Welcome to the post-technology era

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# Utopia for Beginners

Welcome to the post-technology era

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Welcome to the post-technology era

As a child we all had dreams. Whether you wanted to become a doctor, start your own business, learn to play the guitar, or become a professional athlete, your dreams ignited what came next and made you ‘go for it’. Organizations have dreams as well, some more explicit than others. Their dreams are presented in their corporate statements: “Let’s build a smarter planet” (IBM) or “Believe in something, even if it means sacrificing everything” (Nike). Corporate dreams are ways to align with what is going on in society. If they capture the Zeitgeist it is a great way to connect and strengthen their brands. Beyond individual and corporate dreams, there are dreams of a new society: the so-called Utopian dreams. Utopia is a collective dream, a desired society in which things are arranged in a certain way. It’s innocent in a sense that it is a dream of a better future and a better society (unlike its counterpart Dystopia). It’s also crucial for your business success. Like individual dreams, collective dreams define which direction society is going to take. So as well as doing what they’re already doing in terms of digital change, organizations must take into account a new dimension – the ‘purpose directionality’. What ‘purpose’ does your business serve in light of the direction that society is taking? Purpose directionality is thus an outside-in perspective; dreams that are bubbling in society today that give direction to the economy of tomorrow.

In this report we will present dreams of a future society. They are presented by nine experts who we have encountered during our research over the years. These perspectives will lead to new questions for business to answer. Without any doubt, the main question will be how to succeed in a future (information) society that is so much more driven by purpose than anything else.

The success of your organization depends on its digital intensity, your transformation capacity, and the purpose direction it serves: aligning your goals with Utopian dreams that are bubbling in society.
It’s no coincidence that Utopian thoughts are popular

There are certain moments in time when collective dreams are more in vogue, more sought after, than at other moments. Societies seem to be stable for long periods and then—bang—doubt and uncertainty start to pour in. There are so many new problems and issues, people start asking themselves “Is this the world in which I want my children to grow up in?” or “Why is everything moving so slowly, we need to take action now.” It is in these ‘fuzzy periods’ that the popular vote is on the move and society looks for new narratives, a new Utopia. It happened during the Belle Epoque, the Victorian boom and in the 1930s. In a sense today is the 1930s all over again. The reasoning behind all this comes from the theory that economies grow and mature in certain waves, long waves of around 60 years, split into two smaller periods of 30 years: an installment period and a deployment period.

Those of you who are familiar with our research know we’re talking about the Neo-Schumpetarian theory that has been researched for decades by Professor Carlota Perez. We’ve been using her framework ever since our publication on the economic crisis of 2008. In fact, that economic crisis is part of her predictive model. The model also predicts that “a Golden Age” is lying ahead of us. This prediction comes from an extrapolation from history. We’ve been at this crossroads before. There have been more Golden Ages, all the result of great infrastructural breakthroughs. Canals in the 18th century in England, steel and trains, cars and roads, all were part of the greater story of human progress.

Golden ages ride the waves of historical breakthroughs in technology. Each of the five technological revolutions brings a techno-economic and socio-institutional shift with new directions for innovation and a potential leap in productivity.

Source: Carlota Perez

Golden Ages are always preceded by a technology age. At first, all attention is on the technology itself, like today’s apps, internet, smartphones and appliances. And then the attention shifts towards questioning that same technology, and pushing it in directions we all favor. The Golden Age is about lifting the economy in all sectors, whereas the technology era is about lifting the economy of tech itself. Any ‘uplift’ towards widespread good use and gain for all will only happen if there’s a collective dream. Collective desires that bubble up from society will give direction to the next phase of our economy and society.
This Utopia is post-technology

It is in these second phases of an infrastructural technological revolution that desires overpower technology, and technology disappears into the background, becoming invisible and acting like magic. We are now at the start of such a period of deployment. It’s not that technology isn’t important anymore, rather the opposite. It has become so important that the discussion shifts towards what we really want to do with that technology in an ethical sense.

This comes as no surprise. We’ve been beating that drum from the very beginning of our research series on digital happiness. We mentioned that the future will be defined by what is technologically possible, financially feasible and socially desirable.

The spotlight is now on social desirability as it becomes clear that the fantastic IT-infrastructure we’ve created is ready to be deployed at a massive scale and at an affordable rate.

This Utopia is post-technology. It goes beyond the amazement of what all these new applications can do. It’s basically saying “Now we know what they can do, what do we want? And now that we have this new infrastructure at our disposal, what’s the bigger plan?”

We’ve looked as this topic of desirability in our previous reports. For instance, in our last report on the generation that is now coming of age, The Synthetic Generation, they share new values that are quite different from those held by older generations. And as we all know, values precede dreams (and dreams precede new societies). We’ve written about the crisis of trust in this research series, a fading desire in existing institutions and organizations. We signaled a shift of trust from the old machinery, the hierarchies, towards platform trust and trust in a chain of actions, the blockchain. And we started our first report explaining why human happiness should be at the center of your strategy and innovation. Now it is time to look at desires from a societal perspective.

We present five visions on the post-tech era

Utopia literally means a place that doesn’t exist, from Greek u topos (no place). Therefore, by definition it is a dream that can never be fulfilled. But the dreams of the nine people selected for this report could, in fact, be realized. Of course, there are boundaries and limitations, and some might be stretching your imagination a bit more than others. Nonetheless, they’re not far-fetched. We’re not going to talk about aliens (although they’re mentioned once) or ‘Beam me up, Scotty’ technologies. We’re discussing the here and the now of our society and what needs to be done. You’ll probably read as much Dystopian as Utopian views, because in order to dream you also need to envision the dark side.

We’ve interviewed nine people: Utopists, pessimists, self-proclaimed realists, and all subject matter experts in the fields of technology, society, ethics, happiness and wellbeing. Nine people we respect; people that have influenced our thinking. Some we have been working with for more than two decades, some for just two years. But we’ve chosen them because they have explicit and original ideas and have deep knowledge in the areas they are working on. We will present the interviews to you in a certain order, clustered two by two, representing five pieces of the puzzle. Starting with Carlota Perez, who’s inspired us to write this report. In her view the answer to the question of what the future will look like can be found in the current Zeitgeist. Therefore, the round of interviews we’ve done should be seen as capturing that Zeitgeist in order to ‘predict’ the future.

“The future revolution, in order to happen, already has to be there. There’s no way a revolution can happen in a vacuum.”
Carlota Perez

Vision I

The New Golden Age: A short history of the future

We kick-off with Professor Carlota Perez, who has dedicated her life to researching the booms and bursts of our economy. The patterns she has discovered hold predictive power, but she’s warning us not to become overexcited. It’s only when we make the right choices that a positive future happens, so it is in our own hands. Extrapolating from the major infrastructural revolutions we’ve witnessed during the industrial- and information revolutions, she envisions Utopia being all about Smart Green Growth. New ideologies have already been introduced as lifestyles. Sharing goods, driving electrical cars and eating vegan are some of her data points. Growth will come from all other sectors, not from tech itself. The rise of a caring industry lies in front of us and a whole package of tax reforms will push the economy in a long-term and sustainable direction. Golden Ages are always preceded by a technology age. At first, all attention is on the technology itself, like today’s apps, internet, smartphones and appliances. And then the attention shifts towards questioning that same technology, and pushing it in directions we all favor. The Golden Age is about lifting the economy in all sectors, whereas the technology era is about lifting the economy of tech itself. Any ‘uplift’ towards widespread good use and gain for all will only happen if there’s a collective dream. Collective desires that bubble up from society will give direction to the next phase of our economy and society.

Beyond the technological revolution

Carlota Perez is famous for her research on Techno-Economic Paradigm Shifts and the theory of great surges, a further development of Schumpeter’s work on Kondratiev waves, which she explains in her best-known book: ‘Technological revolutions and financial capital’.
Vision II
Power shift: living in a self-sovereign heaven

There is currently a window of opportunity to improve market conversations. Breaking up the power of the Big Tech companies is seen as a logical step. It will be the end of advertising and the beginning of deep friendships between organizations and consumers. This will be heaven on earth. Like friends, organizations won’t spy on you. They will anticipate what you need, simply because they know you so well. This Utopia is not about their intentions, it’s all about yours. The quality of life will improve with the same speed as the quality of data. Data in the hands of every individual will guarantee this quality jump. It will be the end of advertising and the beginning of something completely different. The existing CRM practices will be scrutinized and an ‘unmasking’ will follow. The spying and manipulating practices of Cambridge Analytica have become the landmark. We’ve seen many a mea culpa from Mark Zuckerberg, but it’s all too little too late. The US federal government is already ramping up its scrutiny of the power, influence and market dominance of the world’s largest technology companies, which could result in significant fines along with efforts to break them up2. France has started to tax the spying data industry, and other countries will follow. Meanwhile we’re listening to whistleblowers telling us that employees are secretly listening into your private conversations when you’re using Alexa or Siri3. While these practices continue, the power-shift becomes increasingly likely.

Turning the system around

Doc Searls is co-author of the Utopian Clue-train Manifesto (published in 2000) and “The Intention Economy”. He is a journalist, visionary thinker and advocate of giving people power over their own data.

The end of advertising

Sandra Matz is computational social scientist at the Columbia business school in New York. She’s researching the relationship between happiness and consumer behavior and is one of the leading experts on how Cambridge Analytica manipulated peoples’ minds.

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3 Forbes: Apple Siri Eavesdropping Puts Millions Of Users At Risk”
Vision III
The industrialization of the higher needs

Up to now, there has been little application of IT to support better lifestyles and human happiness. The IT industry simply began with a focus on the negative side effects and is busy with damage control, fixing the adverse effects of the digital machinery. Rafael Calvo and Nell Watson are taking it one step further. In their Utopia, IT supports a better way of living and helps us to become that better person we would like to be. The augmentation of our hearts and souls is what comes next. In contrast to the digital transformation of your organization, this is about supporting the transformation of others. With the support of technology, happiness and wellbeing and the higher needs, like love and belonging, self-esteem and self-actualization, will be industrialized.

This industrialization is the result of the confluence of machine intelligence, machine economics, and machine ethics. But first we must overcome the idea that by designing for happiness, we’re interfering and making judgements for other people. The eye-opener here is that there’s no such thing as a neutral system design. There’s always an intention, an impact. There’s always a direction of actions that is embodied in these systems. We must make it work in a way we would like it to work, and we must take responsibility for the happiness and wellbeing of society as a whole.

Beyond damage control: IT for wellbeing

Rafael Calvo is Professor and Director of the Wellbeing Technology Lab at the University of Sydney. He combines fields such as positive psychology, machine learning, and human-computer-interaction to create IT for wellbeing.

Augmenting the human heart and soul

Nell Watson is an expert in machine learning at Singularity University. A visionary thinker and geek, she has tech patents and a focus on AI, Cognitive Science, and happier human societies.
Vision IV
Making Utopia Work: The power of a great narrative

“The most important characteristic of people is their incorrigible dissatisfaction”. We welcome you to the Utopian view of Luciano Floridi. His hope for a better world comes from the fact that we’re never satisfied. Meanwhile, the promised land of Claudia Senik is based on common enemies that create communities: "We need a common enemy to recreate the sensation of living in a society". Dissatisfaction and enemies are crucial to make Utopia work. So, if there’s anything that brings the stories of Claudia Senik and Luciano Floridi together, it is the question of what makes Utopia tick. The underlying basic fear in both stories is the possibility that we could lose control over our happiness. We might become the victims of machines that are animating the world, or machines that are pushing humans out of the system. The Dystopian scenario of Luciano Floridi is that we stop thinking and no longer take responsibility. Senik is worried about society falling apart and introduces a concept of bridging- and bonding capital in her Utopia. But gluing society together again needs a lot more. We need an overdose of empathy to create Utopia. The solutions they propose sound like a Green New Deal: universal basic income, green and sustainable, an inclusive economy and tax and tech reforms. But what stands out is that besides all good actions and fantasies, we need a damn good narrative.

Controlling the blue and supporting the green

Luciano Floridi, Professor at Oxford University, author of The Fourth Revolution, researching how technological revolutions change humanity.

A recreation of the sensation you live in a society

Claudia Senik, contributor to the UN World Happiness Reports, Professor at the University of Paris-Sorbonne researching the happiness of societies.
Vision V
California dreamin': A wake up call

Fast success in a new world is often known as the “California Dream”. As a result of the Gold Rush from 1848-1855, California became a place of new beginnings. Overnight, California gained the international reputation as the “golden state”—with gold and lawlessness as the main themes. Hollywood, the wine-industry and the aerospace industry contributed to the idea that new futures are made and shaped in California. Silicon Valley is probably the biggest contributor to that story. The California Dream inspired us to return to the mothership, the place where it all started. The modern version of the California Dream was epitomized in 1997 by Peter Leyden when he published “The Long Boom”, an upbeat future prediction that stretched from 1980 to 2020. His new California Dream looks like this: “There’s a sense that almost no idea is too crazy and will initially be taken seriously. And it does not matter who you are and where you come from as long as you have ideas, some talent and work hard. [...] A lot of the innovation to emerge in the next decade will have an impact well beyond America. It [California, red.] is now a global melting pot that is creating what will be global models about how to do things in the near future.” As an antidote to this we also present the so-called Antichrist of Silicon Valley, Andrew Keen. He sees a lot of dreams from well-meaning technologists that have not come true. For instance, the internet should bring the global world together, but we now see a rise of the Splinternet. Despite these failing dreams he still sees naive optimism regarding technological solutions, where the real problem is a social one. These are two stories that show different directions but also many similarities. The new boom is about social change, agency, taking control over all these innovations coming from the Valley and political action as a path we need to follow.

The California way forward

Peter Leyden, independent thinker and author of “The Long Boom”, a 1980 - 2020 upbeat Utopian view of the future written in 1997. Peter presents the ‘Yes we can!’ mentality that has its roots in the California Dream and has become part of the American psyche.

Social change lies ahead: technology is not the answer

Andrew Keen, author of many books and independent thinker, once awarded by us the memorable title of Chief Unhappiness Officer (which he wore with pride). Keen has been known as a critic of the companies and culture coming from California for more than a decade and should be considered as Mr. Early Warning.
The closing note

In Utopia we’re all beginners. Our closing note, the final chapter, resumes the agenda for the future. We’d like to have you think five years ahead, or even ten. What will society look like? Which of the strategic choices you make today will define your future success? It might be too much to ask for. Thinking about the next quarter is taking up all your time and energy. If we could ask Joseph Schumpeter, the economist who presents the theoretical foundation of Carlota Perez’ Golden Age, he would probably say that he couldn’t care less what your strategy looks like. We are all part of the dynamics of creative destruction. If your company doesn’t catch up, a newcomer will. You will be the one that is destructed, while others will create the new.
Vision I
The New Golden Age:
A short history of the future

The first Utopia we want to present is from Carlota Perez. It is based on her historical understanding of technology revolutions. According to her Neo-Schumpetarian theory we are currently at a turning point and heading towards a Golden Age. But only if we handle the current turmoil correctly. In order to thrive, businesses need good institutions, which are outdated right now. Furthermore, Perez sees new lifestyles as the drivers for change. Most of them share values such as health, sustainability, creativity, experiences, and social relationships. And today, what’s good for the ICT and environmental industries, is good for the whole world economy and vice-versa.

In order to reach this Utopia...
Organizations need to prepare to shift gears. The deployment phase we are heading for will be fundamentally different from the past installation phase. Purpose-directionality will be one of the key drivers for success.
Carlota Perez -
Beyond the technological revolution

Carlota Perez is a researcher, lecturer and international consultant. She is famous for her research on Techno-Economic Paradigm Shifts and the theory of great surges, a further development of Schumpeter’s work on Kondratiev waves, which she explains in her best-known book: Technological revolutions and financial capital. She is Honorary Professor at IIPP-UCL and SPRU, University of Sussex, UK, Visiting Professor LSE, and Professor of Technology and Development at TalTech, Estonia Academic in Residence, Anthemis UK.

The following is based on a brief talk over video and a set of questions sent to Carlota Perez by email. She said she preferred this email approach because she was afraid she would start to ramble in an interview. She doesn’t like improvisation. “I’m a perfectionist” she tells us. The first answers were sent right after our 20-minute video conversation. Besides being a perfectionist Perez is a workaholic. This year she’s turning 80 and still working – at the weekends too we’ve noticed. This time it’s on her new book. It must be around ten years since we first met. We were doing a tour of events, discussing the economic crisis of 2008 and became intrigued by her perspective on that event. While everyone was asking why the economists didn’t predict an economic crisis, we had found one who actually did. We invited Carlota Perez to do some speeches. At that time everyone was confused by what had just happened, and here was someone saying that this crisis and the confusion was the thing that was expected to happen. We have since stayed in touch and adopted the Neo-Schumpeterian theory as a framework for better understanding the role of technology in society.

Signs of our times

We start our conversation with the ‘here and now’. What are the signs in society Perez is looking at right now that could be related to her theory of technological revolutions? “As you know, my theory about how technological revolutions emerge and diffuse, creating a great surge of development, expects great financial and social turbulence for the first few decades, with the rich getting richer and much destruction of skills, jobs and even industries. But this only becomes highly visible after the inevitable bubble and crash at the mid-point of each surge. What immediately follows this crash, as in the 1930s and the present, is a time of political turmoil, with new political parties and populist movements emerging while the established parties tend to divide. It is this time – the moment that we are in now – when the shape of the future is socially designed. It can be a ‘golden age’ as in the post-war...
prosperity (1947-70) of the fourth surge, the Belle Époque (1900-WWI) of the third and the Victorian boom (1851-73) of the second surge in the UK.

“Today we are witnessing the typical signs of that interim period between the bubble collapse and a possible golden age. Social unrest, political divisions within the incumbent parties, extreme right and extreme left populism – just as Fascism and Communism in the previous post-bubble period. Messianic leaders offer the recovery of heaven or a new paradise (as Communism was), often together with the punishment of the culprits in some sort of hell, be it Jews, Muslims or capitalists.

“So, the signs of the problems are there to be seen. The question is whether there are also signs of the solutions. I would say that the tide is turning. The neo-liberal orthodoxy of austerity and minimal state, reversing the Welfare system and believing in the infallibility of unfettered markets is increasingly being questioned. The traditional center parties that adopted that ideology are taking a beating everywhere. Their survival – if still possible – will depend on whether they can reinvent themselves with a program that will respond to a fairer society, drastically reducing inequality and providing a safety net for the majorities. It is not a return to the old Welfare State, which is obsolete and belongs to a world of ‘jobs for life’; it is about inventing the Welfare State for the Information Age.”

New lifestyles are drivers for change

Perez continues: “The other important sign of the turning of the tide is the environmental movement. It is becoming a much stronger social concern, both in the activism of the young – who are fighting for the quality of their future lives – and in the lifestyle changes, not only by the young, but also by the elites, who are abandoning the wasteful and energy intensive ways of the old consumerism and embracing a life aimed at experiences, creativity, health, exercise, learning and intense communication with peers. Jogging, cycling, veganism, composting, recycling; listening to streamed music; communicating over the internet to avoid unnecessary travel; these can all be seen as part of a loose ‘ideology’ responding to the climate risk through behavioral change. They gradually define an idea of the ‘good life’ that becomes a guide to desirability.

“The other important thing about a potential golden age with information technology is that, as has happened with previous revolutions, the high-tech sectors destroy more jobs than they create, while it is the new lifestyles that create the demand for a high proportion of the new jobs emerging to cater to them. Caring, coaching, teaching, exercise, various forms of art and participation in experiences, maintenance, recycling, reusing and so on are the activities that would multiply. However, in a proper golden age, just as in the post-war boom the retail sector paid decent salaries despite the low productivity of those jobs, the socio-political decisions required now for a decent society would involve giving significant prestige and monetary recognition to the new personal services.”

A Golden Age

At this stage in our conversation we are wondering what a golden age would look like. Perez continues: “The first thing I must say is that when a golden age gets underway, everybody knows it. The historian Eric Hobsbawm described the feeling of the beginning of the Belle Époque as ‘the global economic orchestra played in the major key of prosperity rather than, as hitherto, in the minor key of depression’. Something similar can probably be said about the post-war boom, after the war and the much greater depression of the 1930s. It is not about GDP or about employment figures; it is about everybody feeling they have a future and that they belong. Business sees a clear path ahead to innovation, investment and profits in shared directions; workers see growing job opportunities with improvement prospects; government feels like an ally in achieving those goals and taxes have meaning; public servants understand their role as making a better society and thus feel useful; social groups propose progressive policies and changes and trust that they will get a fair hearing; the young see their future as full of opportunities and choice. It is the best of times in capitalism. Gradually, the victims of the ‘creative destruction’ period forget all the suffering and capitalism and democracy are once more seen as legitimate.

“There is no doubt that the great majorities live much better today than they did during the first industrial revolution at the end of the 18th century. But my research has shown that the process is a pendular movement, first worsening inequality and then reducing it, so that the good times brought by each successive revolution arrive first for a relatively small group, leaving the majorities behind, and then, if the state does the right thing, they spread to a much greater portion of the population within the core countries.

“The process between countries is somewhat different. When the revolution is globalizing as this one and the third – from the 1870s to WWI – many countries make a leap and join the
advanced world (one can see the US and Germany in the late 19th century like the China and India of today); at other times, as in the fourth – from WWI to 1970 – there is a wide gap between advanced and developing countries. In that case, the high wages paid in the core countries became demand for mass consumption, but they had to be counterbalanced by cheap materials and oil coming from what was then called the “third world”. This time, it would be good for the economy and the planet if materials and fossil fuels were expensive. Exporters would receive a growing income even for lower quantities; importers would be encouraged to use less materials per unit of product so the environment would suffer less. And, since internet facilitates information, trade, technology acquisition and education, conditions would be more favorable for all countries to develop. Each golden age is different because each revolution is unique, as are the countries where it is used and shaped."

**Smart Green Growth as our way out**

We ask Perez to elaborate on the coming golden age of our current globalizing IT revolution. "It is clear to me that the way out of the current unequal societies is what we could call ‘smart green growth’, meaning a positive sum game between business and society, including using ICT to maximize productivity and wealth creation in a socially and environmentally sustainable direction. To succeed in bringing stable and peaceful growth, it must be a win-win game between business and society – as social democracy was during the mass production surge – and, this time, it will also have to be a positive sum game between humanity and the planet.”

Perez continues: “The economy would have some sectors that are intensive in the use of high productivity technologies which would maximize wealth creation. But the majority of jobs would be in areas associated with the new sustainable lifestyles. So, the idea of smart green growth implies a paradigm shift in both business and consumption. It involves creating an incentive framework that moves business to invest and innovate in a green direction, not only because it avoids climate change but because that is the best path to find dynamic demand and profits. For consumers, the aspirational ‘good life’ would not be about possessions but about healthy creative lives and about having access to the fulfillment of needs through rental or sharing – and feeling good about that. The shift from products to services leading to a gradual dematerialization of GDP would be seen as the ideal. Waste would be embarrassing and durability highly desirable. In fact, the idea that a product would break down and not be fixed but thrown away would become unacceptable (and the original manufacturers would be responsible for disposal, if that were the case – as we are already seeing in some areas). Masses of workers would be employed in a rental and maintenance industry that updates all products, 3-D prints spare parts and keeps track of product histories on chips with IoT. Used and vintage furniture, clothing and other things would be fashionable. Growing food around cities and preferring fresh food rather than processed would be the norm. Personal services, especially caring and teaching, would be highly regarded occupations and highly paid. A universal basic income would give dignity to all citizens, who would engage in life-long learning and have freedom to shape their lives. Imaginative and effective solutions for housing would be developed to banish homelessness and facilitate lodgings for the young. New financial instruments would facilitate life-long security without it necessarily being tied to home ownership, given the increase in portfolio careers and frequent changes of job and place. Education would become a massive industry, given that skills are the most important asset for a person."

**Tax reforms to encourage new kinds of consumption**

This sounds great, but how could we possibly get there? Perez has her answer ready: “All of this implies a redesigned tax system that encourages both investment and consumption in that direction. Instead of taxing salaries and profits, taxes would fall on fossil fuels, materials and transport. This would change the relative costs facing decision makers in business. Education would be supported in multiple ways, including tax exemptions and subsidies. Finance would be encouraged to invest long term by having very high taxes on short-term capital gains (90% if within one day and zero if after ten years). A simplified tax system would include the elimination of all the tricks for avoidance and a transactions tax [FTT] for movements of more than $10,000, slowing down the casino and capturing a proportion of the transfers to tax havens."

“The other direction for changing the context to guide investment would be full global development. This could be kick-started using the funds of a global FTT. As it bears fruit there would be new markets for capital goods, engineering, advanced and sustainable equipment and other tech-based products, while Asia would find export markets too and gradually locate more production in less developed countries. Just as raising salaries during the mass production golden age provided dynamic demand for the typical products of that time, letting the prices of raw materials rise (through accepted OPEC-like organizations, similar to the German cartels of the 1890s and 1900s) would set up a positive sum game between advanced, emerging and developing countries. In addition, taking advantage of internet banking and telecoms to help set up production and improve living conditions in the countryside would contribute to reducing migrations to slums in the cities as well as to the advanced world.”
Post technology

How do you relate the coming changes with the current focus on human centricity and desires in society? Perez responds: “Well one thing is how people experience the good life and another is how the economy produces the wealth with which to provide such a life. I would say that information technology is going to become so ubiquitous – as it increasingly is already – that we won’t see it. Paying with a contact card, taking a picture, sending a message, using a fitness tracker for health, or a smart meter for electricity, and streaming music or films will be just as normal as radio, TV, washing machines and refrigerators used to be. The main difference is that, rather than the way it is now, where the new information technology gadgets are simply added as another possession in consumerism, they will fade into the background as supports for human centered, collaborative, creative, healthy and interconnected lives. And the same would occur in factories and businesses, where having robots and using artificial intelligence will be the norm; organizing human capital in a creative and meaningful way for high quality of work will be the main concern of business leaders.”

Inclusion as a safeguard

Of course, it is also our task to play the devil’s advocate in this interview. There are a lot of possible ways things could go south. What is Perez’ perspective on this? “The truth is that it’s only in recent times that most of society has been lifted into the good life, and that was only in the advanced countries. Each deployment, since the industrial revolution, has raised further layers of the population into higher quality lives, but still always leaving out many ‘losers’ within the ‘winning’ countries, let alone those who have suffered in countries under colonial rule or simply under economic dominance. The good news is that the general trend is for greater inclusion. However, it occurs in a ratcheting way. The early decades destroy some of the advances in the previous deployment – through deskilling and competing some industries and regions away – and then the new golden age is the result of shaping the new technologies and incorporating other layers of society into better and secure lives.

“The process is socio-political, and nothing guarantees the best outcome. The mass production paradigm was used by Stalin, Hitler and the Keynesian democracies in very different ways. That is why it is so important to mobilize society in the most inclusive and democratic direction and to get business on board to do the same. Highly unequal societies are very unstable and, in the end, are bad for the rich too. That is why golden ages are win-win games; I would say that is, in fact, what defines them as golden ages. Generalized satisfaction is the basis of a peaceful society and a certain level of inequality is then easily accepted. In the end, the legitimacy of capitalism is based on its capacity to turn the ambition of some into the benefit of all.

“Today we need bolder leaders, ones who are not in debt to the financial world, along with a business community that understands the social and environmental goals that can guarantee its long-term survival rather than short-term gains.”

How to stay relevant?

Finally, we talked about relevancy and Perez said: “Well, it depends on the type of organization. If you’re talking about businesses, they could recognize the direction of change in demand and engage in the circular economy, care about the triple bottom line (planet and people in addition to profit) and invest in innovation and personnel training to be at the front of the pack working towards a sustainable future. But in order to thrive, businesses also need good institutions – and this is where we are still going wrong. Coming out of World War II it seemed obvious to politicians, business leaders and the public alike that state institutions underpinned the success of a country, which is why we saw institutions like Fannie Mae backing home ownership (which was the basis of dynamic consumer demand), unemployment insurance enabling uninterrupted payments of mortgages, cars and other big items, universal health services and free college education taking that burden away from salaries and wages. But in the past thirty years this message has been flipped; people have been told that we need successful businesses in order for a country to thrive. In truth we need both – and they must converge towards underpinning the sort of lifestyle change I described before. Here is where state institutions can be really helpful – they can tilt the playing field for businesses in the direction of that change, so that it becomes profitable and satisfying for business organizations to work with social change rather than against it.

“In fact, one of the tragedies of our time is that the revolutionary industries have adopted a libertarian ideology and have let the old incumbents – oil, pharma, the military and finance – shape government policy. Charlie Wilson of General Motors, when proposed for a government post, argued rightly that what was good for GM was good for the US and vice-versa. Today, what’s good for the ICT and environmental industries is good for the whole world economy and vice-versa. We will not have a better world by going to the moon or aiming for immortality. We need social and planetary sustainability on earth, and we will all be responsible for the outcome.”
Vision II
Power shift: Living in a self-sovereign heaven

A balanced relationship between companies and customers – that is the dream in this Utopia. The widely-read author Doc Searls and computational social scientist Sandra Matz foresee a rework of the current trend in surveillance capitalism. The relationships with customers are at this moment too much one-directional, with data hoarding, spying, and meaningless advertising. In their Utopia both thinkers have the customers back in control over their own data. Companies are built and structured in a new way, in which they can respectfully get to know their customers better. They will befriend the customer and the customer will befriend a brand. Sandra Matz even calls it the end of advertising, since people will find it hard to separate advertising and well-meant and thought-through personal advice.

In order to reach this Utopia...
Companies are advised to rethink data ownership and to prepare for a time where brands are valued less and experiences take over.
Doc Searls -
Turning the system around

Doc Searls’ Utopia puts the customer back in control. It’s a place where the current CRM model is flipped around and companies are formed around the intentions of people. It was back in 2012 when we started our conversation with Doc Searls. We invited him to join us in London where we gathered a group of CIOs to discuss the future of customer engagement. We handed out red and green cards and asked the group how many of them were willing to let their customers have their own data. Almost everybody held up a red card. We then asked Doc Searls to turn their opinion around, and we gave him a few hours to achieve this. We started our interview for this project by asking Doc whether he still remembered this.


“I do remember and still know what my first sentences were: Imagine this is 1982 and the PC just came along. If I had asked you ‘Are you going to let PCs into your company?’ everybody would say no. And then within three or four years, everybody had PCs. And the same thing with the internet. Same thing with smartphones. Are you going to let them in the company? And the answer would be no. We will give you a Blackberry. Right? That’s what they did back then. And within a short time, everybody had to have an Android or an iPhone. I think we’re at the same moment right now. Will you deal with self-sovereign customers? Because that’s really what the question is. And the answer will be: ‘That’s scary’. We don’t want them to be in full charge of their identity. We will give them an identity and will know them by our database. But in the meantime, what’s also happened since 2012 is that because those companies did not hand over their data to people, we now have the EU’s GDPR.”

Doc Searls has been ‘the voice of customer empowerment’ for more than twenty years, ever since the iconic The Cluetrain Manifesto was published, which he co-authored: a manifesto containing 95 theses that still look highly relevant today’. After The Cluetrain Manifesto, he moved on to work on a concept called Vendor Relationship Management (VRM) in around 2006. VRM is the consumer power version of Customer Relationship Management (CRM). After that, Doc published his book The Intention Economy: When Customers
Utopia for Beginners

Take Charge in 2011. Now that several years have gone by since its publication, we asked Doc if and when customers will actually take over control. He does not doubt the "if"; rather he seems more convinced than ever before. But we need to prepare for a bit of chaos, he said. This is very much in line with the chaos we expected to come from the PC, the internet itself and the smartphone.

How is Utopia working out for Ya?

Doc Sears continues: "On the 10th anniversary of The Cluetrain Manifesto, David Weinberger and I, two of the authors, had a session at Harvard in one of the law school classrooms. The title of that talk was 'So How is Utopia Working out for Ya?' All because the Cluetrain was considered a Utopian document. It’s been twice that time since then and Utopia is still pretty far off. At the same time, I think we’re closer to it than ever. I have no doubt that the ‘intention economy’ (the theme of my 2011 book) will happen. I thought we were late with publishing, but in fact we were ridiculously early. And we may still be early. But, at that time, we didn’t have new options, like blockchain. If anything, there are far more violations of privacy and it has made the web a much worse place. GDPR is helping in certain ways. The basic idea behind the Cluetrain was to take the customer’s side. It showed the potholes in the marketing machinery of companies; completely lacking empathy and out of touch with what customers really want, and lacking any real conversation."

Utopia is about relationships

The VRM-concept that formed the basis of Doc Searls’ book on the intention economy shows the same lack of real relationships. It also shows what needs to be done: self sovereignty, customer ownership of data. But let’s start with the crucial turnaround that Doc foresees. From CRM to VRM, what problem does it solve?

"The original idea behind CRM was that there would be software and services that would help companies truly relate with their customers. Let’s not forget that the middle name of CRM is relationship. The idea was that it would be about relationships. What happened was that it turned into customer records management. And it turned into a vast business for keeping track of customers, but not especially relating to them. The sort of paradigmatic case here is that any one of us should be able to change our address, change our last name, change contact information, with every company we deal with, and do it in one move. That would be VRM. And ideally, VRM would meet CRM. VRM would be a way that people could actually relate to multiple companies in standardized ways. CRM has not changed very much, just new things have been added to it. CX (customer experience) for instance, and social CRM was big a few years ago. The idea was that you follow people on social media, and you connect with them there to try and relate to them. This was mostly driven by Marketing. Yet mostly Marketing was detached from actually relating to people. Marketing really never touched the customer. This is no different today, it’s just a lot more rationalized, and a lot more complicated. It has become infinitely more digital and it’s full of data. And it’s still bullshit like a few years ago. Even worse. There’s not another human being involved; the customer is just someone to gather data from. And the data is almost all based on spying on people." Doc Searls

The Cluetrain Manifesto, 1999

Markets are conversations. Their members communicate in language that is natural, open, honest, direct, funny and often shocking. [...] Most corporations, on the other hand, only know how to talk in the soothing, humorless monotone of the mission statement, marketing brochure, and your-call-is-important-to-us busy signal. Same old tone, same old lie.

4 Visit and read https://www.cluetrain.com/
5 See https://cyber.harvard.edu/events/2009/06/cluetrainat10
Surveillance capitalism

Searls continues: “Quite frankly, had companies not spied on people, we would not have the GDPR, we would not have the CCP in California, we would not have most of the new digital privacy laws that are coming along. All of which, by the way, are largely directed against the big companies and forget that this spying on people is endemic. It’s massive. You can’t go to a website, even non-commercial ones, without knowing they’re tracking you. It really is an offense against all that is sensible in the physical world. They put up the cookie notices saying we’re trying to improve your experience, please click, accept us improving your experience. And that experience continues to be one of spying on you and giving you advertising or spying on you just so they can do more marketing with the data. The data that they gather is toxic, and it’s poorly anonymized. And all the rest of it is beside the point – it is in, fact, spying. This is all very eloquently explained in Shoshana Zuboff’s book Surveillance Capitalism. The whole issue here is whether you can believe that free customers are more valuable than captive ones? Many market problems can best be fixed at the customer side, such as the one I gave about changing your address. And we have plenty of evidence that this could be done to the entire internet. We can fix these things. The thing is, we have to fix them from our side, we can’t fix it from their side.”

Self sovereign identity

This leads us to the question of what needs to be done to achieve this power shift. While there’s clearly lots to do, the one thing Doc keeps on stressing is the notion of getting an economic system installed that’s based on self-sovereign identity (SSI).

"SSI (or just self sovereignty) is the biggest thing. VRM has always been about self sovereignty. The term sovereign has mostly been applied to countries. It’s also used as a synonym for, say, coins. You know, a sovereign token is a coin you can use. But sovereignty, a domain that an entity controls, is a critical concept. In the physical world we are embodied animals, we live in our bodies, walk in spaces that require respect for who we are and what we are. When I wave my hand, or if I’m writing something that’s a self-sovereign act, my ‘self’ is in full control of this, I have independence. I have autonomy. I have control. Theoretically speaking, GDPR was developed in the absence of us having full control of ourselves in the digital space.”

We are all digital beginners

A crucial point in our discussion is about understanding, or better, the non-understanding, of the whole change that the internet is bringing to our new lifestyles. Doc Searls, being a veteran ‘internet watcher’, makes it clear: in this new era we’re all just beginners.

“What the internet did was complete the process by which we become digital beings. We are not just embodied animals anymore, we are digital animals. We live in a place that isn’t a place. And this is a really critical point.”

Searls continues this theme: "I’m currently in New York City; we could be anywhere, we could be in offices next to each other, where there is no distance here, but we see each other. In a functional sense, the internet eliminates distance, it’s gone. It also eliminates gravity. It’s a little bit like suddenly we’re in space, we have no weight. If this were to happen to all of us in the world, suddenly, it would take a while before we figured out how to live there. What would that be like? When we don’t have gravity anymore and don’t have distance anymore, how do we get along? How do we preserve privacy? How do we bring our embodied understandings of ourselves as far as we can into this new world because we don’t give up our bodies? We’re still here. We’re still discovering what that means. How should we be with each other? How can we continue to respect each other? How can we start respecting each other in new ways? I think the biggest work that needs to be done, that needs to be started, is just beginning to try to understand what it means to be digital as well as physical and where those two connect.”

Doc Searls

“I think the biggest work that needs to be done [...] is just beginning to try to understand what it means to be digital as well as physical and where those two connect.”

Doc Searls
companies is to be ready for customers showing up not just with a complaint, but with constructive help. I mean, it’s so crazy that companies are trying to get data on people, when people actually have the best intelligence about the company and its products. If you’re a good company, making good products, or with good services, you should be able to welcome people’s help. They’re out there, millions of them in some cases. What can you learn from them? