off. With the rise of mobile phones, smartphones and social media, things were about to change radically – again.

Table 4: Context and innovation approach of the Open Innovation period

CONTEXT: ECONOMIC VOLATILITY

With the Internet allowing information to be sent around the world in seconds, companies faced a rise in global competition in local markets.

Many companies began outsourcing secondary business functions, such as IT, administrative financial processes and HR to low-cost countries around the world.

People in many countries were confronted with challenging economic times while also facing a new threat in the form of terrorism. The financial crisis also led to a lack of available traditional capital and the rise of crowd-funded capital.

APPROACH: MARKET PULL

Development of innovations no longer took place within company walls but in all sorts of networked collaborative structures. Innovation was much more likely to be organised close to or inside operating units.

Governmental and political change as well as innovation were often driven by bottom-up movements.

When a company introduced an innovation, gaining market share and acquiring an installed base were key; there was less focus on profit than before. The doctrine was that you had to act fast and become the focal point in your market segment. You had to find your niche.

5. Moving forward: Open Innovation 2.0

Going from Web 1.0 to Web 2.0 – the social web – has changed the balance between producers and consumers. The first iteration of the Internet allowed consumers to make much more informed decisions and calculated investments than in the past. Today, with Web 2.0, the success of a product or service no longer lies in the hands of large corporations but in those of consumers. Online influencers, with their mass followings, now have voices that can be heard all over the world. Businesses have quickly begun increasing their investments in social media to reap the benefits of this new development.

With the coming of age of social media and the further digitisation of society, a new wave of open innovation has commenced, in which consumers and producers are working together on innovations using co-creation and crowdsourcing methods. Traditional businesses are going bankrupt as start-up companies succeed in taking over their markets. For instance, the once-popular Dutch music-store chain Free Record Shop was pushed out of the market by digital competitors such as iTunes and Spotify. Life in traditional corporations and businesses has become too complex for them to be able to deal with innovations in a controlled, isolated manner, and only new entrants seem capable of really shaking things up.

Looking back on the various innovation eras, we see that not everything has changed or faded away. For instance, the funnel approach still exists, but it is used in a much more open way today. As a result, it can help to create new innovation opportunities outside the company walls. The R&D departments and their armoured doors, typical of innovation in the 1970s, do still exist today, particularly in science (e.g., the energy, space and pharmaceutical industries), where innovations still take many, many years to get to the market. And the bottom-up approach that emerged in the 2000s is still present in corporations at the operational level. All these models and ideas still have value in innovation processes today and will continue to in the future.

However, there is a fundamental change on the horizon. We have arrived at the final stage of our history of innovation models in corporations: the current phase, which some are calling Open Innovation 2.0. It is “a process that involves all stakeholders (businesses, public institutions, academia and citizens). It can actually translate into smart cities, living labs, fab labs, social media, e-platforms, crowdsourcing platforms, etc.”¹⁹

In my opinion, Open Innovation 2.0 provides an interesting conclusion to our story. In this model, innovation is no longer just about technology, as is often suggested these days. Although technology is developing faster today than it ever has, and new advances are impacting on our markets and society on an unprecedented scale, the Open Innovation 2.0 paradigm advocates an innovation approach that does not revolve around technology and or a single company. Rather, it is rooted in the idea that information and knowledge can be found everywhere and are accessible to anyone. The development of innovations can no longer be confined within the walls of a building but must be accomplished by working with stakeholders from all kinds of backgrounds.

Furthermore, capital is no longer the key differentiator for corporations. Of course, if you have deep pockets you can innovate to your heart’s content, but if you don’t have the financial means required to develop an idea, there are all kinds of ways and places to get your hands on them (e.g., through crowdfunding or venture capital). It can start with one person who has a great idea, whether he or she works within a corporation or as a solo business.

So the – perhaps surprising – conclusion to this story of innovation history might be that the key differentiator for successful, sustainable innovations is human capital. What matters is the creativity and value of people. They are the force behind every innovation, and the ones who are able to move it forward. From the perspective of a corporation, the creators of innova-

tions are its own employees and people working at partner organisations and knowledge institutions – and perhaps most interestingly, these are the same people who used to be seen primarily as consumers of the end products created earlier on in our history of innovation. They have moved on from being consumers to being producers too.

This is why the days of closed-off innovation are definitely over. Moving forward, corporations need to create ecosystems and infrastructures that will attract the best partners, the best talent, the best employees, the experts – all the right people. I agree with one of the fundamental ideas behind Open Innovation 2.0: people are at the centre of innovation.²⁰

Endnotes

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19. This description is taken from the *Open Innovation 2.0 Yearbook 2017-2018* (Luxembourg: Publications Office of the European Union, 2018), 117. For more on Open Innovation 2.0, read the 2017 book *Open Innovation 2.0: The New Mode of Digital Innovation for Prosperity and Sustainability* by Martin Curley and Bror Salmelin.

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VI

ESSAY

Corporations can be Future Eaters, Future Seekers or Future Creators

Ruurd Priester

Global warming, a critical loss of biodiversity, growing global inequality, massive pollution and waste, democracies under siege. There are too many symptoms and scientific analyses around to deny that humanity is in the midst of an existential crisis. How should we expect corporations to respond? This essay will argue that their leaders bear a great responsibility to drive the rapid transformational change that is required, due to their dominant position in the global economy. Inspired by the work of the environmentalist Tim Flannery and the economist Kate Raworth, it will propose that corporations be classified as either Future Eaters, Future Seekers or Future Creators. Such classification will give

corporations a choice as to what kind of future they see for themselves and subsequently allow people to decide which corporations they want to associate with.

The term “Future Eaters” was coined in 2002 by Tim Flannery in his eponymous book.¹ It made Flannery instantly famous in Australia and far beyond. The book consists of three parts, respectively describing the geological formation of the Australian continent (Australia, New Zealand, New Caledonia and New Guinea), the arrival there of the Aborigines, and the arrival of the Europeans. Throughout the book, Flannery paints a vivid picture of the subtle processes that create rich ecosystems and how people are able to break these ecosystems down within short periods of time, leaving the land uninhabitable. He builds a convincing argument about the importance of humans achieving a careful, balanced cooperation with nature instead of dominating it. The book is rich in detail, and Flannery cites many real-world examples. His thorough approach contrasts with the simplicity of that one, easy-to-understand term, “Future Eaters”, which holds accountable the people and nations that pose a danger to our future on earth.

A mere decade and a half later, the term has only gained in significance. The story of Australia is the story of the world, and the story of the Australians is the story of us all. We are all Future Eaters. We are part of a sequence of generations which have dominated the global ecosystem², from the thin atmospheric shell we all depend on to all the living creatures that inhabit the earth, with our dominance increasing exponentially after the Second World War. As scientist Bruno Latour has put it, “What we are experiencing is not just an ecological crisis but an irreversible mu-

tation to another world with a new climate regime. We are entering the Anthropocene³, a new era that cries out for a rethinking of our disturbed relationship with the planet.”⁴ Causing the world to mutate into a different, very dangerous new one: this is what “future-eating” does. With its strong symbolism, the term is perfect for describing what is currently happening in Australia. The tangible effects of global warming are even more evident there than in most other places on the planet: temperatures exceeding 50 degrees Celsius, increasingly frequent forest fires, a rapidly dying Great Barrier Reef. Australia and its resident, Tim Flannery, are issuing a warning; that much is clear.

With regard to what is probably the most pressing effect of future-eating, global warming, awareness finally evolved into international action in 2015 in the form of the Paris Agreement⁵. It saw 174 countries commit to working to limit the rise in global temperatures to one-and-a-half degrees Celsius⁶, leaving it to individual countries to decide how to do their part. The urgency driving the agreement was perhaps best expressed by then us president Barack Obama, who said, “We are the first generation to feel the effect of climate change and the last generation who can do something about it.”⁷ The Paris Agreement may give us hope, but that hope is undermined by concerns about whether its objectives are sufficient, by the lack of a binding enforcement mechanism, by the inability of governments to realise solutions single-handedly, by the United States’ withdrawal, and by alarming reports of an acceleration in the rise in sea levels.⁸ The broadly felt worry and frustration were expressed in summer 2018 by Pope Francis, who urged governments to make good on their commitments to curb global warming, warning that climate change, continued unsustainable development and rampant consumption threaten to turn the Earth into a vast pile of “rubble, deserts and refuse”.⁹

