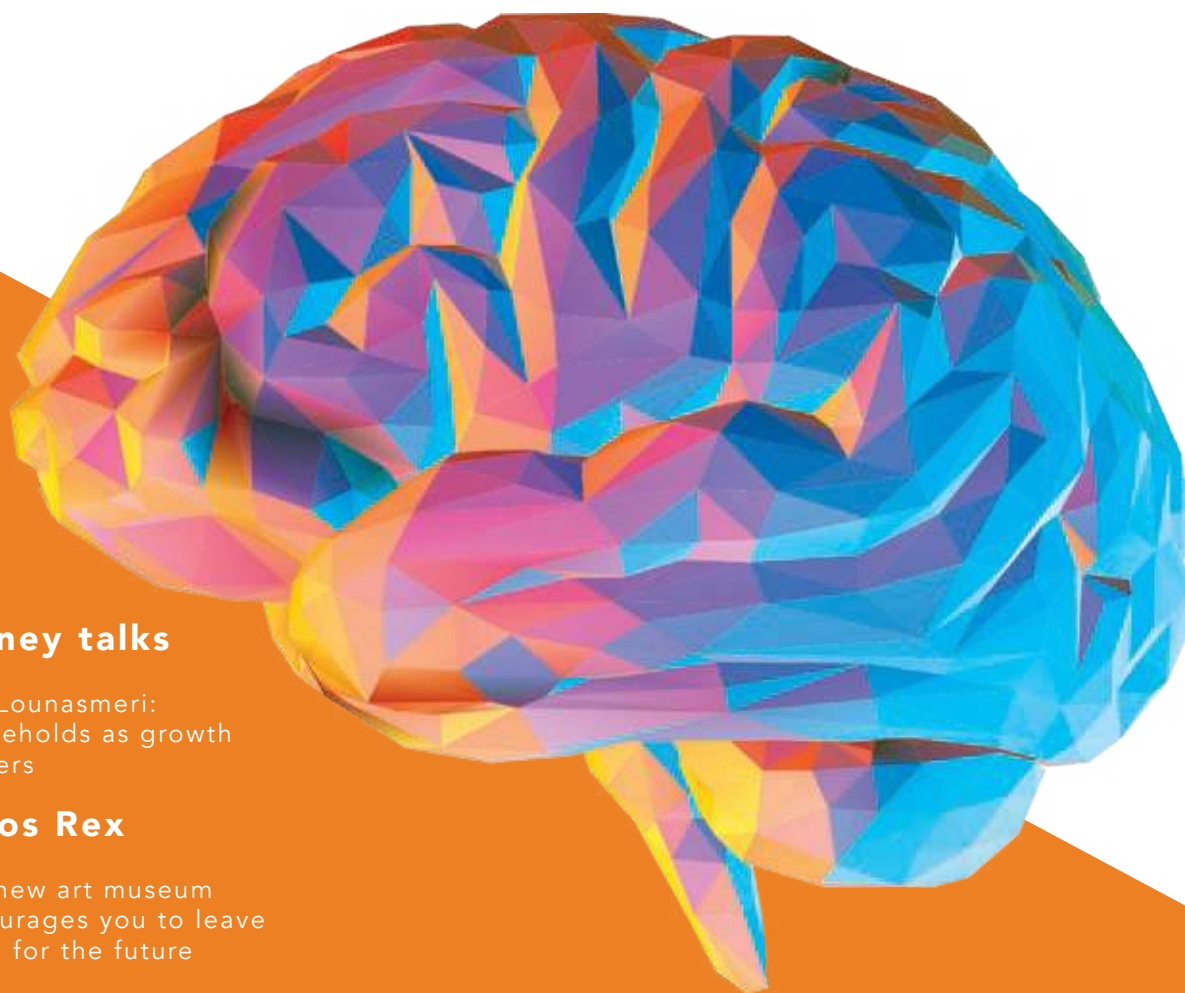


Do you have time to think?

# NORDIC

## Business Report

February 2019



### Money talks

Sari Lounasmeri:  
Households as growth  
funders

### Amos Rex

The new art museum  
encourages you to leave  
room for the future

### Deep dive AI: Linda Liukas



Andrew McAfee, Alf Rehn,  
Katri Saarikivi, James Hewitt

### How do you recharge your batteries?

We asked Nordic Business  
Forum participants how they  
recharge their batteries

### Marcus Samuelsson

A world-renowned chef  
whose career has taken  
him all around the world

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<b>The new Camry 2.5 Hybrid Active*</b>	38 585,11 €	600 €	39 185,11 €	119 g/km	5,3 l/100 km	760/595 €/mo
<b>The new Corolla Touring Sports 1.8 Hybrid Active*</b>	28 566,30 €	600 €	29 166,30 €	103 g/km	4,5 l/100 km	620/455 €/mo

3 year/100 000 km warranty, 12 year anti-corrosion and perforation warranty, 5 year/100 000 km hybrid system warranty, 10 year/350 000 km Toyota Hybrid battery warranty. RAV4 Hybrid models CO<sub>2</sub> emissions 126-131 g/km and combined fuel consumption 5,6-5,8 l/100 km. Camry Hybrid models CO<sub>2</sub> emissions 119-127 g/km and combined fuel consumption 5,3-5,6 l/100 km. Corolla Hybrid models CO<sub>2</sub> emissions 101-121 g/km and combined fuel consumption 4,5-5,4 l/100 km. \*Now in pre-sales.



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# MISTÄ YRITYKSESI MUISTETAAN?

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## YRITYSTEKSTIILIEN JA MAINOSTUOTTEIDEN HANKKIMINEN ON NYT HELPPOA!

New Wave Profile on valtakunnallinen ja koko maan kattava jälleenmyyjäverkosto joka tarjoaa kokonaiskonseptin yrityksesi yritystuotteiden hankkimiseen. Tunnettujen tuotemerkkiemme laajasta valikoimasta löydät varmasti tuotteet, jotka muistetaan pitkään.

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**NORDIC**  
Business Report



# GIVE YOURSELF A BREAK!

You're holding a slightly reformed version of the magazine you may have picked up when attending a Nordic Business Forum event. Around the time when the 2018 version of the Nordic Business Forum was taking place in Helsinki, a new spin-off company, Nordic Business Report Oy, was established, which has now published this magazine.

We chose taming the daily rush as the theme for this issue. Each one of us is caught in a crossfire of signals, stimuli and social media from the moment we wake up. Surrounding us is the transparency of everything – climate change, risk management, law changes and regulations, digitalization, AI, blockchain. Every so often I ask myself – is it really necessary to know everything? Is it truly beneficial to monitor and interact with every stream of information that is available to me? How can I interpret and filter this flood of messages, differentiating between the significant and the insignificant?

If you feel like social media and technical gadgets are dominating your daily life, neuroscientist **Katri Saarikivi** recommends you choose to do otherwise. You can – and must

– decide how you spend your time each day.

**James Hewitt** from Hints Performance also reminds us that we can't always be on. His advice: "Optimize. Don't maximize. Understand your unique cognitive rhythm and work in the way that suits it best." I, for example, belong to those 20% referred to as "early birds," meaning my cognitive peak is in the morning.

We also wanted to dive deep into AI, because it is clearly a subject that is on many people's minds - even though some consider it to be reaching saturation point as a topic of discussion in many media. There are differing opinions on AI. Many believe it offers amazing future opportunities for individuals and companies, but many also quietly contemplate what it actually means. According to non-fiction author **Linda Liukas**, it is typical for us to carry a suitcase of unclear terminology that everyone explains to themselves in their own way - since they are not brave enough to admit that they don't understand. Deep neural pathways in our brains tend to position unclear issues as frightening threats. What if you were to raise your hand and admit out loud that you don't understand?

MIT Research Scientist **Andrew McAfee** strongly believes we still underestimate AI. He states the following: "The progress we've seen gives us a glimpse of what might be possible if we just let the machines take the lead.

Is there time to think in business anymore? The continued pursuit of quarterly results in today's uncertain global economic and political environment challenges each individual's ability to cope and make smart decisions. Last autumn, **Barack Obama** stated in his speech that there is reason to be concerned. "Young business leaders believe in the power of global business but worry that all their focus goes in to the quarterly returns, which means they're not able to think about the impact of their work in the long-run". And, as **Alf Rehn** states in his column: "To speed up your business, first slow down! A place to stop can be provided by an inspiring location, such as the slightly crazy Amos Rex Museum, an excellent book - or why not this magazine? So, sit back, relax and give yourself a break!"

*Mia Heiskanen, Editor-in-Chief*



# Foreword Barack Obama



"The revolution in globalization, technology and communications has shrunk our planet. The changes that are now taking place technologically are profound. People are more closely bound together, which creates enormous opportunities. If you come up with a great app or you have a special skill, you are surrounded by a global market that you can access instantly.

The challenge is to adjust our social and political arrangements to meet these new times, because our governments, political and social arrangements move much too slowly compared to technological and economic changes. AI is a great example of technological development that can help us identify and solve many of the challenges we're facing today that also requires attention, focus and public conversation on many levels. That is why I think you shouldn't separate the business environment from political and social environments. My hope is that business leadership could engage more directly with both, saying we have a business which can do a lot of good, but we recognize there are some issues involved. Let's engage each other so we can solve this problem together.

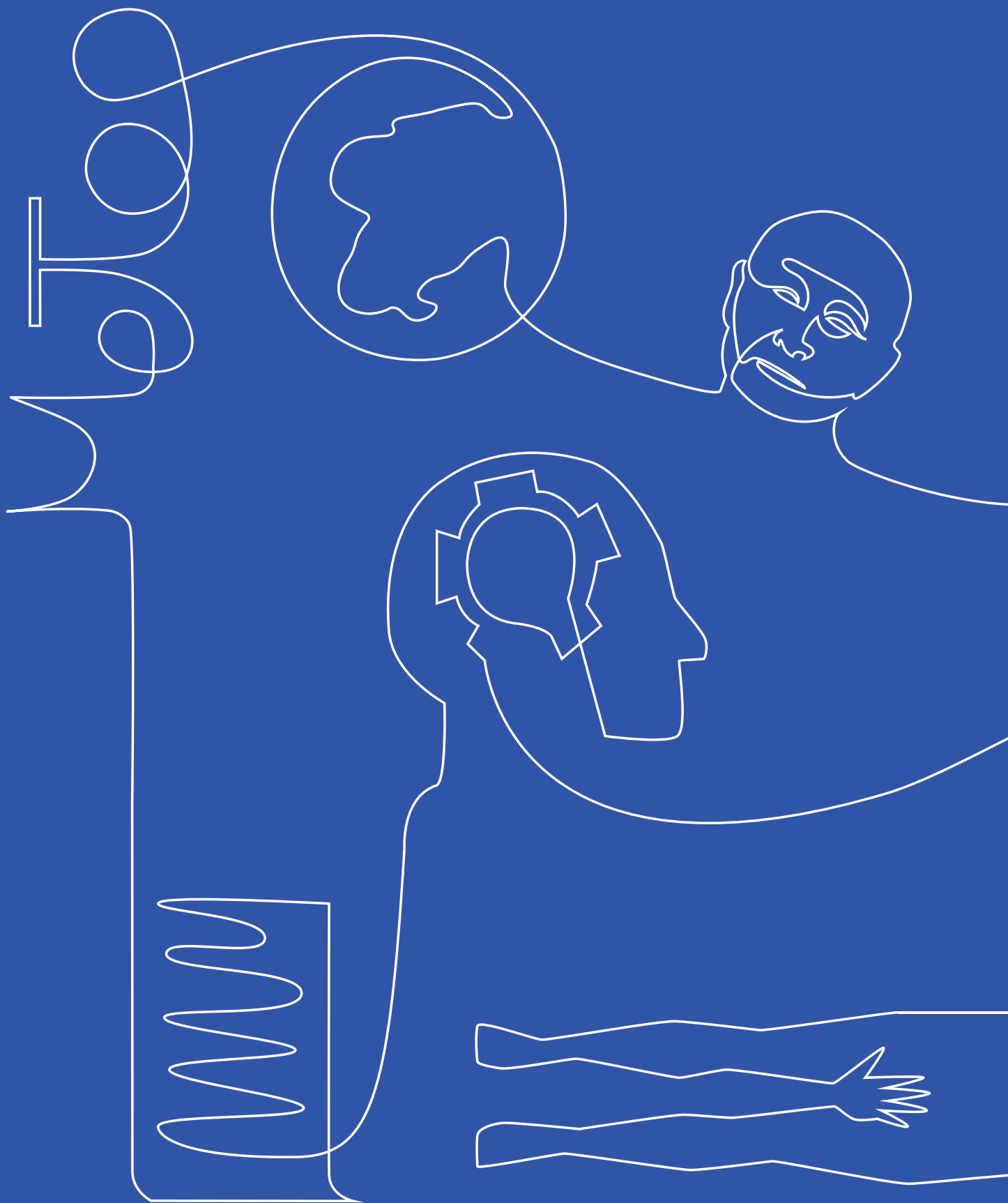
I used to describe the President of the United States as the captain of an ocean liner. You had to use a lot of power to get people working together over a long period of time just to be able to move things a few degrees. Now, I'm able to focus on organizations all over the world to have them work better together by investing in the next generation. I believe that if you invest in talent and human capacity, bring people together over cultures and boundaries, there isn't a problem we cannot solve.

Everywhere I travel, I've noticed that especially young people have a sense that change is needed – but the old institutions don't seem to work. At the same time, there are a lot of young business leaders who believe in the power of global market and entrepreneurial spirit, but worry they become too captive to the mindset where all your focus goes to the quarterly returns and you are not able to think the impact of your work in the long-term. That means younger generations want to come up with new leadership models, and if we can get them together, we will have a new kind of power which will unleash a positive change. And that leads us to a new brighter world with smart, passionate and caring leaders.

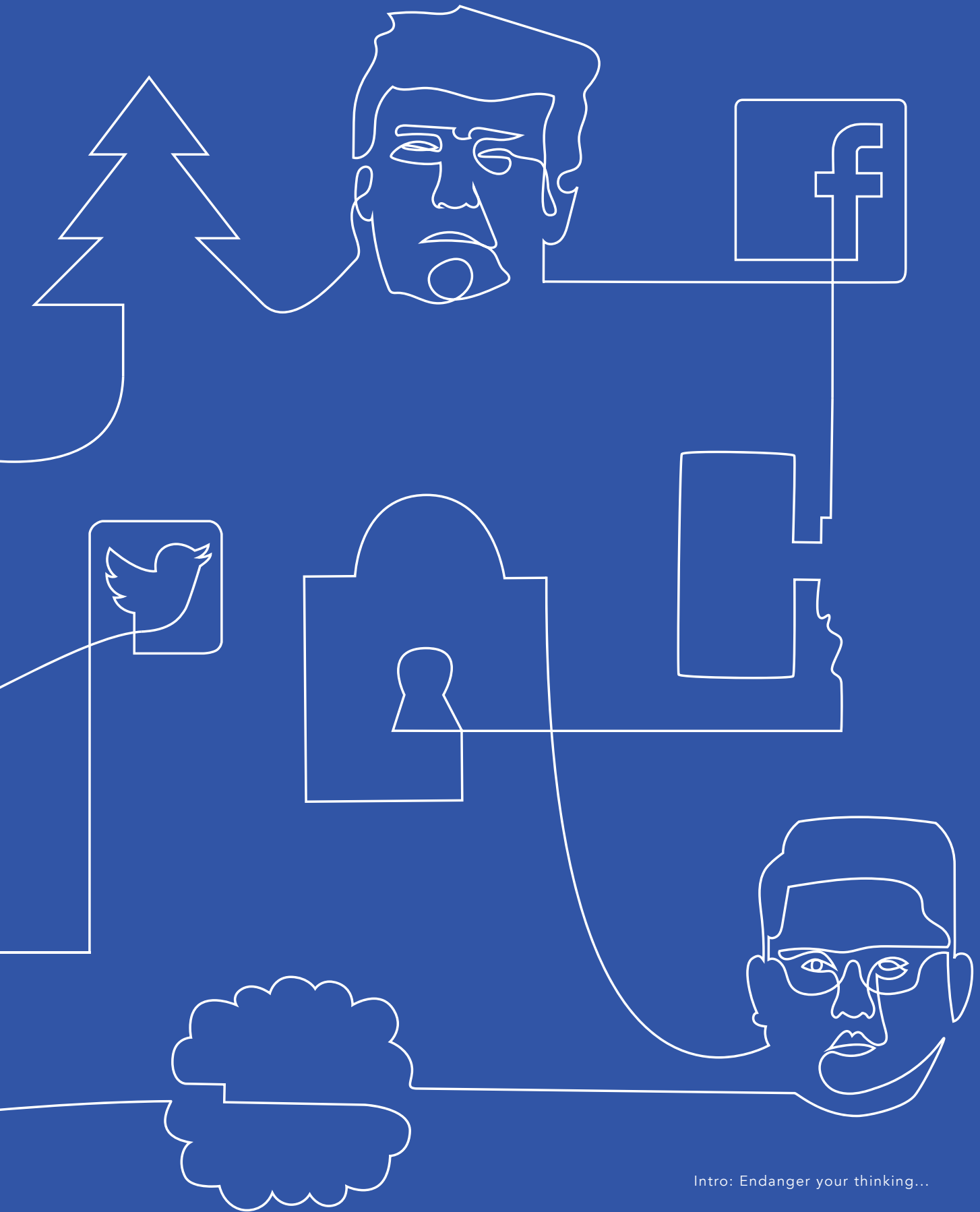
**John F. Kennedy** once said: "There isn't a problem that man faces that a man can't solve, because we created those problems." I think the human spirit yearns for truth, kindness, solidarity and fellowship. If we are focused and generous in our spirits, I'm confident that the challenges we face today can be overcome – just as they were in the past".

**President Barack Obama**

\*Extract from Barack Obama and Niklas Zennström conversation at the Nordic Business Forum 2018







Intro: Endanger your thinking...

# Endanger your thinking

Can you think differently about thinking differently, asks **Alf Rehn**, a Finnish professor teaching in Denmark. Asking questions and expressing doubt certainly produce in the long run more on the bottom line than like-minded nodding.

Western countries have intensified diplomatic pressure on Russia and accused it of violating Ukrainian integrity on the Crimean peninsula.

April 2018, the fire suppression system went off in Nasdaq Nordic's data centre in Stockholm. Stock market trading ceased in Helsinki, Copenhagen, Stockholm, Reykjavik, Tallinn, Riga, and Vilnius. A cyber attack would cripple the financial system.

The Nobel economics laureate, **Joseph Stiglitz**, shocked us at the turn of the millennium with the dangers of globalization, and now he sees black clouds hanging over artificial intelligence. It has also been attacked by Israeli historian **Yuval Harari** in his third book "21 Lessons for the 21st Century," as well as by physicist **Stephen Hawking** before he passed away.

In the hands of a benevolent head of state, monitoring algorithms may be the best thing to have happened to humankind. Global security is now to a large extent in the hands of **Donald Trump**, **Vladimir Putin**, and **Kim Jong-Un**.

Fears of terrorism, fake news spreading like an epidemic, and the by-products of na-

tionalism, climate change and trade wars are very real, but trading in threats does not really move matters forward.

People rant maniacally about other issues such as artificial intelligence, nanotechnology and other high-tech advances. Behind every threat, there may also lie business opportunities, once there is time to think.

The senior management and board of a listed company are responsible for the quarterly growth of the business and delivering dividends to the shareholders. Startup companies are from the outset shackled by available financing. Numerous business leaders have complained that there is not enough time, for example, to question their own points of view with people who think differently.

American business consultant and professor **Gary Hamel** has said companies should provide space for free thinking. IBM has recently asked more than 200,000 of its employees how much the company should invest in artificial intelligence development.

There is enough information for it to double during the next year and a half. Algorithms need to partner with creative think-

ing. According to Harari, instead of grinding away, schools should invest more in the arts and social skills.

According to Finnish professor **Alf Rehn** at the University of Southern Denmark, creative and imaginative thinking is the only competitive edge that will also create value in the future.

**Behind every threat,  
there may also lie busi-  
ness opportunities, once  
there is time to think.**

"Lazy brains must be conned into working in a new way. Genuine creativity is dangerous and uncomfortable, and innovations create chaos and agony," he says.

In the early 20th century, the economist **Joseph Schumpeter** argued that there always exists a creative quarter that reforms economic structures and generates long-term growth. Perhaps this time it is artificial intelligence?

**RIITTA EKHOLM**

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# If you give a lot, you receive a lot

**Marcus Samuelsson** is a world-renowned chef whose career has taken him all around the world – including cooking for **Barack Obama** in the White House kitchen.

- I've always been passionate about what I do. I've only worked for one thing in my life – food, and it has taken me around the world. From sitting here, all the way to the White House.

## ROOTS MATTER

Marcus says he feels like he's been cooking all his life. "Growing up, my sisters Anna, Linda and I spent summers in Smögen on the west coast of Sweden. Every morning, I went fishing with my dad, Lennart, and my uncles. We caught crayfish, lobsters, and mackerel, and often smoked and preserved the catch. My grandmother Helga would gather us in the kitchen and teach us how to pickle fresh vegetables, make meatballs, ginger snaps, cookies, and apple jam. These experiences taught me to love and appreciate fresh, local food."

Marcus' other culinary influence comes from his Ethiopian roots. "My other window into food comes from my relatives and my father, Tsigie, in Ethiopia. Food in Ethiopia is often viewed through a strong spiritual lens, more so than anywhere else I know. A good example is spices, which are the key element in Ethiopian cooking. That is why I think about spices differently; they're not just something you throw in, they have more meaning. I appreciate my Ethiopian roots - I see how hard people work there to survive and I am inspired by the way people lead their lives, how everyone tries to help one another in their communities. Their drive inspires me to work as hard as I can to take the knowledge I have about food and share it with those who want to learn."

## NEW YORK CITY - A CRADLE FOR DIVERSITY

New York City also has a special meaning for Marcus, as he's been living there for the past 20 years. "New York City means diversity. I love meeting new people and learning about different cultures, because it helps me expand my knowledge of different foods, spices and techniques. Different sounds and colours influence the way I design a dish."

**I appreciate my  
Ethiopian roots and  
I'm inspired by how  
Ethiopians try to  
help one another in  
their communities.**

## COME AS YOU ARE FOR FUN DINING

As we speak, we sit in the Clarion Hotel Helsinki Airport's Kitchen & Table – Marcus Samuelsson signature restaurant – where the menu embodies a 'Manhattan meets local ingredients and Fun Dining'. But what does that mean in practise? "I like the casual nature of American dining. When I think about American food and restaurants, I appreciate the lack of stiff formality. It means you can arrive in jeans just as you are. I think that's an important part of being in general."

According to Marcus, the concept also embodies the evolution of the restaurant business. "If you think about the last 30 years, most restaurants focused on French cuisine and dining culture. Also, when I grew up, restaurant visits only happened a couple







of times a year. The internet and travel have dramatically changed this. Also, if you think about the hurdle of going to a restaurant, we want to lower that. It means that if you meet a friend spontaneously, you can just pop in, have a drink, hang out, get a coffee, and enjoy an appetizer or a whole meal. It's all about a more social way of being, and this is what our Fun Dining concept is all about."

Marcus describes Fun Dining as a place where you can enjoy your meal in a cosy environment reminiscent of a neighbourhood restaurant. "All my restaurants have an open kitchen. I don't want to create a closed environment where you have to cook behind closed doors. I also want to create an environment where women can feel comfortable dining alone. A safe, cosy feeling of dining in a living room away from home."

**I want to create an environment where women can feel comfortable dining alone.**

#### THE OPPORTUNITY TO GIVE BACK

Marcus values the opportunity to give back the things he received during the early years of his career. "I was once a person who did not necessarily know what I wanted. I knew I wanted to travel, but not how to combine it with work. I was lucky to have someone to mentor me. After studying at the Culinary Institute in Gothenburg, Sweden, I apprenticed in Switzerland to expand my culinary knowledge, which changed my life. I felt like the hospitality industry became my second family and that I was invited into the global hospitality family, which was a turning point in my life."

Through Kitchen & Table, Marcus and his team want to offer young people the opportunities to work abroad. "My motto is, if you give a lot, you receive – and I love to see young team members with the same glow in their eyes I had in the early years of my career. I relate to them still, because I feel I'm even more inspired by my work today than I was in my twenties. There are so many opportunities in today's world."

**I love to see young team members with the same glow in their eyes I had in the early years of my career.**

#### IT'S ALL ABOUT GUIDANCE AND HARD WORK

When asked about a star moment from his career, Marcus responds: "I started my career with the hope of being able to work with creative people and do what I love, and I still don't take that for granted. Of course, there are many unbelievable experiences that have happened along the way, but not one of them is really a reflection of me – rather they are a result of teamwork, guidance, hard work and determination. For me, success is not a bus stop, but rather a great opportunity to learn – for the love of food. **MIA HEISKANEN**



Kristian Sjöstedt

### MARCUS SAMUELSSON

Marcus Samuelsson is an Ethiopian Swedish chef and restaurateur who was born in Ethiopia in 1971. His father, Tsegie, is an Ethiopian Orthodox Tewahedo Church priest. His mother died in a tuberculosis epidemic when he was three years old. Marcus was separated from his family during the turmoil of the Ethiopian Civil War and was adopted by **Ann Marie and Lennart Samuelsson** who lived in Gothenburg, Sweden. His biological father, Tsegie still resides in the Ethiopian village where Samuelsson was born.

After becoming interested in cooking, Samuelsson studied at the Culinary Institute in Gothenburg. He undertook his apprenticeship in Switzerland and Austria, then came to the United States in 1994 as an apprentice at Restaurant Aquavit. At 24, Samuelsson became executive chef of Aquavit, and soon after became the youngest recipient of a three-star restaurant review from The New York Times.

In 2003 he was named "Best Chef: New York City" by the James Beard Foundation. During the same year, he started a second New York restaurant, Riingo, serving Japanese-influenced American food. Samuelsson has been featured on television, including appearances on CNN, MSNBC's The Dylan Ratigan Show, as a judge on Top Chef, Iron Chef USA, Iron Chef America, Chopped, and frequent guest appearances on Today. In 2009, Samuelsson served as guest chef for the first state dinner of the **Barack Obama** presidency. The dinner was served in honor of Indian Prime Minister **Manmohan Singh**.

Source: Wikipedia





Kristian Sjöstedt

NEW YORK

## Travelling tip

**GOING TO NEW YORK? VISIT THE MARCUS SAMUELSSON  
RED ROOSTER RESTAURANT IN HARLEM!**

[redroosterharlem.com](http://redroosterharlem.com)

“My hope is that Red Rooster will build on Harlem’s rich culinary culture, and that people from all over the world will be able to celebrate all that Harlem has to offer. I’m looking forward to this new adventure. Harlem has a rich community in terms of music and culture. It’s an iconic American neighbourhood with art, writers, musicians and food. At its core is music, food and creative people, and my restaurant, Red Rooster, is the center of that. We have a lot of music in our restaurant, as well as community events. I feel very lucky that we can live there”. *Marcus Samuelsson*

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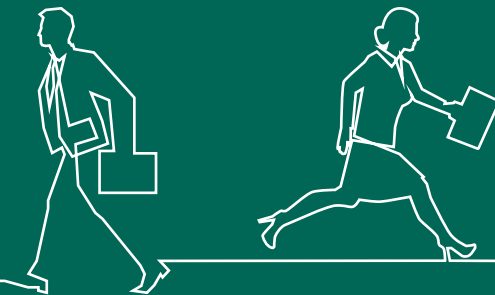


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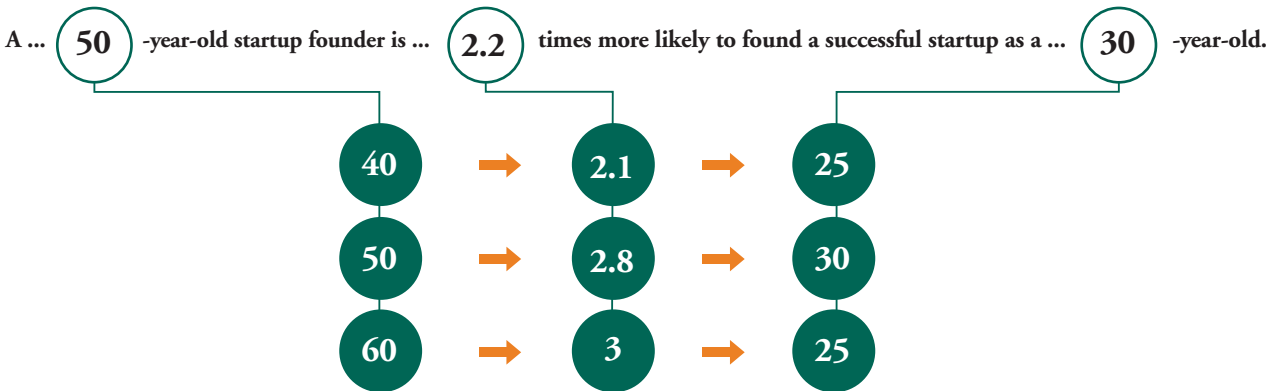
# DID YOU THINK IT'S TOO LATE TO START YOUR OWN BUSINESS IN YOUR 40'S OR 50'S?



**WRONG: YOU HAVE EXCELLENT ODDS TO SUCCEED.**

If you're in your 40s or 50s, you might think it's too late to start a business. A study by the Census Bureau and MIT professors has proved that wrong and found out that the most successful entrepreneurs tend to be middle-aged. In a study, **Benjamin Jones**, a professor of strategy at the Kellogg School, **Javier Miranda** of the U.S. Census Bureau and MIT's **Pierre Azoulay** and **J. Daniel Kim**,

used an expansive dataset and found out that contrary to popular thinking, the best entrepreneurs tend to be middle-aged. Among the very fastest-growing new tech companies, the average founder was 45 at the time of founding. They also found out that a 50-year-old entrepreneur is almost twice as likely to start a successful company compared to a 30-year-old.



**RELY ON YOUR EXPERIENCE**

Why do older entrepreneurs succeed? The key factor seems to be experience. It is much harder to execute great ideas when you have limited experience. It is more challenging to develop an enduring strategy when you have limited experience. And the same goes with smart tactical decisions. So we have good news for you at your 40's and 50's who still dream of establishing your own company: the longer you've been around, the better your odds! **MIA HEISKANEN**

Source: Reserach by Pierre Azoula, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda. 2018. "Age and High-Growth Entrepreneurship".

## Careers of change -

# becoming an entrepreneur in your 40s

Founders, entrepreneurs, startups. The words tend to conjure images of plaid-wearing twenty somethings beaver away in open offices and coffee shops, building the latest and greatest in SaaS platforms. Even so, a surprising number of people in their 40s and above are taking the plunge and pivoting away from traditional careers and entering the world of entrepreneurship.

What is driving this change? We listened to the stories of entrepreneurs from three very different Nordic companies to unearth their reasons.

**Sirkku Hahn** is the Founder and CEO of Inari Cosmetics, a brand that focuses on sustainable, naturally-sourced products from the Arctic region. She has a cosmetics background in consumer online sales and retail, and has imported a range of Nordic brands into Germany.

**Hi, Sirkku. When we think of entrepreneurs today, they tend to be in a rush to create things. When you were thinking about building and growing your business, are you happy to move quickly or to take your time?**

**SH:** Of course it's important to grow fast, but for me, it's more important to grow in the right way. The fact that I am no longer

in my twenties is an advantage for me now, as I have accumulated working experiences and an extended business network that only comes through experience.

If I tried to found Inari back when I was twenty five, I believe it would have been much more difficult to gain traction. Of course, when you are younger, you aren't necessarily tied down by family and other commitments, so you can pour more energy into your startup. Even so, I think I am able to work more smartly and effectively today than was possible in the past.

**Why did you start the company? Did you feel the time was right?**

**SH:** Entrepreneurship has actually been something I've always wanted to do. Even so,

I wanted to have a solid background to start from. By accumulating experience throughout your working life, it becomes much more easy to focus on valuable task and work effectively.

In terms of founding Inari, I had already spotted this niche business opportunity that nobody was talking about several years ago. No-one was using Arctic ingredients (Finland has the cleanest air, forests and water in the world) in cosmetics at the time, yet it's been common knowledge in the food industry that products like blueberries have many health benefits. This, along with me feeling I had developed the competences and experience needed to found my own company, caused me to act.

**Sampsa Fabritius** spent 16 years working in research, operating systems and producti-



Sirkku Hahn,  
Inari Cosmetics



Sampsa Fabritius,  
Kieku



Andreas Jürgensen,  
Anders Rasmussen,  
Passendo

zation at Nokia before he realised he needed a change. He founded audio platform Kieku in 2016 with the mission of creating a modern community radio by improving the conversations we are having in our society.

**The life of an entrepreneur has some inherent risks. Has your attitude towards risk changed since you started your journey in entrepreneurship?**

**SF:** For me, this subject has multiple viewpoints. One is that risk and pressure are relative to life experience - if you have successfully navigated particularly troubled waters in your past, the less likely you are to be worried by matters that cause relatively smaller ripples. Another factor that has been relatively surprising for me is that I tend to feel way less pressure when facing risks typical to startups like ours, especially in comparison to those I took in a corporate setting. I think different people react to stress sources in different ways. For example, the startup rollercoaster ride can be a very emotional journey for many who get on board, but I find it very fun and valuable, even in troubling times!

**What has been the most important thing you have learned since leaving the corporate world and founding Kieku?**

**SF:** Entrepreneurship is more all-in compared to a corporate setting. Corporate culture tends to make people objective, sort of neutral parts of the machine in a lot of places.

That's pretty much the opposite of what is needed in a startup, where the passion and drive you bring into the team has a huge impact on your company's success.

A key difference is you're not reporting to a boss and colleagues who advocate conformity and status quo - instead, you have to convince your customers to trust your energy, your resolve to do what you promised to do. The whole core team therefore needs to throw titles, hierarchies and the like out the window, roll up their sleeves and create the culture of getting things done. Startup life is more raw and genuine - including cleaning and the coffee beans!

**Andreas Jürgensen and Anders Rasmussen** both have extensive corporate and entrepreneurial backgrounds in digital advertising and all things tech-related, so they naturally joined forces when founding Passendo, a startup that brings programmatic advertising to email campaigns.

**Hi, Andreas and Anders. It's very common in your space to get private equity investors on-board. Do you have an opinion when it comes to selecting and working with an investor?**

**AJ:** I had investors in several of the companies I was in before Passendo, and it's always a mixed bag of pleasure on some level. Sometimes we are the adults in the room, and sometimes it's the investors - this is fine, because it increases the chances of there al-

ways being at least one adult in the room at all times!

It can proceed smoothly, and sometimes they tell us we have to do better - and that's fine. Investor feedback certainly doesn't affect me the same way it did twenty years ago, I worry way less and take the lessons on board in a more relaxed manner. One thing I will say is that I have learned to manage and strengthen our investor relationships in the same manner as the other relationships in my life - without this, it's easy to end up in a difficult situation.

**Would you recommend startup entrepreneurship to others over the age of 40?**

**AR:** A few months ago, I was having a beer with an old friend. We are around the same age. He was telling me that he has a really good job, family, a very decent salary, everything you want, right? He then started sharing some ideas with me. He told me he was considering starting a company, and he actually wanted my opinion on whether he should do so - and it was a good question!

After listening to him, I could feel how much he was burning for this idea. My answer to him was this: As a sixty or seventy-year-old, could you comfortably sit down and look back on this period in your life with no regret if you didn't try to make your idea happen? If you think you can make a difference, you should do it, whatever your age.

**JOHN COZZI**



"It's interesting how well the Nordic countries manage, even if in the United States they are considered socialist," said John Mackey at the Nordic Business Forum.

Pasi Salminen



## A BOW TO CAPITALISM

The freedom to choose is the foundation of everything, because there also is a chance of making bad choices, says **John Mackey**.

American business leader John Mackey is a controversial character in the business world. He founded Whole Foods Market, the biggest natural and organic grocer in the world, and he is a hard-nosed capitalist. But Mackey has also not discarded the values he embraced as a young hippie. As an activist, he has taken part in protests against Wall Street greed, and he does still not identify with bankers. He said he understands young people that do not trust Wall Street. Mackey does not care about fast cars, he stays in cheap accommo-

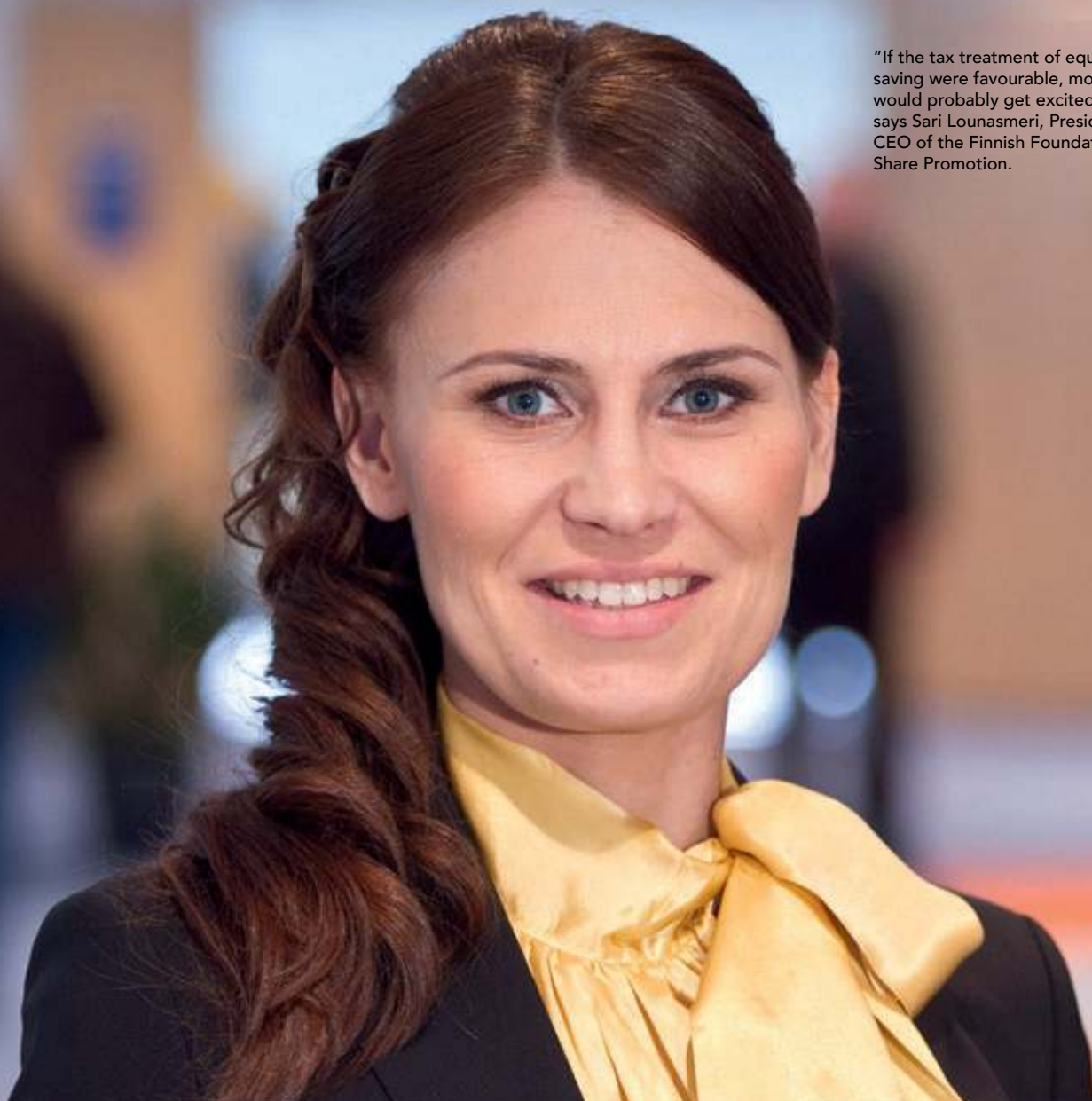
dation, and flies economy class. At the Nordic Business Forum, he praised capitalism. "Capitalism is the best thing that man has created," Mackey said. According to him, it is not a zero-sum game, where somebody's victory is the defeat of somebody else. "Proof of this is that a great part of the planet's poverty has been wiped out," Mackey said. He talks about conscious capitalism in order to distinguish it from sustainable development capitalism, creative capitalism as well as corporate social responsibility. He dismisses the

allegation that business is self-interest and the pursuit of profit. Generally speaking, successful business creates value and making money may also be the objective, but it is not merely this. In his opinion, capitalism is always based upon an exchange between two parties. Whole Foods Market sells natural and organic food to consumers. "Customers are not forced to choose our products; it is their free choice. We create value for them," he says. According to Mackey, one should not maximize profit, but relevance.



# Households as growth funders

"If the tax treatment of equity saving were favourable, more people would probably get excited about it," says Sari Lounasmeri, President and CEO of the Finnish Foundation for Share Promotion.



Tuomas Pietinen

In Sweden, investment is a part of everyday life as well as a long-term activity. In Finland, the wealth of many people is stuck in walls and bank accounts. Companies need funding and private investors need good objects.

**T**he welfare state and the market economy are a perfect team, an enviable Nordic combination. Finland, Sweden, Denmark, Norway, and Iceland are affluent countries that are admired around the world.

Social security and comprehensive health care are, however, no longer taken for granted in Finland. The population is growing older and the working-age population is decreasing, while at the same time the national debt is nearly 20,000 euros per citizen.

Even if 2018 was the best in the present economic cycle, economic growth this year is slowing to 1.7 per cent, according to the Ministry of Finance. The major reason is that investments in construction are falling.

Some companies are able to finance their investments using the revenue stream from their investments, but many need external money as a buffer. Traditionally, the state and pension companies have been significant company funders in Finland, but cash flows from both have turned.

As the financial crisis was followed by a flow of regulations and access to credit from banks became more difficult, companies' need for equity grew. "In practice, this meant that they needed more owners, and all eyes turned towards private households," says **Sari Lounasmeri**, President and CEO of the Finnish Foundation for Share Promotion.

**"You learn your approach to spending money at home, but generally people talk relatively little about it." Sari Lounasmeri**

The door of the Stock exchange has, in fact, swung frequently both to the main list and the First North market, and the listing

window does not seem to be closing yet.

Households have become significant shareholders and funders for company growth. "Socially, it is rational that the companies' head offices would be in Finland. It has been observed that the nationality of the owners have an impact on this," says Lounasmeri.

#### **TAXATION AN OBSTACLE IN FINLAND**

At the moment, around 800,000 Finns own listed shares with a value of approximately 35 billion euros. Almost one million people have fund investments representing a value of around 20 billion euros.

According to **Lars-Erik Forsgård**, chairman of Aktieförbundet, there are 1.4 million equity investors and even more than five million people saving in investment funds in Sweden.

Forsgård says that Swedish investment in equities has been encouraged by vigorous political measures and thereby a favourable mood towards investing has been created. In Finland, on the other hand, capital gains tax has in the meantime tightened, especially taxation of dividends from listed shares.

In the neighbouring country, since 2012 there has also been an investment savings account, allowing depositors to keep cash, fund units, and shares. There is low annual tax on the account capital there, and returns on investments are otherwise not taxed at all.

Here, it will not be possible to accumulate savings in a similar equity savings account and invest them in suitable batches on the equity market until 2020.

According to Lounasmeri, the Swedes have also deliberately transformed Stockholm into the financial centre of the Nordic countries. In the neighbouring country, the roots of people's capitalism extend as far as

to the 1980s. During that period, investment funds were established for everybody. These were the Allemansfond funds, which offered significant tax advantages. "Nearly every Swede invests in shares at least through the pensions," says Forsgård. He says the Swedes closely monitor share prices and the stock market is openly discussed over coffee.

In Finland, Lounasmeri argues that there has not been time to accumulate inherited wealth in part because of the war, and thus prosperity has accelerated here only in recent decades. In Sweden, two-thirds of investment assets are obtained as inheritance.

#### **MATCH FINLAND-SWEDEN**

The biggest asset for Finnish households, totalling around 300 billion euros, is their own homes. The Swedes, on the other hand, live in leased premises or have taken even a big mortgage at a time, but only pay off the interest, leaving money to invest.

Where Finns have nearly 90 billion euros in deposit accounts with zero interest rates, Swedes invest more profitably according to Lounasmeri.

80 per cent of Finns consider equity investments very risky, compared with only half of Swedes, according to an international comparative study by **Matti Keloharju**, Professor of Finance at Aalto University.

In both countries, the volume of equity securities grew following the financial crisis. Lounasmeri argues that Finland's taxation has been a hindrance in attracting new equity investors.

In both countries, young people are encouraged to save and invest, by the Pörssilähettiläät programme in Finland, and in Sweden by the Ung Ekonomi programme.

**RIITTA EKHOLM**

# The time for artificial intelligence is now

Finland is at the forefront in Europe in the use of artificial intelligence, but still only half of Finnish companies are planning or piloting use of AI, as revealed in a survey performed for Microsoft by the consulting firm EY.

According to calculations by Gartner Inc., global AI business this year is estimated to reach USD 1.2 billion, representing growth of 70% compared to the previous year.

AI-derived business activities are predicted to reach USD 3.9 billion by 2022.

The survey comprised 269 companies from 15 different countries. There were 22 companies from Finland involved, with a total annual turnover of EUR 103 billion.

"A total of 14 percent of Finnish companies already use AI in a variety of areas as support for both work and business activities, while the corresponding figure in European

companies that are on average equally advanced is only 4 percent," says **Riku Piipari**, Partner, head of EY Digital Transformation.

Even if companies still have something of a wait-and-see attitude regarding the actual effects of artificial intelligence, many companies nevertheless believe in the opportunities that AI offers.

"In fact, it has been estimated that AI and the platform economy will make up around 30 percent of GNP by 2030," says Riku Piipari, head of EY Digital Transformation.

Among senior management, 71 percent considered AI to be an important topic, and AI projects are strongly management-led in Finnish companies. Companies rated the open corporate culture, agile development, progressive analytics, ecosystem cooperation and change management of AI projects to be

among the best in Europe.

Elsewhere in Europe, emotional intelligence also goes hand in hand with AI projects and understanding, whereas in Finnish companies it is seen as a less important part of the big picture.

Mainly Finnish companies, as with many European firms, consider the main applications of artificial intelligence to be smart optimization of processes, automation, predictable and anticipatory maintenance and analytics.

However, 57% of companies state that future impacts will be focused on business areas that are still somewhat unknown.

The survey revealed that the majority of investments were made by venture capital organizations or private equity funds. The UK, France, and Germany provided 87 percent of investments, to a total value of USD 10.5 billion.

61%

Companies that are still only in the stage of the planning or piloting stages.

57%

Companies expect AI to have a high impact on business areas that are entirely unknown today.

Source: Artificial Intelligence in Europe, Finland, Outlook for 2019 and Beyond, EY



AI is so general that it can be applied to any problem, where there is enough data. But every business problem is unique so how companies apply AI will differ for each company.

— **Peltarion, Software Company**

Every industry and every aspect will be affected by AI. At least for machine learning, it is like statistics on steroids and shown to be very powerful. There is a risk that many business areas will be disrupted fully. But this is also the opportunity.

— **PostNord**

Postal service company With AI, we must find a way to identify unknown unknowns.

— **Metso Industrial machinery Company**

We think AI is one of the most important digital initiatives.

— **Stora Enso.**

We're still in a preliminary approach to AI, but it's an unstoppable motion.

— **Globalia Tourism company**

By shifting focus towards the more complex and spending less time on simple, mundane tasks, we can be real advisors, shifting focus away from high volume routine tasks that create little value.

— **DNB Financial services group**

AI will be an enabler for large scale digitalization and automatization of various financial services processes. This will lead to significant cost efficiency. It will also open lots of new innovations and disrupt how we will interact with customers. Disruption is inevitable.

— **OP Financial**

To really benefit from AI, you need technological capabilities, people with high level of know-how, and an understanding of the business opportunities.

— **DNA**

The way we manage and plan operations will change dramatically through data capabilities.

— **Finnair Airline**

We need the whole company to think data, be data-driven and understand that data has value we need to put in our products.

— **Husqvarn Consumer equipment company**

You cannot only have data scientists do it. They have a super important role but you also have to complement them with designers. Because you need to find the use cases where you apply those types of technologies. Even though it is the fantastic technology that can bring fantastic results, it has to be embedded in a design approach to meet the customer needs and solve real problems.

— **IKEA Group Furniture retail company**

A big challenge is to follow all the rapid evolutions in the market and match that to the right business initiative.

— **DAF Trucks Manufacturing company**

During the past few years, we have learnt what is easy, what is hard, what is realistic and what is only hype.

— **DNA Telecommunications company**

Source: Artificial Intelligence in Europe, Finland, Outlook for 2019 and Beyond, EY



# A guide to artificial intelligence

The biggest developers of artificial intelligence are also the most valuable companies in the world. In acquisitions in the technology industry, the team is what is interesting, not just the technology. If the board of directors does not understand anything about artificial intelligence, there is reason to be very concerned.

In the worst-case scenario, the business executive shuts his eyes and does not dare to look down into the precipice, but he might also beat a hasty retreat, lying in wait for those behind. In actuality, companies have very few alternatives if they hope to stay competitive in the field.

It all started two years ago at the Slush event, where **Antti Merilehto** moderated a debate on the topic. The following spring, he encouraged executive boards from companies with turnovers ranging from a few million euros to the over a billion.

Merilehto noted that the executive boards were not quite on the ball when implementing machine learning. He decided to do something about it, and wrote a book on artificial intelligence for executives. For that purpose, he interviewed experts in the USA, Asia, Europe, and of course, in Finland.

"If I tell the executive board of a major firm that Finnish companies use 20 per cent of the technology that contains pre-existing production-ready artificial intelligence, some answer that I am a hopeless optimist, some that the number is ten per cent, and some agree", says Merilehto, describing the range in the companies' knowledge levels.

He argues that it is essential for technology to no longer be a constraint.

"The issue is the restriction in the minds of executives. The silliest thing to do is to wait for off-the-shelf products," Merilehto says.

Writing coach from Aalto University School of Business, **Carol Kiriakos**, inspired Antti to write: you do not have to be an industry guru, but you need to have insight into the topic.

**"By means of machine learning a company can bring accuracy and real-time responses into the analysis of its data."**

## RESEARCH AS A THERMOMETER

Competition in artificial intelligence research and implementation is actually fairly evenly matched between the US and China. According to one estimate by Chinese investor **Kai-Fu Lee**, Google currently has half of the 100 best artificial intelligence researchers on its payroll.

The biggest companies, such as Baidu and Google, have invested 20-30 billion dollars in research. An average of around 50 studies are globally published every day.

"There's a full research storm underway in the United States, and on the other side, China is number one in applications," Merilehto says.

He says there is a tremendous interest in scientific communities and an exponential increase in investments. The huge number of studies can also be explained by the fact that there is very open sharing of information among researchers.

A NIPS seminar for the research community is sold out immediately. Merilehto talks about a cartoon that jokes about how the number of participants increases faster than the population.

From the perspective of artificial intelli-

gence, Asia is interesting due to its immense population. There, economies of scale work in a textbook manner. When a product that brings in users is created, the impact is progressive: each user improves the experience of every other user.

"When I skip a song in Spotify or like it, I teach the machine. The nine euro subscription is not as valuable to the company as information on the kind of user I am," says Merilehto.

## STAY CALM IN THE HYPE

When one talks about artificial intelligence, one talks in practice about machine learning, says Merilehto. In more simple models, e.g. in housing sales, accuracy does not grow if data are added.

He gives an example of his friend's child. The little boy was given a van that became his favourite toy. After that, every vehicle was a van.

The boy's father broadened gradually the horizons and showed him cars and lorries. The child soon learned to identify different kinds of vehicles. Merilehto says that this is a good example of learning.

He warns companies that they nevertheless should not give in to any excessive hype. He talks about artificial intelligence as a cake sprinkle, which means that companies claim they are artificial intelligence-oriented and slap a sticker on their products.

At present, it pays for companies to begin using machine learning in earnest. If they just remain stationary without doing anything, their competitors would take everything. There might be very ordinary matters at issue.

"Neural networks need a vast amount of training data. There are no limits to its use," says Antti Merilehto.



Joonas Villanen



## Picks and pieces

*"For the first time in human history, people can trust each other and do transactions peer to peer." This trust is no longer achieved by an intermediary. Instead, it is achieved by "cryptography, collaboration, and some clever code."*

**Don Tapscott**, Writer, Media Theorist

*"The importance of artificial intelligence is underestimated. Even if there is hype around artificial intelligence and machine learning coming from everywhere, I hope that you will not be sceptical."*

**Andrew McAfee**, scientist at MIT, Writer, Co-founder of the MIT Initiative

*"We're in the early days of AI. In most cases, it isn't deep learning. It's machine learning. It's about taking a big data set, learning, figuring things out, and optimizing."*

**Niklas Zennström**  
CEO and Founding Partner  
at Atomico

He gives the example of the Finnish pet supply shop chain, Musti ja Mirri. The company collected more than six million receipts in order to understand the best times to have people at work. The data were forwarded to shift planning, which gave a forecast. The working hours of the person planning the shifts decreased by 80 per cent, since the machine estimated the amount.

In medicine, cooperation between machine and humans has also been used. For instance, for breast cancer, a machine diagnosed the disease in 92.5 per cent of cases and an experienced physician in 96.6 per cent of cases; together, the result was 99.5 per cent.

### INDIFFERENCE A THREAT

Merilehto will not play devil's advocate. Nobel Economics Prize laureate **Joseph Stiglitz**, historian **Yaval Harris** and physicist **Stephen Hawking**s before his death have, each from their own perspective, been worried about the catastrophic effects of artificial intelligence.

"The biggest threat in the Nordics is that business executives close their eyes or are cavalier in their attitudes to artificial intelligence," Merilehto says.

He argues that it is completely hypothetical to ponder, whether any state has more extensive artificial intelligence, when all applications in reality are still machine learning.

Neural network developer **Andrew Ng** has stated that it is pointless to worry about the overpopulation of Mars when nobody has

yet travelled there, but it is fine that the matter is being studied.

According to Merilehto, there should be investment in user interface convenience, so that, for instance, a salesperson can receive information from the computer and serve the customer simultaneously.

In his book, he gives the example of an ice cream shop and illustrates how a company can plan its sales better using the data it has gathered.

The computer has data on how ice cream sold last week and it finds out how the weather influences sales. The computer makes suggestions on how to prepare for the following week's warm weather. It recommends a certain number of additional orders, but it is the owner that makes the decisions.

All operators use creep analysis in order to monitor customer moves. He lists three alternatives: the customer moves to another country, has died, or is thinking about switching to a competitor.

"Only the last alternative is of interest and that is where we hit."

"First, I always ask: what is the business problem that you want a solution for? Then I ask: what data do you have?" summarises Merilehto.

According to him, in every experiment, 80 per cent of the time is spent gathering, clarifying and expanding data, and only 20 per cent for refining machine learning.

**RIITTA EKHOLM**

### Machines outdo humans

In a survey of 352 artificial intelligence researchers by the Universities of Oxford and Yale, it was predicted that by 2062, there is a 50 per cent probability that machines will be better than humans in all tasks.

- **Machines translate foreign languages by 2024.**
- **Write better high school essays by 2026.**
- **Drive lorries better than humans by 2027.**
- **Act as salespersons in retail work by 2031.**
- **Are better at doing surgical operations by 2053.**



# WHY WE ARE STILL UNDERESTIMATING ARTIFICIAL INTELLIGENCE



All the hype about machine learning and Artificial Intelligence (AI) is true, MIT research scientist **Andrew McAfee** said in the opening words of his presentation at the 2018 Nordic Business Forum in Helsinki. He was there to make one important case: Despite all the hype, we are still greatly underestimating the effect AI will have on our lives. “The more I look around, the more deeply convinced I become that we continue to underestimate exactly how big, deep and broad the changes, transformations, and improvements are going to be.” As co-founder and co-director of the Initiative on the Digital Economy and principal research scientist at MIT’s Sloan School of Management, McAfee studies how computer technologies are changing business, the economy, and society.

## AN AI TURNING POINT IN 2016

To illustrate the progress made in the field of AI in just a few short years, McAfee shared the history of how humans have taught machines to play games. Until as recently as 2015, we were successful at programming machines to beat humans at games like chess, with clear rules and strategies. “It’s basically just an algorithmic search problem,” McAfee explained. But we had little luck building computers that are good at playing games in which the rules and strategies are less clear. All of this changed in March of 2016 when Google’s AlphaGo AI beat champion **Lee Se-Dol** at the game of Go. Prior to this breakthrough, coding strategies into a computer to teach it to play Go didn’t work well. This is because “Nobody on the planet can tell you how to play a good game of Go. Unlike chess, success in Go is based less on understanding clear strategies and more on “intellect, judgment, and intuition.” It is a good example of Polanyi’s Paradox. “Human brains have a really interesting feature - we know more than we can tell.” AlphaGo made a specific play in one of the games, that is now simply known as Move 37. It surprised Go experts, as to

them, it just didn’t make sense. And yet, it eventually helped to lead to the AI innovation’s swift victory. No one is entirely sure how AlphaGo beat one of the best human players on the planet, but it is clear that the technology considered something that most human players of the game had not considered. “We human beings don’t play Go this way,” says McAfee. “As far as we know, we can’t play it this way.” But for McAfee, this example - as well as other recent examples of machine learning in games - tells us a lot about the future division of labor in a world with advanced AI.

## DIVIDING UP TASKS BETWEEN MAN AND MACHINE

Up until recently, we thought Polanyi’s Paradox gave us a good rule of thumb for dividing up work between humans and AI. Machines would excel at tasks involving searches, record keeping and math, while we humans would be responsible for other, more deductive things. The AlphaGo win led many people, McAfee among them, to reevaluate this division. “We realized we were living in a new era. Now, even in areas where Polanyi’s paradox applies - where we know more than we can tell - we can still build machines that are better than the very best people at this task.” Not only can artificial intelligence complete tasks better than humans, it approaches those tasks differently. He points out several areas in which AI has made recent breakthroughs, including recognition of conversational speech, diagnostic leaps in the medical fields of radiology and ophthalmology, energy efficiency monitoring of large data centers, and the detection of subtle patterns in genetics.

## THE VALUE OF HUMANS IN THE SECOND MACHINE AGE

McAfee acknowledged that for many, the idea of human expertise being outpaced by technology is scary and uncomfortable. But he doesn’t see it this way. “In this era of AI and machine learning, we have an alternative.

The progress we’ve seen gives us a glimpse of what might be possible if we just let the machines take the lead.” So will the human mind still have value in the second machine age? According to McAfee, this will still very much be the case. He lists four areas in which humans still will have something to contribute. The first is common sense. McAfee said that machines simply don’t have it and so, when the stakes are high, it is always necessary to “keep a person in the loop”. Next, he lists the inherent human ability to ask questions.

**“In this era of AI and machine learning, we have an alternative. The progress we’ve seen gives us a glimpse of what might be possible if we just let the machines take the lead.”**

Computers still don’t know what to work on next, and so it is up to Homo sapiens to continue to generate the next questions to be solved and be inquisitive about the future. Third, McAfee points out the advanced social skills that humans possess that are necessary to navigate our complex world of interactions, where we are constantly negotiating, coordinating, motivating and persuading. And lastly, he said that humans have the unique ability to partner with AI to fashion a new world. He said while machines will open up new territory, humans can explore that territory in partnership with the technology to create the optimal final product. “The people who are currently in the business of opening up new territory are going to have to react to a new reality,” said McAfee in his parting comments. “But it is a reality that’s going to let us make much faster progress. Stay tuned. It’s going to get interesting.”

**SOURCE: NORDIC BUSINESS FORUM  
EXECUTIVE SUMMARY BY ALLISON VRBOVA.  
EDITED BY MIA HEISKANEN**

Linda Liukas

...

Finnish children's book author

...

Illustrator

...

An instructor for  
beginner programmers



# Marvelling at artificial intelligence is allowed

Could artificial intelligence in the future be my only mate? Which kind of work can I do, if robots steal all the jobs? These are questions about artificial intelligence that children have asked, but there are many adults who would also like to ask them – if they dare.

Children's author and programmer **Linda Liukas** has written an artificial intelligence book\* for children that simplifies the loaded terms milling around. "In my opinion, children have the right to deal with technology pragmatically instead of being intimidated. Why infect children with adult fears and make these take root in them, because artificial intelligence is a part of the evolution of technological development? Computers weren't sent from on high; they were built by humans, weren't they? The technology and artificial intelligence of the future will be built by people that wonder and are astonished and relate to the future curiously and positively in just the same way. That is why it would be good if the building blocks were assembled by a group of people with a versatile worldview. There are many people in the world that understand technology and people that understand human beings and society, but in my opinion we would need more people that are curious and interested in both."

Thus, Liukas hopes for cross-pollination in the discussion milling around the technological development. "Technological development is not just software, hardware or a cultural and social impact, but everything at the same time. This also sets challenges for technology education, because you cannot

just transfer knowledge into people's head – it should be connected to what happens in the surrounding society."

**"There are many people in the world that understand technology and people that understand human beings and society, but in my opinion we would need more people that are curious and interested in both."**

## LESS THREATENING ARTIFICIAL INTELLIGENCE

In Liukas' opinion, there are too many threats in the debate around artificial intelligence. "The media says that artificial intelligence has beaten a human in a game of Go or that artificial intelligence is able to identify criminals in a sea of faces. It evokes an image of a supernatural force coming in to steal our humanity, even if it in reality is about a new wave of artificial technology that humans can use for resolving various problems."

Liukas provides a simple example of the new wave of artificial intelligence. "Previously, if you asked a machine if something was a cat, you had to give it precise instructions that a cat is an animal that has two ears, a tail etc. The world is considerably more compli-

cated, however, so those instructions do not take into account the different physical states of a cat, meaning the machine has not been able to learn efficiently enough. Thanks to new-wave machine learning, we can now give the machine thousands of examples of what a cat is. The machine thus learns to itself create a model, on the basis of which it is able to identify a cat. This means that even if we now may feel that, thanks to artificial intelligence, a computer learns to identify things, draw conclusions, or even be creative, at the end of the day it is a question of what we humans teach the computer by means of examples. This makes artificial intelligence a more easily approachable and less threatening idea."

## ARTIFICIAL INTELLIGENCE FOR CHILDREN – AND ADULTS

The paradigm described above was also the starting point for Liukas' Hello Ruby series of children's book about artificial intelligence. "I began to think about how you could write for children about a topic that is everywhere and invisible, but is associated with philosophical and even big and scary questions in connection with humanity. How can you write about the topic pragmatically, but optimistically? I decided to write about the topic as specifically as possible from the point of view of machine learning, which is the most



Maija Tammi

advanced form of artificial intelligence.”

The core message of the book was that in the world of tomorrow, the people that manage are those who understand which areas people and machines excel. In the story, there is a machine that is good at deducing, optimizing, analysing and finding patterns, but it is not able to motivate human beings or show empathy. The machine does not function well in new situations for which it has no input in advance. So, we are intelligent in different ways.

#### EXPLAINING LOADED TERMS

Liukas has heard that several high-level businesspeople and board members have already been using the book to explain what the various terms connected with artificial intelligence actually mean. Liukas says this demonstrates how normal it is in the “adult world” to carry with you and throw around loaded words, which have many layers of additional meaning. “The problem is that nobody stops to examine

and explain what they mean. So, I thought that I could become a simplifier and explainer of things in the business world as well.”

**We seem to carry and throw around loaded words which have many layers of additional meaning.**

#### SHAMELESS WORKSHOPS

To achieve this aim, Liukas has built an ABC workshop directed at the business world, where cross-pollination is done. “Many companies employ people that will never write algorithms, but who would benefit from understanding how artificial intelligence can bring added value to the company and to people’s lives. The idea behind the workshop is that the participants approach artificial intelligence and machine learning from the

perspective of a child and in such a way that the company holds what it judges are relevant discussions with people who would not normally encounter the topic in everyday life.”

Technology is often associated with the fear of losing face, and Liukas has in fact observed that in the workshops the discussion between people is often more important than the content of the discussion themselves. “The Hello Ruby stories, which draw from the wonder of children, are an excellent starting point for the workshop, since there is no embarrassment in a child’s world, meaning everybody is comfortable in the situation.” The examples have been optimized for the business world and the exercises for the individual challenges of each company.

**MIA HEISKANEN**

*\*Linda Liukas book Hello Ruby: A robot at school – How artificial intelligence works is currently available only in Finnish.*





PHOTOS: ANI RASK

In the autumn, we published Professor Kirsi Lonka's book *Phenomenal Learning from Finland*. The book has aroused a lot of interest all around the world, reports Päivi Hietanen.



# Smart Learning from Finland

One link in the creation of the highly praised Finnish level of education has been Edita Publishing Ltd, a 160 year-old pioneer of publishing and information services. Now, Edita is revolutionizing how people learn at all ages by combining its strong know-how in a variety of fields of education, with digitalization. The result is smart learning that helps us all to cope, even with the working life of tomorrow.

In smart learning, the core idea is that every student – whether still at school or already at work – gets the information most relevant to them. The information that is most suitable for his or her own starting point, in which the student's needs and background are taken into consideration.

"By means of digitalization, information can be rationed out in suitable pieces in order to maximize the impact of learning. It has been proven that the greater part of learning takes place outside of formal learning, e.g. at work and from colleagues. We also support social learning and problem-solving experiences," Managing Director Päivi Hietanen clarifies.

"We reduce skill shortfalls, especially in education, legal matters, and various organizations. In the educational field we participate in making a culture change, where modern pedagogy enables deep learning with efficiently managed education.

## The knowledge company in Smart learning and legal.

In legal matters, we offer personalized information services for experts in order to enable them to create additional value with their skills," Hietanen continues.

The company has provided digital training, e.g. in competition law, for an international organization with 1 200 employees. In October, Edita was rewarded with a BELMA award for its publication 'Business Bites', which is a digital learning resource for students in international business and administration. Edita cooperates internationally with New Pedagogies for Deep Learning. **MAIJA-LIISA SAKSA**

# EDITA

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## PERSPECTIVE: DIGITALIZATION IS A VERB

Digitalization is a verb, because it is not a phenomenon that merely occurs around us, but it is an act of doing.

I understand that as a term it may still be unclear in many companies. It is mainly associated with technology, but in my opinion, it is more about how technology changes the customer expectations and business processes, thus constantly altering the business environment. A dynamic approach to create human-centric services based on real-world data is essential in the digital era.

From a company's perspective, digital transformation is better seen as continuous adaptation to the constantly changing environment. There is no longer time for a strategy that is prepared for the next five years, but rather the need to continuously sense and respond to the changes in marketplace. Therefore, strategy is also a verb, and digitalization must also affect leadership.

### WHAT DOES DIGITALIZATION MEAN TO YOUR COMPANY?

Whichever business sector your company operates in, the relevant strategic question is, what does your company wish to influence with digitality?

The offering, value proposition, or the way the company wants to monetize it? Is the goal perhaps to carry out business operations in a more efficient manner and thus make savings in production costs? Does your company operate in a business sector in which there are companies that may not be carrying out profitable business yet, but are still eating at it in small quantities? Does digitalization refer to the optimization, the transformation, or even the market disruption?

### WATCH OUT FOR SHARKS!

Have you stopped to consider why companies that disrupt the market are usually

new-comers? The reason is probably in the fact that when a company holds an established and stable money machine position in the market, shareholders naturally do not want to take any unnecessary risks by disturbing the market and at the same time make a radical change!

The fact is, however, that a group of sharks swim around every company, even at this very moment, that have the opportunity to disrupt the market extremely quickly with the help of digitalization. Therefore, it is just a matter of time, when your company's business model is no longer relevant. So, be alert because the new world order will drive even an established company towards change.

### NEW WORLD AND BUSINESS ORDER

Digitalization has changed the world in several ways. In today's business, data is what matters. According to IBM, 90% of the dig-

ital data in the world was created during the past two years. The amount of data is not only growing exponentially, but its sources are becoming fragmented.

It has had a significant effect on the purchase behavior of consumers and companies. Approximately 70% of purchase decisions are made before the selling organization is even aware of them, since we shortlist suppliers online before making a purchase decision. Therefore, a company's opportunity to influence a purchase decision has changed.

Digitalization has also made us move from products to services, because in practice all the service providers in the world are available to all the customers in the world. At the moment, the majority of western countries' gross domestic product (GDP) is formed by services.

What does it mean in terms of a company's business model? The fact that in this increasingly complex environment companies must be capable of managing data streams, refining, analyzing and using data wisely for business benefits. To rephrase the famous Darwin-citation, it is neither the strongest nor the most intelligent companies that survives, but those most responsive to change.

In a service-dominant economy, the company's value stream has also turned upside down. It no longer starts with a product, but instead with a customer – products are sold but services are bought. An organization that produces a service must therefore adapt ac-

cording to the demand of the service market and aim to co-create services for the customer's changing needs in a pull-stream manner instead of a push-stream manner.

A company's business model must therefore change from push-driven goods-dominant business to pull-driven service-dominant business.

### ARE YOU READY TO CREATE NEW VALUE?

Now comes the tricky part: how do you do it? I strongly believe in a three-phase value proposition through Design Thinking, Co-creation and Lean methodology. The core is formed by a three-circle model, which starts with first identifying the customer's needs by means of design thinking. Design thinking is applying design tools for business development. In practice it means that a problem is reframed in making sure the right problem is solved and a vague picture of the service can initially be drafted and put on the market at an early stage to be boldly tested. When sufficient data is gained through design thinking on whether there is a need for a certain value proposition, and a solution for value capture, the following business model can be prepared. Many business ventures fail, not because they fail to build what they set out to build, but because they waste time, money, and effort building the wrong solution.

The next stage is co-creation. The goal is to scale creativity by collaborating with the

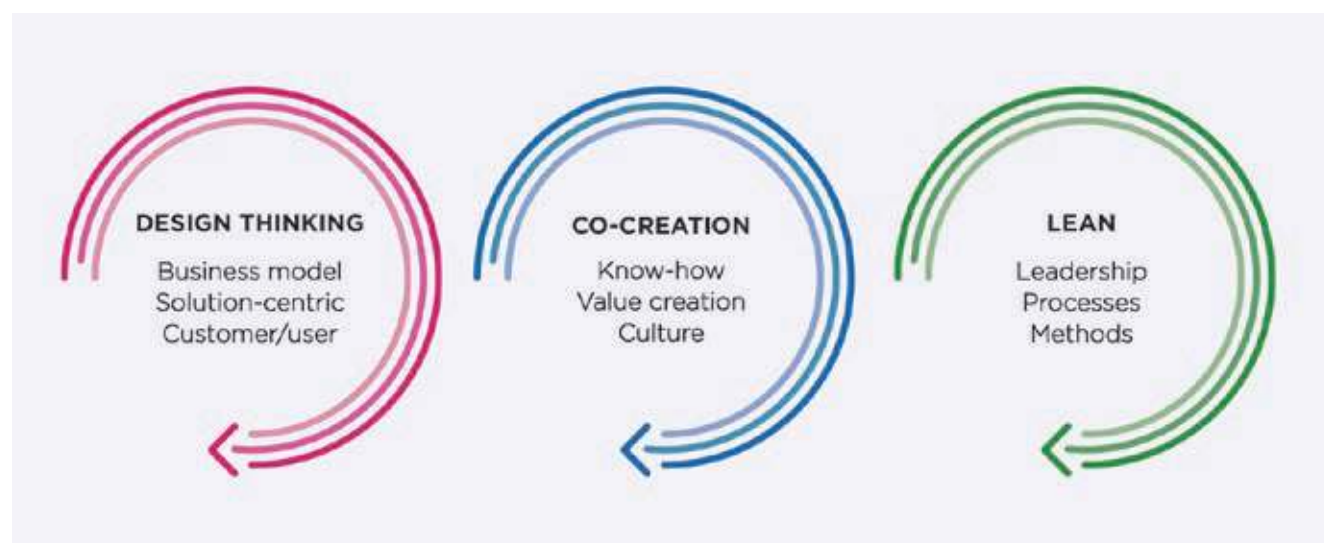
entire value-creating ecosystem, from competitors and partners to customers' customers. Through co-creation, value is created throughout the network of actors whenever its members meet. A company that genuinely utilizes its network is smarter and more agile and tolerates the instability of its operational environment better.

When we are dealing with the customer's strategic needs, it's important that marketing, product development and delivery run smoothly in order to produce the service. That's where Lean comes into the picture. I strongly believe in the Lean methodology, where the basic principles are continuous improvement, the readiness to react and continuous pull control throughout the entire personnel of the organization, including tools, processes and management work.

The combination of these three methods creates a framework for responding to the continuous change. With these, the company is not only restricted to making value propositions, but also gets opportunities to actively and directly participate in value creation with its customers.

There might be many creative solutions for this, but I would say that collaboration is the key and I'm glad that the digital journey we are all on is forcing us to push boundaries in order to be frontrunners of change!

*Seppo Kuula, CEO, Enfo*







# **An update to humanity's image is needed in working communities**





According to neuroscientist **Katri Saarikivi**, in a world that is becoming increasingly complex and technical, people are having to solve ever-more challenging problems. Therefore, working communities' image of humanity and the notion of productivity should be revised.

Saarikivi has observed that in today's working life, a work culture that weakens high-quality thinking and intelligent problem solving is dominant; one in which people that appear to be busiest are idealized. "The ideal type in the working community is one that continually has multiple tabs open on their computer screen and is simultaneously scanning the screen, talking on the phone, and typing a text message on another phone. If the ideal image of an employee is this, we also have a biased image of productivity and efficiency."

According to Saarikivi, neuroscience has produced ample information on how a person functions, and what creativity, learning and empathy mean. "Thanks to scientific research data, we already know a huge amount about the thought process; if you still believe that a human being is a creature that is guided only by stick and carrot, you're leaving out a great deal of information from that image of humanity. It

is on humanity to solve increasingly challenging problems in a world that is becoming more complex and rapidly more technical; therefore now is the appropriate moment to stop and think about how to create working conditions that in the best possible way promote problem-solving, human intelligence and welfare."

#### **AS THE BOSS, DO YOU ENABLE HIGH-QUALITY THINKING?**

Saarikivi calls for human expertise in leadership. "Even now, a growing number of routine tasks and processes can be automated, so what remains for humans to do is what machines are unable to do—complex problem solving, interaction, learning and creative thinking. That, in turn, means that the basic work becomes more difficult, when a single person's thinking is no longer necessarily sufficient for complex problem-solving. Learning together becomes a core process in working life. In this equation, unit heads and managers no longer have the job of deciding how things should be done, but rather enabling high-quality thinking, problem solving and generally good work. "

#### **ARTIFICIAL INTELLIGENCE FILLS IN FOR THE BIASES OF THE HUMAN BRAIN**

The experience of many people is that tech-

nological development—and especially artificial intelligence—leads and people follow. Saarikivi sees artificial intelligence as part of the technological development continuum. "The human race has throughout its entire existence developed new tools in order to save resources, time and effort. Accordingly, technology has been a part of our problem-solving palette for a long time already. Its most talked-about state is presently artificial intelligence, which is developing at an incredible pace and is of concern to many."

Saarikivi does not see artificial intelligence as a threat, even if she concedes that it is associated with the possibility of abuse. "It depends entirely on the purpose it is used for. If you think about, say, new medical diagnostic tools that are presently being developed for doctors by means of artificial intelligence, this will open new possibilities to minimize human mistakes and patch up shortages of the human brain. At its best, artificial intelligence thus extends human capacity. If one considers the types of problems that humanity is struggling with at the moment, I think it can only be a good thing. The human brain is also able to produce nonsense, so it does not matter, if our biases are covered over a little by means of AI technology!" **MIA HEISKANEN**

#### **REST YOUR BRAIN, REDUCE MULTITASKING!**

Does media multitasking and the number of stimuli cause strain? Do you think technology is to blame for your weakened concentration? "Many people complain about the attention-disrupting stimuli of devices, applications and social media, but they forget that in the end it is due to the fact that you give them permission to disturb you," Saarikivi reminds us.

#### **SLEEP ON IT**

The more items and stimuli competing for your attention around us, the more backbone is needed to decide what we want to give our time and attention. Saarikivi notes that the brain likes being trained, but if this training is continuous multitasking with media, applications and devices, the attention quickly wanders from one subject to another. This consumes the attention training, which little by little starts to weaken concentration. "However, it does take a fair amount of time before this has a significantly negative impact on the brain. If you're stressed by the information overload, it is worth paying attention to recovery. Sleeping on it is a useful basic piece of advice, because when you are asleep, the brain clears and arranges the information gathered during the day."

# WHAT WOULD YOU DO IF ROUTINE WORK TOOK LESS TIME? AI CAN HELP.

Artificial Intelligence should be used to support people to do things a human is best at. Things that require emotion, intuition, innovation. Things that require collaboration, seeing the big picture, understanding how other humans work, emotional intelligence, if you like.

Being a former analyst I tend to perform surveys before I hold a workshop with a client. This is good for preparation and when the data is cumulated it gives you a good data source of the most common challenges. One question I ask is “if you had 20% more time in a workday what would you do with it?”.

On average, 33% of the respondents say they would use the time to educate themselves on what is new in the world and to do more innovative planning. We do not have time for this right now, we are heavily stuck in routines. Routines that can be automated.

This is what technology is for – to create more time for clever people to do what they do best, innovative thinking, solving problems, come up with new business ideas. One big issue preventing innovation is lack of time. How can we create more time?

Artificial Intelligence runs on data, data we have hoarded for years not quite knowing what to do with it. Traditional commercial solutions for predictive analytics, for instance, have been quite costly and rarely implemented. Another preventive issue has been bad data quality. With Natural Language Processing and Machine Learning both of these issues can be solved. We can clean the data,

classify it, create an ontology and correlation maps that tell us what the data means.

In practise, at the moment, there are 4 solution areas for Artificial Intelligence that are commercially viable. We have Natural Language Processing (NLP), Image recognition (OCR), Chatbots and Machine Learning (ML). All of these solutions need to be “trained” with your data. We can use NLP and ML to create “recommendation engines” with the right training, giving you the ability to process existing data that with human labour would be impossible to do or be too expensive to be done by humans. You can have a virtual helper with impressive data processing capability to give you suggestions on what the data says would be a good decision.

But nevertheless – you are in charge. Artificial Intelligence does not think by itself, it is trained based on what we people know. There are also concepts such as “supervised learning” and “unsupervised learning” when it comes to AI. The supervised learning means you can give the algorithm a research question which it will mull over. In the unsupervised form it will take the data and make its own deductions.

AI is a great tool to support people in their daily work, make room for innovation and more fact-based decision making. It is a tool to be used wisely to help us be more productive, creative and innovative.

**Katriina Valli** *Ai4Value.com,*  
*CEO and Founder*





Sami Perttälä

# To speed up your business, first slow down

One of the most characteristic features of our age is speed and acceleration, or at the very least the sensation of these two. We are told daily that change occurs faster than ever these days, and that the life-cycle of organizations are getting shorter and shorter. No wonder, then, that many leaders feel that slowness is a weakness to be excised. Our modern heroes often seem to work at a speed all their own – the kind of person who reacts at the speed of light, who speed-reads and sprints, and who in the words of **Arnold Schwarzenegger** (at NBF in 2014) can even sleep faster than us mortals. This has led many a manager to hoard things like coaches, productivity guides, and a multitude of apps, anything with the promise of speeding you up.

This is understandable, but at the same time a problematic approach to an accelerating world. The fact of the matter is that one of the most important skills for contempo-

rary leadership in strategy is not acceleration, but the art of mindfully slowing down.

There are several reasons for this. One, as the world speeds up it becomes increasingly important to tell important changes apart from mere fads. Two, when an organization starts taking off in several directions at once, someone needs to grab the reins and find one, considered change vector. Three, if everyone else is accelerating, the strategy thinker will look for success factors where others do not, i.e. in more mindful approaches.

I obviously do not mean that leaders should get lazy, or just lounge around. Nor do I argue that leaders should oppose change and re-discover their inner conservative. But there's a difference between slowing down and slamming the breaks. Just like when driving, it is important to at times decelerate, make sense of your situation, keep your movement considered, and retain the capacity to react to new possibilities.

Consider **Bill Gates**. Twice a year he takes a week off and goes off the grid – as he did when he ran Microsoft. Without distractions he reads and thinks, i.e. slows down. Simple and ingenious. By doing this he decouples from the stress and fragmentation that defines the work of many a leader and which often stops us from seeing the big picture of things.

Still, when I advise CEOs to do something similar (and even offer to give the lists of books to bring along), many of them merely huff. There's no way, there's no time. Work's too busy, and the world is moving too fast. And then they marvel at the fact that they miss so much, just like a driver who accelerates until it becomes impossible to make out anything at all...

So slow down. It's the fastest way to speed up.

**Alf Rehn** *Professor of Innovation, Design, and Management, University of Southern Denmark*

# Find your rhythm - The key to sustainable high performance

**J**ames Hewitt, chief innovation officer at Hints Performance reminds that people can't always be on. Hewitt, a performance scientist and researcher, highlights that peak performance does not arise from trying to imitate a machine but from understanding how to be more effective as a human. Hewitt points out that knowledge workers often try to maximize their output by multitasking, working long hours, and rarely resting. They often struggle and are unable to focus, which results in constant sub-optimal performance. Hewitt quotes Hints Performance founder Dr. Aki Hintsa that inspired much of his research: "Optimize. Don't maximize."

## KNOWLEDGE WORK IS AN ENDURANCE ACTIVITY

In explaining how the rhythms of work and rest optimize performance, Hewitt recalls his work with Masters road cyclist Claire Jones to prepare for the l'Étape du Tour – an event where amateur cyclists are given the opportunity to ride the Tour de France route. In 2017, she set a goal of finishing in the top 20. Jones and Hewitt devised a plan that would help her be at her best for the final climb, giving her the best possible chance to pass her competition. However, after finishing 54th, an analysis of her performance by Hewitt showed that she increased her intensity earlier than planned instead of saving energy for the climb. "She focused her effort in the wrong place at the wrong time. She didn't rest where

she was supposed to and she followed someone else's rhythm instead of her own."

In 2018, Jones returned to the l'Étape du Tour with a very clear understanding of where to focus her efforts and when to rest. She paid attention to when she was at her best. She finished 16th overall and third in her age group, her best ever result in the l'Étape. Hewitt drew comparisons between optimizing physical performance and cognitive performance after he realized many of his amateur athlete clients were knowledge workers by profession. "I started to use the tools and framework from sports science to understand knowledge work better," he said. Similar to low, medium, and high-intensity zones recognized in endurance sports, Hewitt described three gears that can help knowledge workers create a plan to optimize their cognitive performance:

- **High Cognitive Gear** for focus on complex tasks, analysis, and productivity
- **Low Cognitive Gear** for rest, recovery and reflection
- **Middle Cognitive Gear** for menial tasks, switching work, and freeing up focus for High Gear.

## FIND YOUR RHYTHM

According to Hewitt cognitive rhythms are not the same for all people. About 20% of people are "early birds" whose cognitive peak is in the morning. This peak is followed by a valley best suited for rest and recovery, with a

rebound occurring later in the day when the Middle Cognitive Gear is most appropriate. Conversely, "night owls" begin their day with a rebound, followed by a valley, and then a peak at the end of the day. About 60% of the population falls somewhere in between. Hewitt stresses the fact that most knowledge workers spend their days stuck in the Middle Cognitive Gear: stressed, switching tasks, pulling their smartphones out at every opportunity, trying to work on someone else's schedule. Research shows knowledge workers are interrupted once every 11 minutes on average, with the majority checking smartphones or other communication tools every 6 minutes. "This makes it harder to switch into high gear and low gear when we really need to".

## MATCH WORK TO THE RIGHT GEAR

He challenges knowledge workers to identify when they experience their High, Middle, and Low Cognitive Gears and to structure their day according to their personal rhythms of work and rest. Instead of allowing frequent interruptions during peak times, Hewitt suggests trying to focus for 25 minutes and then taking a short 5-minute break. He continues by calling on business leaders to engineer environments for teams that minimize distraction and interruption. The Low Cognitive Gear is best suited for breaks that are active, social, and natural, like taking a walk with a friend. He stresses the importance of 7 to 9 hours of sleep per night and team schedules that permit it. After 18 hours of being awake, cogni-



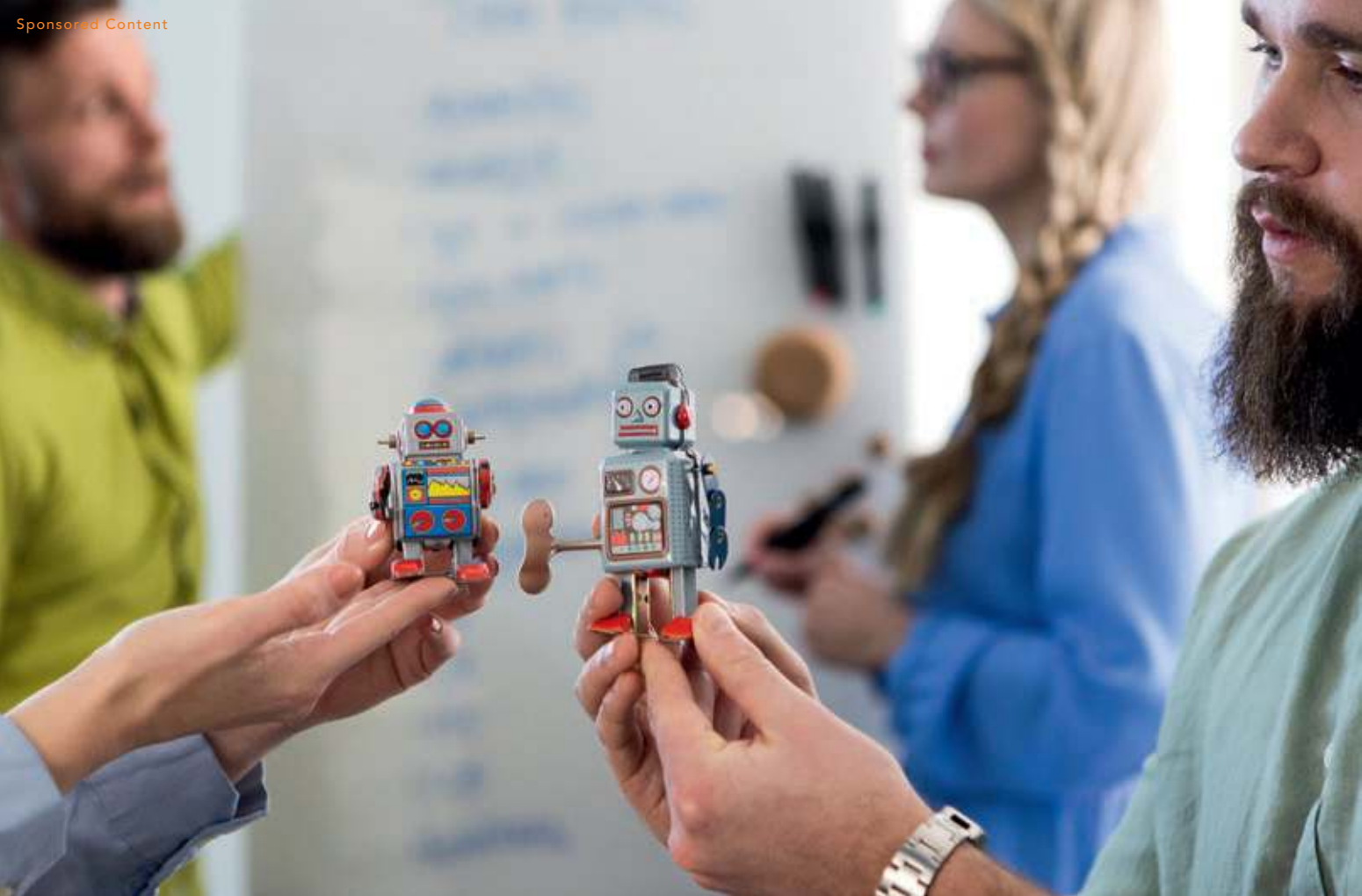


tive performance is equivalent to that of being legally intoxicated in most European countries, and inadequate sleep may be costing the Nordic economy €18 billion Euros per year.

**The real danger isn't that machines and artificial intelligence are going to start working more like humans, it's that we humans will keep trying to work like machines.**

In one study, Hewitt recruited 100 knowledge workers for 14 days and monitored their daily rhythms of sleep, stress, and cognitive performance. He concluded that people who follow regular work and rest patterns feel and perform better, exhibiting 10-15% better cognitive performance. "If they're too stressed and sleep deprived, it's not likely that they're performing sustainably," Hewitt commented. "Sleep is one of the most effective performance enhancers available." He also stresses the importance of scheduling routine tasks during the "rebound" time in your schedule. "Starting the day with email is starting the day on someone else's schedule. According to Hewitt work-related stress is estimated to cost the European economy €136 billion every year and could be responsible for as much as one-fifth of all cases of staff turnover. Human cognitive performance is increasingly becoming a differentiator in the workplace. "Complex problem solving, collaboration, and creativity, are the output of a rested and focused brain. These capabilities, however, will not be expressed at their best with our current ways of living and working." Hewitt says wellbeing, which can improve employee productivity by up to 19%, is set to become a business value of strategic importance. "Perhaps the real danger isn't that machines and artificial intelligence are going to start working more like humans, it's that we humans will keep trying to work like machines. We can't always be on."

NORDIC BUSINESS FORUM EXECUTIVE  
SUMMARY BY MELANIE GRANO.  
EDITED BY MIA HEISKANEN.



## Healthy and motivated employees with good workability form the foundation of a successful growth company

Motivated employees with good workability allow a company to prosper as working life changes and the company's pace of growth increases. Varma's Head of Commercial Segments, **Ilari Abdeen**, reminds us that the effects of a cycle of change are most apparent in growth companies. - I encourage the management of growth companies to consider what the growth spurts of a company's business operations mean in the everyday life of employees, in order to ensure that the requirements for the growth of business do not deteriorate, when the pace of growth increases.



The change of working life is discussed a lot, but what does it mean in practice? – Working life changes at many levels. Basic processes are digitalized and automated, artificial intelligence leads to further emphasis on problem-solving skills and deeper expertise in working life. We are heading even more strongly towards a 24/7 world, where the site specificity of work will further decrease, and the self-management of individuals will be emphasized. Multiculturalism is even more strongly visible in work communities, which in turn creates new types of requirements for management systems and organization cultures. Significant changes of working life are discussed, and for this reason, an individual employee must be able to perceive his/her full role more clearly, Abdeen underlines.

### **MANAGER, REMEMBER TO LISTEN!**

What does a changing working life require from management? – Above all, management that listens. Continuously listening to the state of employees and the company helps the company's management to quickly react to the challenges of the changing world. It is good for the company's management to know, how the company is doing and how the employees are, since healthy and motivated employees with good workability form the foundation of a successful company – whether it is a case of an established, growth or start-up company, Abdeen reminds.

Management of change also requires strong interaction skills. – Varma also hopes to be a better listener, so that we would better understand the business operations of our customers, i.e. what companies are aiming to achieve in their own strategy and business operations: strong growth, internationalization

or the establishment of a new business area. We can then mutually consider, how it influences the company's employees and how we can best support the company's workability management, and thus success.

### **PREDICT CHANGES IN CASE OF THE STRONGEST GROWTH**

The pace of change in the company's internal world is most clearly visible in growth and start-up companies, which seek strong and fast growth.

According to Abdeen, management which listens, particularly in companies such as the ones mentioned above, means that the company's management stops to consider, what the growth of results and market share mean in practice in an individual employee's everyday life, in the roles and the skill requirements of employees. – The better the change of business and its requirements are predicted and understood, the better the company's prerequisites are for success. On the contrary, this may mean that at the point when growth is at its strongest, employees are not well and the company's pace of growth stalls.

Abdeen notes that workability management among the rush of growth may sound far-fetched, but it has a direct effect on the company's business operations. – The more motivated and committed the employees are and the better workability they have, the better the company's level of work capacity risk management is too.

### **TRAVEL COMPANION OF GROWTH COMPANIES**

Abdeen emphasizes that the occupational pension insurance company Varma has both substantial skills in workability management,

as well as tools and services which help the company's management to identify the weak signals and risk factors concerning workability management at an even earlier stage. – It may mean leadership training, supervisor coaching, webinars or an online tool, which allows the company's management to stay in touch with employees better by listening to them with personnel surveys, or supervisory work assessments, which can be carried out online at any time. – It is worth it, since it helps the company stay on top of changes – and manage continuous change. We, on the other hand, want to be a partner which supports the business operations of growth companies on our mutual journey of change.

**MIA HEISKANEN**

### **VARMA'S CORE TASK IS TO SECURE PENSIONS**

We invest funds that are collected as pension payments in a profitable and secure manner for current and future pensions.

Responsibility is a key part of all our operations and our modern work culture.

Our services in workability management and rehabilitation help Varma's corporate customers make savings in pension and sick leave expenses.

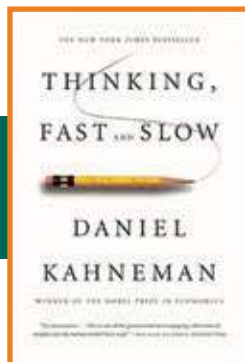
Varma is a mutual pension insurance company, and it is owned by Varma's corporate and entrepreneur customers, insured employees and owners of the initial fund.

**VARMA**





# WISE DREAMS



**My book: Thinking, Fast and Slow,  
Daniel Kahneman**

**Carl Linnaeus**, the father of taxonomy, gave modern human beings the name *Homo sapiens* in Latin, meaning "wise man." The obvious reason for the name was our superior cognitive skills in relation to other members of the animal kingdom. *Nomen est omen*?

In economics, it is often assumed that we act rationally. A completely rational "Homo economicus" might not correspond to any actual person we have met, but on the other hand, random aberrations do not necessarily diminish the validity of a hypothesis... if they indeed are random.

As I encountered the research of **Daniel Kahnemann** and **Amos Tversky**, I understood that our rationality is clouded by many cognitive biases. Kahnemann's book "Thinking, Fast and Slow" – as I remember it now – finally revolutionised my understanding of human rationality.

The key message of Kahnemann's book is that we have two decision-making systems. System 1 is fast and simple, and works almost by itself. System 2 is slow and complicated, and calls for efforts by us. We prefer to use System 1, since we are born lazy (or energy-saving). "This sounds like some kind of joke," my System 1 immediately conclud-

ed when I first read about the two systems. Fortunately, my System 2 booted up before I abandoned reading the book.

Kahnemann skilfully builds the arguments in his book on both research data and anecdotal evidence. One step at a time, the reader arrives at the same conclusion as he does: we actually have two almost entirely separate decision-making systems, the results of which may differ from each other or be completely different. System 1 is perfectly suited for many everyday tasks. For instance, reading a person's feelings based on his facial expressions or catching a ball in the air are effectively achieved by means of it. To perform the same tasks by means of System 2 would be overly arduous (they call for solving complex mathematic problems). So, in which situations do we need System 2?

System 2 is slow and consumes a lot of energy, but it is also extremely flexible. We can use it to solve very diverse problems, from a

newspaper crossword to strength calculations for a bridge under construction. Whereas System 1 jumps to an answer by relying on familiar patterns, System 2 proceeds steadily towards the solution, even if the problem is previously completely unknown. When System 1 faces a new question, it can easily jump to the wrong conclusion, because it answers an old, i.e. the wrong question.

In everyday life, Kahnemann's book has taught me to monitor my own decision-making. I try to remember to stop and ask myself whether I should deploy System 2. For example, situations where the counterparty tries to appeal to my emotions, and decisions must be made in a hurry, are among the ones where you should always use System 2.

Therefore, it pays to sleep on it – you can become wiser at the same time.

**Anders Ekholm, Ph.D., Docent, Chief Investment Officer, University of Helsinki**





Vilma Lehtonen





# It's fun to be weird!

The new art museum encourages you to leave room for the future.

**W**aking the creative mind takes time, but not boundlessness. This is the view of **Kai Kartio**, Head of the Helsinki Amos Rex Art Museum. – It's a bit paradoxical. The emergence of new solutions could be thought of as being easiest when everything is possible. But, that may not be so. The most lucrative solutions arise when boundaries are at their highest and one has to really think about what can be done within them.

To illustrate what is meant by boundary conditions, Kartio takes Amos Rex as an example. – The building of the Amos Rex Museum was born by renovating the old, which was extremely difficult. There was a very tight town plan, and very strict protectionary rules, but look what came into being by taking into account the strict boundary conditions! The end result is fantastic, says a rejoicing Kartio.

## A PLAYFUL CITY

Amos Rex is a fantastic, centrally located museum that wants to celebrate a new kind of urban culture, according to Kartio. – Amos Rex is not a monolithic museum building, as art museums have traditionally been. It opens directly into the city and grows organically from the urban milieu.

An important part of the new museum's nature is its urban landscape. Amos Rex has an outdoor space – with a unique design and appearance, created by JKMM's architect **Asmo Jaaks** – which provides for the skylights of its underground spaces, under the new 'humps' of the museum. Thus, the humps connect the underground building to the town and passers-by.

The humps also have another aesthetic significance. They encourage you to get out of the ordinary and play. – They nurture playfulness in people. It's so gratifying to see how they encourage people to climb up, to sit, and stumble.

The playful mind is ready for inspiration. Inspiration can also ascend from delicacy. Kartio has been happy to see that the uniqueness of the autumn and winter darkness of Helsinki has finally become seen as a richness. – We have been able to open up our eyes to the strange charm of the dark season. That is great, since the charm of the dark is very unique.



## INSPIRATION CAN RISE OUT OF DELICACY

The reflection on seasonal variations makes Kartio map out Helsinki as a pan-European city. – Helsinki is much more rustic than Stockholm, Copenhagen or Oslo. There are, naturally, many similarities between all of the Nordic capitals, because of the common history. Helsinki, however, stands out very clearly from them and other European capitals, as it's a positively weird place.

Kartio believes that the charm of the darkness and the delicacy are best felt by outsiders visiting the city. Much more could be taken from it though. – Helsinki is at its strangest time in November, in the darkest of times. Especially when the weather is such that it is really difficult to move outdoors. Just being in that time is the strangest and, in a way, the most exciting experience. I believe many will come here to experience this special mood of the city.

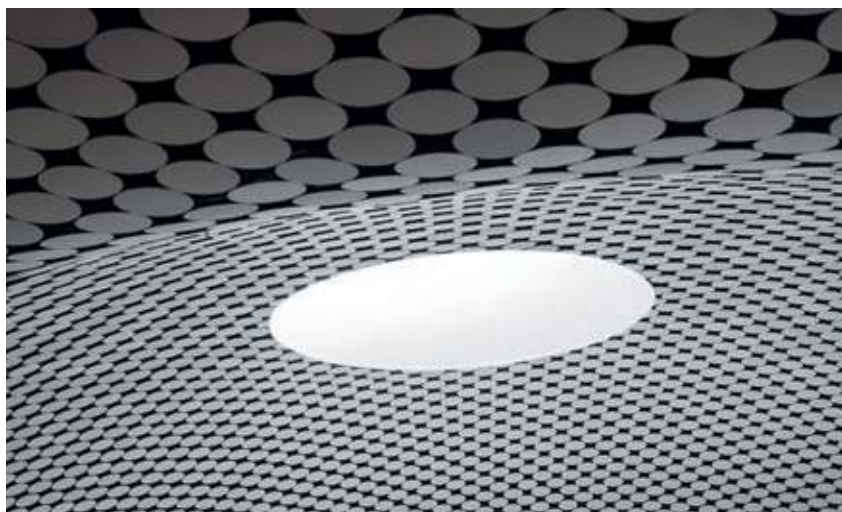
Kartio is full of strong enthusiasm in describing the originality of Helsinki and Finland. – It would be a pity if Helsinki would be dwindled into a normal European capital. For example, Slush has been smart and taken advantage of the darkness of the season and its mood. Also, the bright spring and summer in Finland are in a class of their own, here. The fluctuation of seasons is so fierce.

## MORE DIALOGUE BETWEEN ART AND BUSINESS

When discussing the city's originality, Kartio shouts: It's fun to be strange! He also says Amos Rex is weird, but not snobby; and neither is the leader of the museum, who is, himself, happy to engage in dialogue anytime. – Let dialogue be extended everywhere. We need dialogue between different kinds of art and business.

Amos Rex is indeed in active dialogue with businesses, through its many business partners. Even the businessman Amos Anderson (1878-1961), an individual who helped establish the foundation that owns the museum, was known for his dedication to business in the mornings and arts in the afternoon.

Kartio believes that the significance of art as a source of inspiration for business and new ideas is not yet fully understood. – For



Tuomas Uusheimo



example, the art museum is considered - above all - a leisure resort, but visiting an art museum can also be a rewarding part of work life in a field that is not directly related to art.

Therefore, Amos Rex wants to encourage seeking inspiration from art; so that a museum visit can be combined into a seminar or a work-related meeting. In addition to the art museum, Amos Rex has restaurants, shops, and a movie theatre under the same roof. – I believe more synergies between business and visual arts and Amos Rex are to be seen in Finland. Maybe, at last, we're getting to know that cooperation really holds big potential for all involved.

Different eras are also in dialogue within Amos Rex. – The conversation between old and new is fascinating. This is already happening in the building of Amos Rex, which is a combination of the finest modernist architectures of the 30s and the bravest of the present. There is also dialogue between the old and the new in the exhibition.

The old is respected, but Amos Rex heads boldly towards the new. The journey is with the knowledge that the future cannot be fully reached at this very moment. – In today's world, there are so many things going on we couldn't predict just a while ago. If the change cycle continues at the same pace, the world will, one day, be pretty wild.

## THERE MUST BE ROOM FOR THE FUTURE

Kartio sees the future direction of Amos Rex to include the most flexible and evolving structures. Which he feels are also necessary in other contexts and scenarios. There must be room for the future. – We cannot know what we want to present in our showrooms in twenty years. Therefore, efforts have been made to make the premises as flexible as possible or at least to ensure that the premises will not restrict the future of this museum.

Kai Kartio, in viewing the development of this particular European city, Helsinki, believes that one of the biggest changes will be the change of the visual world. – That field is expanding rapidly, especially in the case of various manifestations of virtual reality. We can ask in which way any change will occur, but nobody knows the answer. All we know

is that everything grows from something. Nothing just pops into existence.

Kartio hopes that we will have sufficiently enough support and opportunities to experience something unusual, as well as ways to observe the familiar in a strange way. Growth requires movement. The only way we can develop is to get inspired when something moves us – just like the Amos Rex opening exhibition has done. **TIINA ÖRN**

## Amos Rex

Owned by Konstsamfundet.

Opened in August 2018.

Facilities include an art museum, a movie theatre at Bio Rex, restaurants and shops. The Underground Art Museum is connected to the protected building in Amos Rex.

The chief designer of Amos Rex was with in the leadership of JMM Asmo Jaaks.



Tuomas Uusheimo

# Experiencing Amos Rex opening exhibition Teamlab: Massless



Tuomas Uusheimo

When visiting an art gallery, it is typical to orient oneself. You look for a suitable change, in order not to focus on the irrelevant. You want to take advantage of everything on your visit, become illuminated by art. At Amos Rex, you can forget about orienting. At the opening exhibition, realised by Teamlab, you do not have to concentrate; the experience emerges without any effort.

Museum Director **Kai Kartio** considers the nature of creativity. He believes that new ideas are born when there is something that restricts. Kartio may be alluding to resources such as space. In Teamlab's exhibition, one wonders whether Kartio is also alluding to the limited nature of human experience. To a situation where the customary human way of experience remains too small, since the experience offered by art is more abundant.

Kartio's suggestion to leave space for the future deserves support.

One could also hope that many would use the comprehensive experience that Amos Rex offers as a model. The way we tell stories should excite through its new form, and not only by its message. A fresh form may also provide the ability to engage in groundbreaking dialogue.

When the entire space stimulates the senses, a new way of experiencing it becomes possible. I experienced the inaugural exhibition together with my friend, who works in the financial sector. The artworks also made us contemplate much more than the exhibition's subject. Our working life and its changes were strongly present during our meeting. My friend did not know that I would be sharing my Amos Rex experience in this publication, but the day after our meeting she sent the message: I somehow got a very warm and fine feeling from yesterday and it is still there. **TIINA ÖRN**

"When I run, I try not to think about anything. It is my own time, when I can get away from everything. But almost every time, the opposite happens—whatever issue that has been bothering me seems to resolve itself."



"I take time for myself as often as I can and I read books on philosophy and psychology. I believe that this has also improved my ability to handle pressure at work."



"I have a long commute so I relax by listening to music. If there is a suitable break during the day, I head to the café and watch the people streaming by. But this is a fairly rare treat."



"I dislike e-mail and so I read my messages at very specific times. Is there time to think? That question really hits home. Working days are so hectic that I just want to relax by cooking or watching sport."



"Time is certainly the scarcest resource for everyone here. The best is good discussions with people with very different backgrounds, so I emptied my calendar for two days. I don't separate spare time and working hours; I do what I like."



## How do you **recharge** your batteries?

We asked Nordic Business Forum participants how they recharge their batteries in the midst of a hectic work life and during their spare time.

"Definitely yoga, and meditation, clear my mind of excess concerns. After that, I feel relieved, and I look forward to starting even a hard day's work."



"I never take long vacations, but I do take time out as often as possible on long weekend trips. Books are not my thing. The world is changing in the field of artificial intelligence among other things, so I spend my energy on this."



"Naturally, my inspiration source is sailing with good companions. I also like challenging discussions and debates. Something new often comes out of them, and this in turn leads to, say, creating new apps."



"I am a life coach and I meet three clients a day. The rest of the time I keep for myself. I teach my clients how to be your own master. In that way you also learn how to master your own calendar."



"I recharge my batteries four times a day by walking my dog. Is it not said that walking is meditative? A few years ago, I was doing 15-hour days. I made a complete lifestyle change."



"I like travelling alone. The best ideas can come to you in the car or while flying. Apparently, I have trained myself to do this. During the day, you sit in long negotiations and wade through memos, so you need to spend the evening quietly."

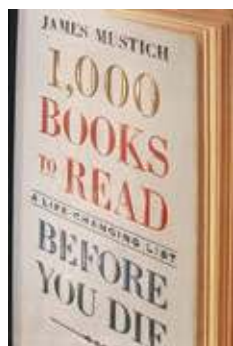


"I organize my day strictly. Every day I read a book for one hour – I have always several on the go at one time. I get pleasure from seeing people succeeding in their challenges at work."





# To read

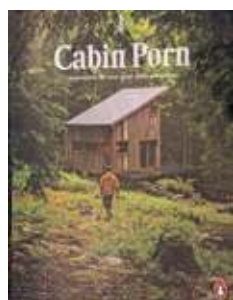


## 1,000 Books to Read Before You Die

A Life-Changing list

by James Mustich

Having trouble deciding? 1,000 Books to Read Before You Die can act as your own treasury of essential reading. As Mustich says, it is neither comprehensive nor authoritative, but rather an invitation to a merry argument about the books left out as well as those included—because the question of what to read next has no definitive answer.



## Cabin Porn

Inspiration for your quiet place somewhere

by Zach Klein and Steven Leckart

Did you think the Nordic people are the only ones on the planet who escape the hassle to their cabin in the middle of nowhere? There are people like that all around the globe. The authors have collected photos and stories of more than 12 000 cabins handmade by people using whatever they could find near places that mean something special to them.



## Failed It!

How to turn mistakes into ideas for successfully screwing up

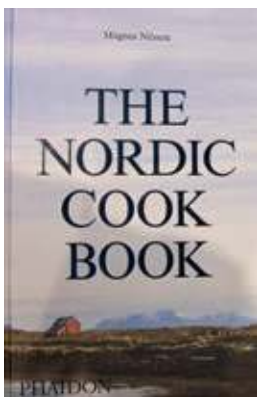
by Erik Kessel

The key message of this book is not to limit our potential by being afraid of failure. Mistakes help us find new ways of thinking and innovative solutions. Failed it! shows how mistakes can in fact enrich the creative process. Book showcases hilarious examples of imperfection and failure within art, design, photography, architecture and product design, to inspire and encourage creatives to embrace and celebrate their mistakes. Fail it big!

## The Nordic Cook Book

by Magnus Nilsson

Want to dazzle your family or dinner guests with the best Nordic Cuisine? Internationally renowned chef Magnus Nilsson has collected more than 700 authentic recipes Magnus collected while travelling throughout the Nordic countries – Denmark, the Faroe Islands, Finland, Greenland, Iceland, Norway and Sweden – enhanced by atmospheric photographs of its landscapes and people. With Magnus as your guide, everyone can prepare classic Nordic dishes and explore new ones from meatballs to lesser-known dishes like rose-hip soup and juniper beer.



## ...and more



### The Broken Ladder: How Inequality Affects the Way We Think, Live, and Die

by Keith Payne

### Educated

by Tara Westover

### Factfulness

by Hans Rosling

### How Democracies Die

by Steven Levitsky and Daniel Ziblatt

### In the Shadow of Statues: A White Southerner Confronts History

by Mitch Landriau

### Long Walk to Freedom

by Nelson Mandela

### The New Geography of Jobs

by Enrico Moretti

### The Return by Hisham Matar Things Fall Apart

by Chinua Achebe

### The World As It Is

by Ben Rhodes



# Start-Ups to follow

## **restb.ai** - Spain

Restb.ai has developed computer-vision software to classify real-estate images in order to speed up image tagging for SEO purposes. Restb.ai's plug-n-play solution identifies, categorizes, and delivers results on property-related images with an accuracy of up to 99%. The solution pushes the boundaries of machine learning, having been designed from the ground up to accurately recognize complex concepts within a real estate context.

## **heptasense.com** – Portugal

Heptasense uses AI software to measure human responses for crowd profiling. Their service is already being used e.g. on airport monitoring and threat detection.

## **N26.com** - Germany

The digital bank which disrupted the German bank industry. N26 was founded in 2013 by Valentin Stalf and Maximilian Tayenthal to shake up the retail banking experience and meet the today's mobile lifestyle. Now N26 already provides services for almost a million customers in 17 European countries outside Germany.

## **ContentSquare.com** - France

ContentSquare uses AI to help businesses understand how customers behave on their apps, mobile websites by finding patterns in computer cursor movements. ContentSquare already works with companies like Gazprom, Avis and Renault

## **racefox.se** – Sweden

An AI-based coach for skiers and runners. Racefox app and the sensor belt use your phone sensors to measure posture, heart-rate etc to analyze your movements and give you personalized training suggestions and track your progress.

## **ouraring.com** - Finland

Healthtech startup Oura's chic ring track sleep patterns, detects the amplitude and intensity of your body movement, automatically recognizes that you're active and tracks the time you were inactive during the day.

# To work

## **Helsinki**

**Epicenter, Mikonkatu 9,  
00100, Helsinki**

The latest addition to Oslo, Stockholm and Amsterdam Epicenter digital innovation houses where entrepreneurs and companies can work, meet, learn and grow their businesses. Cool and hip workplace with great location in the heart of the city.

[epicenterhelsinki.com](http://epicenterhelsinki.com)

## **Stockholm**

**Alma, Nybrogatan 8,  
11434 Stockholm**

A workplace for style and design lovers. The five-story building offers work and social spaces, rooms for meetings and collaboration, a music studio, a restaurant with an outdoor terrace and a bar. The restaurant is overseen by chefs Gordon Grimlund and Nathalie Nordström,

[thisisalma.com](http://thisisalma.com)

## **Tallinn**

**The Workshop, Rävala  
pst 8, 10143 Tallinn**

Cozy and colorful workspace in the middle of Tallinn with very reasonable and flexible prices. Good vibe comes as an extra bonus.

[theworkshop.ee](http://theworkshop.ee)



**Petteri Lahtela:**

# What I learned through founding Oura Health

With a journey spanning telecoms, chronic disease prevention and private healthcare, the career of Petteri Lahtela is a near-perfect fit for the co-founder of the company behind the Oura ring. Even so, bringing a hardware and software solution to market is never straightforward. Let's find out what was learned.

**Nordic Business Report: Hi, Petteri. What surprised you when you founded Oura? What was different from your expectations compared to your previous roles and experience?**

**PETTERI LAHTELA:** Hi, John. When trying to get funding for the company, it was really hard to find investors who were also driven by something else other than money. Our mission from day one has been to create a lasting impact by empowering individuals to learn how their bodies respond to their lifestyles.

However, it was really hard to find investors who understood this driver and also the competences needed to achieve our mission. There were a few individuals in Finland who believed in us, but we ended up doing a lot of footwork in the US to gain traction. In the vast majority of cases, we were turned down.

It became a huge challenge to find the people who both understood where we were

going and how we planned to get there. In particular, it was a fight to convince people that we had the competences needed to blend science, technology and design into a beautiful, valuable solution.

**NBR: What surprised you during the process of designing, building and delivering the Oura ring?**

**PL:** We have learned plenty of different things. For instance, many online technologies have exponentially developed since the company was founded. I honestly don't think many people believed we could manage sales solely through our own website. In fact, since we started selling the first generation Oura rings, we have mostly been limited by supply and scaling up manufacturing.

Manufacturability at scale was one of the drivers for developing the new Oura rings, in addition to their smaller size for even better wearing comfort. We are working to refine our

manufacturing process to meet our demand.

Another surprising factor has been the volume of interest from high-quality research institutes and universities. We've received many, many requests! It's a positive problem and we're now building better processes for evaluating cases and discovering opportunities.

**NBR: Finally, nobody can be perfect when running a business. What is your advice to founders, entrepreneurs and leader who realise they need to make a change?**

**PL:** Openness, transparency and continuous communication - face-to-face wherever possible - is vital both within the team and between all stakeholders. I can't stress the importance of this enough. If you notice a problem, bring it up - there will be people who will help you solve it. There's no point in keeping information to yourself - trust your team, work together to solve your problems. **JOHN COZZI**



#### ABOUT OURA HEALTH

Founded in 2013, Oura Health is a pioneering sleep performance platform, focused on improving sleep that leads to a better life. The Oura Ring and app gives users daily feedback to improve their health, allowing users to better understand their body and reach their goals. Headquartered in Oulu, Finland, with offices in Helsinki, London, and San Francisco, Oura Health recently moved past 17.5M€ in funding, attracting investors such as **Will Smith**, Twitch Co-Founder **Kevin Lin**, YouTube Co-Founder **Steve Chen**, MSD Capital (**Michael Dell**) basketball player **Shaquille O’Neill** and American celebrity chef **David Chang**.



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