His call is striking for the depth and breadth of its definition of the problem. Like Flannery, Latour, and many other leading scientists, Pope

Francis is clearly determined to make us aware that climate change is not just an isolated technical challenge but a symptom of humanity in crisis. Perhaps this is, at the same time, what has eroded hope in the Paris Agreement the most: the fact that people are becoming fatalistic in the face of the enormity of it all. They realise that humanity may be beyond the bifurcation point: the crossroads at which we still had a choice between a dark scenario and a bright one. And deep down, they have a sense of limited individual agency and see the indifference of the powerful. The end result is that many simply choose to look away.

All this might explain the popularity of a rising star in economic thinking: Kate Raworth, author of the bestselling book *Doughnut Economics*¹⁰. Raworth confronts us with how very dangerous it is to continue to rule countries, and essentially all of humanity, according to 20th-century economics. She concludes that economics needs a new goal: “to meet the needs of all within the means of the planet. In other words, to ensure that no one falls short on life’s essentials (from food and housing to healthcare and political voice), while ensuring that collectively we do not overshoot our pressure on Earth’s life-supporting systems, on which we fundamentally depend – such as a stable climate, fertile soils, and a protective ozone layer.”¹¹

Doughnut Economics is far from a conventional textbook. It invites people to engage in thinking and talking about economics through the use of inclusive language, powerful narratives and easy-to-understand images. The book is structured around seven dominant 20th-century ways of thinking, and the graphs, diagrams and images that go with them. For each, Raworth suggests a 21st-century alternative.¹² The first and most paradigmatic concerns economic goals. The book reproduces the iconic graph depicting endless economic growth, along with the associated narrative that consumption makes people happy and eventually creates a better world for all. This story has been so strong and so well marketed that it has left most of us unable to imagine any alternative reality. Raworth makes

a compelling argument for the falsity of this story and suggests an alternative, 21st-century model for thinking about economics: a doughnut-shaped chart representing an environmentally safe and socially just space in which humanity can thrive.

Raworth plots dramatically in red outside the outer edge of the doughnut to show where human activity has exceeded the boundaries of the ecological ceiling (in areas like biodiversity loss, climate change and land conversion), and inside the inner edge to show where we have fallen short in maintaining our social foundations (in areas like health, energy and political voice). Raworth did not invent these indicators. The 12 dimensions of the social foundation come from the United Nations' 2015 Sustainable Development Goals.¹⁵ The nine planetary boundaries have been defined by an international group of earth systems scientists led by Johan Rockström and Will Steffen.¹⁴ Because it is backed by data, the doughnut's depiction of how alarmingly far we currently are from a situation in which "the needs of all are met within the means of the planet"¹⁵ is virtually undisputed. It is the most meaningful, coherent and factual mirror we global Future Eaters have ever been confronted with.

However disturbing this image is, Raworth still succeeds in giving hope to many. There are probably several reasons why. The first is that she makes economists – and others who follow or use their dominant views and ways of thinking – directly responsible for the alarming "state of the doughnut". Raworth challenges some powerful assumptions of conventional economic thinking. In the minds of many, especially among the younger generations, she has created a crack where the light can get in.¹⁶ Secondly, of the seven alternative ways of thinking Raworth offers, two are elementary design principles: 1) create to regenerate, and 2) design to distribute. Many economists may find these ways of thinking and the idea of using design principles odd. However, it is clear that to many others, they offer inspiration and an invitation to engage in fresh ways of thinking, new interdisci-

plinary collaborations and public debate. And thirdly, there is the iconic doughnut graphic. The sense of hope it radiates might simply be related to its form. The doughnut is a metaphor for the thin atmospheric shell we live under and depend upon; it makes us aware of the "overview effect"¹⁷. At the same time, the doughnut is a compass, a dashboard and a steering wheel in one. This easily understood image sparks hope that those in power might in some way be inspired to take the wheel and adopt the goal of meeting the needs of all within the means of the planet.

This leads us to another interesting question: who is actually in power? Ultimately, people are – that is, people within government and companies, and people who join forces by forming networks to make their voices heard. The first group, the global leaders, could have chosen to implement a system of carbon pricing. That would probably have been the safest way out of the most pressing problem, climate change, at least. But they didn't. And there is no reason to expect that they will do so soon. With regard to government leaders taking responsibility, the best result we have seen so far is the Paris Agreement, and frankly, that's not a comforting thought. So let's look at the second group of leaders, those within global corporations. One could say that they bear extra responsibility because they have benefited enormously from the neo-liberal policies that have gripped the Western economies since Thatcher and Reagan. In parallel with a process of increasing deregulation, the future-eating behaviour they have exhibited on a global scale has made them responsible for the sharp rise in temperatures reflected in the hockey stick graph¹⁸. The leaders of these corporations are individuals, often with children and grandchildren. The time will come when they will no longer be able to say "We didn't know" and will be held accountable. And they are leaders, so they cannot divert the blame by citing dependence on shareholders or financial institutions. Leadership means taking responsibility.

So the question is how corporate leadership can be inspired, encouraged

or, if necessary, forced to do whatever is in their power to rapidly bring humanity into the safe, just space of the doughnut. And a related question is how we can get the third group, the people's networks, to put extra pressure on these leaders.

The fact that the values put forth by the doughnut's 21 indicators are based on scientific data presents an interesting opportunity. The effects of people's behaviours worldwide in relation to the indicators has actually been measured. Theoretically, the effects of future-eating can be measured on any scale and in relation to any organisation or type of organisation. The website for the project *A Good Life For All Within Planetary Boundaries*¹⁹ provides a world map, country comparisons and opportunities to explore scenarios and download data. But before we go into doughnut dashboards to measure the future-eating habits of corporations, let's look at another interesting effect of bringing the 21 ecological and social indicators together in one picture.

Raworth combines two existing sets of indicators in one circular image. Circles express unity and coherence. The effect is that many viewers intuitively become more curious about the relations and interdependencies between the various indicators and about the underlying mechanisms at work. Could giving people better education and a stronger political voice put a halt to biodiversity loss? And what are the forces that prevent this from happening? These are the kinds of questions that arise. In my experience, the more people think about the picture, the more they realise that all the indicators are interconnected and that reversing overshoots and shortfalls requires an understanding of relations, flows and forces at deeper, more complex levels. Raworth refers to this view of the world as a system, which therefore functions according to the laws of systems theory. The fourth principle in her book is "Get savvy with systems."²⁰

It is important for corporations to recognise that literally all the indicators

are linked. Corporations make it a habit of justifying their behaviour on the basis of specific indicators they perform well on. But when it comes to future-eating, this is irrelevant. If one wishes to evaluate whether or not a corporation is a Future Eater, it only makes sense to look at its score across all the indicators.

To clarify this point, let's look at the food system in the Netherlands. The food production chain starts with some 65,000 farmers, ends with about 16.7 million consumers, and is controlled at the halfway point by just five purchasing companies, which supply 25 supermarket chains.²¹ These suppliers are the corporations that bear most responsibility for the functioning of the chain. If judged on their contribution to a single indicator of the social foundation, food, they have reason to be proud. If we look at the doughnut as a whole and think about the food system, we see that it is responsible for putting many indicators into the red zone. The social foundation is under attack from a long-term decrease in farmers' incomes²² (indicator: income and work) and an obesity crisis due to food containing too much sugar and fat²³ (indicator: health). The image worsens still more when we look at the vast holes the food system has punched in the ecological ceiling: the climate change, biodiversity loss and soil pollution indicators go dark red and off the chart.²⁴ The holistic doughnut perspective clearly reveals the corporations ruling the Dutch food system to be Future Eaters with extremely large mouths, stomachs and appetites.

What can we conclude from this? First, as human beings, we are all Future Eaters, and it is corporations most of all, given their dominant role in global future-eating culture and practice, that bear the vital responsibility of turning the curve. Second, doughnut economics not only offers a rational goal and a fresh way of thinking but also an integrated, measurable definition of future-eating, made visible in the doughnut chart and its 21 indicators. Conceptually, the doughnut acts as a compass, a dashboard and a steering wheel in one.

Building on all this, what could constitute an impactful intervention? What could give corporations a firm push in the right direction? The dramatic term “Future Eater” clearly has great communicative power. Maybe we global citizens should start talking about Future Eater Corporations when referring to those that are actually destroying the next generation’s future. And to inspire and reward those that are striving toward or displaying positive behaviour, we could also start talking about Future Seeker Corporations and Future Creator Corporations. This classification model would combine powerful communication with a solid underpinning made possible by the doughnut-economics theory, model and data. The next step, of course, is to give the three terms proper definitions. The following initial proposal is built around two key elements: performance and intent.

With respect to performance, a *Future Eater Corporation* is a corporation that is active in a supply chain that produces one or more overshoots and shortfalls. Furthermore, it displays no intention of becoming a Future Seeker or Future Creator. This implies that its strategic, long-term investment in turning the curve is low in relation to its revenue and margin.

A *Future Seeker Corporation* is also active in a supply chain that produces one or more overshoots and shortfalls. However, it shows a strong intention of becoming a Future Creator. This implies that its strategic, long-term investment in turning the curve is high in relation to its revenue and margin.

A *Future Creator Corporation* is active in a supply chain that is reversing one or more overshoots and shortfalls. A Future Creator also shows a strong intention of continuing to improve its “future creation impact”. This implies that its strategic, permanent investment in increasing impact is high in relation to its revenue and margin.

This classification scheme can help people to distinguish between corporations based on their care for future generations or lack thereof, and to decide which ones they want to associate with as consumers, employees and investors. It can also help to raise awareness about future-eating and its catastrophic effects. Governments can also use it to develop laws and regulations (for instance, around progressive taxation). Scientists can build on the work of Flannery, Raworth and likeminded pioneers to further strengthen the framework. Finally – and perhaps most importantly – this classification scheme could be used to help Future Eater and Seeker Corporations embrace the huge business opportunities to be had by becoming Future Creators and producing, on an unprecedented scale, innovative solutions spanning multiple ecological and social indicators.

Epilogue

Tim Flannery has not wasted any time since publishing The Future Eaters: he has written 17 more books. Whereas most scientists work hard to understand problems, Flannery is dedicated to identifying solutions (which we could now call Future Creator solutions). His latest book, Sunlight and Seaweed²⁵, is subtitled An Argument for How to Feed, Power and Clean Up the World. Delivering on this promise, the book contains several daring proposals for new technologies and approaches that could push back various combined overshoots and shortfalls simultaneously on an enormous scale. The most impressive and inspiring of these is perhaps the large-scale cultivation of seaweed in oceans. Seaweed has valuable qualities: it grows fast (certain giant species can grow by up to 60 centimetres a day), extracts huge amounts of CO₂ from the air, and makes excellent food. And seaweed plantations can even play an important role in restoring biodiversity and reversing acidification in the oceans.

Of all these benefits, extracting CO₂ from the air is definitely the most vital. We are too late to solve the problem of climate change solely by preventing more CO₂ from entering the atmosphere. We now need to remove it

(through so-called negative emissions) incredibly fast on a massive scale.²⁶ And the best option we have for doing so is to find scalable ways of working in harmony with nature, as in the seaweed example. Corporations love scale. So, leaders of Future Seeker Corporations: what are you waiting for?

Endnotes

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VIII

ESSAY

From the corporation to the shed – and back: A conversation with Hans van Goudoever of Emma Children's Hospital

Geleyn Meijer

The concept of scale is important for thinking about organisations. Start-ups are still as hot today as they were 15 years ago, but we now know that scale-ups are also needed to progress an original idea. Some start-ups choose not to become bigger and instead operate on a smaller scale that works better for them. However, there are benefits to scaling up in that it means more people are able to enjoy a product or a service.

Of course, you can be critical of thinking in terms of growth. Should society grow? Should every business grow? However, there is no denying that large-scale organisations, whether they are networked platform-based organisations with thousands of members or formal corporations employing thousands of staff, have a place in 21st-century society. Working on a large scale still brings benefits.

The metaphor

With greater size, however, comes the question of how to organise a large group of people so that they will pursue a common goal or cause. As you've probably read by now, the model we explore in this reader is built on two ideas: you need attraction, and you need sufficient freedom to be able to move. Magnetism and entropy are essential. We've already discussed what they stand for in depth. The more practical coming-of-age story behind the concepts is also interesting. Rather than an elaborate theory leading to these two concepts, the most vital part of the journey, believe it or not, was a rather primitive assemblage that I made in my shed to visualise the metaphor: a small metal case containing a piece of cloth, a couple of steel marbles, and a magnet. For me, it was a way of turning a complex, large-scale situation into a simple, interactive object. It brings the concept of a large organisation down to a small, abstract yet tangible model. The way it works is simple: you line the box with the piece of cloth, put a dozen steel marbles – representing the actors in an organisation – on the cloth, and use the magnet to move them around. Sometimes they follow the magnet; other times, the cloth obstructs their path.



**THE INSIDE OF THE METAL BOX,
WITH THE MAGNET AND MARBLES.**



**THE CLOTH IS WRINKLED, AND THE
MARBLES CAN HARDLY MOVE TOWARD
THE MAGNET. ENTROPY IS LOW.**



**THE CLOTH HAS A SMOOTH SURFACE.
THE MARBLES ARE ABLE TO MOVE
TOWARD THE "PURPOSE". ENTROPY IS
BALANCED.**

When the cloth is folded and has more “ups and downs”, movement becomes harder. So, in an organisation, what you would want to achieve from a leadership perspective would be a cloth that was as smooth as possible. This idea brought us to the first important metaphor: entropy. A smooth cloth represents a high degree of entropy in an organisation: people can move freely throughout the organisation (and outside it). If you remove the cloth, however, and the marbles start to roll over the bottom of the case, they become uncontrollable. You need some type of structure underneath them.

Whereas the cloth represents the ability of actors (the steel marbles) to move, the magnet represents the direction of movement: the attraction of the marbles by a particular force. Magnetism was the second metaphor we started to explore. Specifically, we looked at the idea of induction, in which an object is magnetised by an external magnetic field. The magnet stands for a story or vision that paints a picture of where an organisation might go. If it’s successful, people feel attracted to it and translate the core idea into their own words in their own work setting. In doing so, they inspire others and act as magnets themselves. People at every level of the organisation share successful stories throughout the company, and in doing so, they attract others. This is a better approach than simply sending out a message to the whole organisation; it doesn’t work when a leader just keeps shouting his or her vision over and over, with nobody adopting it. Finding a balanced story to tell that inspires people without restricting them is the sweet spot. And storytelling is the mechanism that makes induction work between people.

The metal case and the metaphors of magnetism and entropy do have some conceptual limitations. First, organisations today are no longer confined by their own boundaries, but the metal case has them. People work in networks inside and outside their organisations and therefore “outside the box”. Second, the metaphor is mechanical in nature. Therefore, it

doesn't do justice to what is most important in organisations: people. Steel marbles and magnets can in no way represent the complexity of the social interaction and creativity that make human beings unique (and different from robots). People are the real drivers of innovation in corporations. It is born of their skill and personal drive to come up with creative ideas and share and advance them. If you want human beings to work for your organisation, they have to be able to identify with a cause or purpose linked to it that is bigger than themselves. The company's purpose has to be attractive to – and even shaped by – the people who work for it. The metal case and the metaphors can't encompass all this. But as tools for starting a conversation about innovation and leadership in corporations, they do work.

A conversation starter

Using the metal case as a conversation starter, Ruurd, Artemus and I, with the help of editor Twan Eikelenboom, talked with a wide variety of people – in fields from design and law to healthcare and organisational strategy – about innovation processes in corporations. First, these encounters helped us to further shape our ideas, and second, they provided qualitative validation for our theories. The outcomes and insights of these conversations played an essential part in the material we have written for this reader.

As we near the end of this reader, we'd like to feature one of these conversations. In June 2018 I met with Hans van Goudoever, the director of Emma Children's Hospital in Amsterdam, to talk about magnetism and entropy and about leadership and innovation processes in large organisations more generally. One reason I chose this conversation for inclusion here is that it offers a behind-the-scenes look at the practice-based approach we took in researching and writing this reader. Another reason is that it illustrates how thinking in terms of magnetism and entropy can not only enrich the discourse around innovation processes in our own organisations and sectors but can also be useful in other contexts. In the following exchange, Hans and I touch upon many points that show the importance of employ-

ees identifying strongly with an organisation's purpose. We also talk from a leadership perspective about how to best facilitate employees' ability to excel in their professions. Our conversation begins with the most important subject: the people we work for.

Emma Children's Hospital

GM: How do you organise healthcare at Emma Children's Hospital in such a way that it fits the needs of people and society today?

HvG: What's important in how we work is that we organise care around the child. That means it isn't limited to within the walls of the hospital – and our research isn't either. Like the parents, we want the child to have the best possible future. What we try to do is make sure he or she can lead a normal life. We see a stay in hospital as an interruption of the daily routine at home. So we only offer limited help, when the child or the parents are no longer able to, and care is organised around the child's local surroundings and situation. So we always take the full situation into account. For example, the liver is causing the child discomfort, and that in turn affects his or her family, the school, and so on. What's important for this approach to work is to not focus on the child alone but to also involve the people around the child. So a nurse coaches the family, and we make sure the parents and the child feel free to talk about how things are going when they need to.

For children who are in the palliative phase, we have the Emma Thuis team – Emma at Home. Often, people think that patients in this phase are close to death. That's not always the case; they might be able to live another 20 years. We want these patients to be at home as much of the time as possible. That means we work with doctors and hospitals all across the country. Our people connect at the local scale with everyone around the patient. Another example of how we're connecting home with the hospital is the Transitional Care Unit we're building next to the hospital. This new location is being built specially for children with complicated conditions

who currently spend a lot of time in hospital because they need to be near the doctors. That's often the only reason they're there. The Transitional Care Unit will provide a location that isn't the hospital but a place between home and hospital where the child and his or her parents can stay.

Our way of working is in line with the overarching trend in healthcare, which is that patients and parents want to play a more substantial part in treatment. This trend is leading to all kinds of new initiatives that are allowing us to create new ways of providing medical care for people, and at the same time we're educating a new generation about how medicine can be organised in the 21st century. At Emma, we prefer to care for people in their homes instead of their loved ones having to come to visiting hours at the hospital.

GM: Emma's name is a familiar one for many people inside and outside the organisation. What's your experience been with facilitating a strong sense of belonging in the organisation?

HvG: People have a high level of identification with Emma Children's Hospital. They're proud to be part of it, and this shows up in employee satisfaction surveys. We get top ratings year after year because of the high level of identification with our brand. People want to belong to Emma, and you feel a sense of belonging radiating throughout the organisation. As leaders, our aim is to contribute to this atmosphere by creating an environment in which people feel safe, secure and trusted.

The result is that even though we're a large organisation, people experience us as a smaller one. And yet they're able to profit from the benefits a large-scale organisation brings. First, from a medical perspective, a big hospital has all the right equipment available. Second, it makes it easier to work with other parties at the international level. Third, employees can use a large organisation's network and strength to fulfil their own dreams, not just outside but also inside it. Fourth, a big organisation means there are

a lot of people you can potentially work with. And because of the strong sense of identification here, people feel comfortable working with each other and are more likely to seek out colleagues to work with in-house. For instance, specialists have traditionally formed groups and worked with others in their own discipline but outside the hospital. At Emma, things are different. Because of the atmosphere, they tend to gravitate towards others in the organisation rather than specialist groups within the larger Academic Medical Center, of which we are a part.

The strong sense of identification is also helping us in our ambition to scale up Emma Children's Hospital. We're working to create one children's hospital group under the Emma name, serving the wider region. However, we want every hospital to keep its own name, which will help to strengthen patients' trust in their hospital. Our goal is not to create one enormous organisation. Every hospital will remain involved in local networks, while at the same time we'll help to keep the quality of medical care up to standard and make sure they go along with Emma's new ways of providing care. Another deliberate choice we're making is to grow at a slow pace.

GM: What would you say are the downsides to being a large organisation in a networked society? And how, from your experience, can corporations make use of networks?

HvG: Processes can be slow, and you're not able to act as freely. However, you can create more flexibility by organising the hospital in smaller units. We're part of the Amsterdam University Medical Centers (AMC and VUMC). That means we can work together with others within the larger organisation at various levels, for example if we need help with communications. At Emma, we're proud of Emma, but we're also proud of the VUMC and the AMC.* We can make use of each other's strengths, not just at the top

* At the time of writing, the Academic Medical Center and VU University Medical Center had just announced that they had joined forces in an administrative merger: <https://www.amc.nl/web/nieuws-en-verhalen/actueel/actueel/amc-and-vumc-join-forces-as-amsterdam-umc.htm>.

level but also within the smaller units. However, those smaller units will only work if you're able to bring people together again in certain ways. Open, transparent office spaces can help with this. If one specialist needs another in a different discipline, they can easily find them – they see them at work.

Within our organisation, the smaller units also come together through Stichting Steun Emma, or the Support Emma Foundation. It's home to a lot of projects set up by people throughout the hospital who want to do scientific research or improve care, facilities, or conditions for patients and their families. When someone needs funding for a great idea, this is where they go – but it's not just a place where you bring in a project and let others handle the finances. The foundation can make things happen for your idea, but an essential prerequisite is that you do something in return. You have to make the effort to find additional funding, for example by going to networking events to attract partners and organising fundraising events – a sponsored walk, say – to bring in additional money and garner publicity. Funding is limited, so if you want more money you have to organise it yourself. That means the foundation acts as a network hub and an accelerator. It's a place where people from smaller units come together and set up new connections with other units.

GM: What, to you, is the role of a leader in a 21st-century organisation? How do you facilitate people's pursuit of their own goals and ideas while at the same time making sure they feel part of the organisation as a whole?

HvG: As a leader I'm not the type to breathe down people's necks. Some people have said I run the hospital like a den of thieves because of my loose leadership style. But I see this as an important aspect of people's strong identification with Emma. Employees have a lot of freedom. I set certain boundaries within which they can act, and the rest is up to them. And I check periodically to make sure everyone is doing well. The idea is to trust people first and hold them accountable afterward.

There is hierarchy – you can see it in the annual employee appraisals – but people bear responsibility for their own work and projects. We put a lot of trust in people, so we don't think in terms of people and the tasks they have to do; instead, we have confidence that you're the best person to pursue your idea. Go for it! My suggestion to others would be to invest a lot of time and effort in bottom-up leadership and elevate natural leaders who surface in the organisation, because they're the ones who carry and shape the organisation's story and can really make things happen. Smart people make the best things happen; they don't need structure.

Digital tools can help you monitor processes, so you can hold people accountable. But it's important to track not only the progress that's made but also the person's well-being. For example, if someone is using the system in the evening or at weekends, it might be a signal that they're not able to complete their work during office hours and might be close to burn-out. You can also see how often someone is checking the system. All this information can paint a picture of whether someone is doing well. I am not using this tool, but I could. At the moment, I think I still see my employees often enough to know whether they are close to burnout, but the system is there, ready to use.

To guide people's efforts and make them feel part of the larger whole, it's important for the organisation to have a story, and for that story to be one people can identify with. To me, an inspiring story is rooted in principles. Our organisation is based on three principles, and specifically three words, that took us months to come up with, because we wanted them to really fit the organisation. These words are “sensitive”, “open” and “innovative”. For me, “sensitive” is the most important because it resonates on every level, inside and outside the organisation. Alongside our three principles, an important mantra I repeat to people all through the organisation is: We can do anything, and we will do anything. We not only perform complex medical procedures, such as liver transplants, we also provide care when

accidents happen to people in the immediate neighbourhood. We're there for them when they need us.

Epilogue

Looking back on the process of creating this reader, we see that important topics raised in the above conversation (and others), such as purpose, identification, leadership, autonomy and the importance of networks inside and outside organisations, have found their way into the indicators relating to magnetism and entropy. Using our own knowledge and experience and that of the people we spoke to, we were able to augment our ideas and compile a set of rules for how to design and lead future-proof, people-driven corporations.

During this process, our little metal box served as a valuable model and metaphor. Using this small set of objects and the related concepts of magnetism and entropy as conversation starters, we were able to embark on useful discussions of abstract developments in large-scale organisations. Going from the shed to the corporation and back proved a fruitful way of devising a set of practical tools you can use in your real-world endeavour.

I invite you to join me, Artemus and Ruurd as we continue to search for new and unexplored ways that traditional corporations can make fundamental changes to the way they operate in order to enjoy sustained success in the 21st century.

Colophon

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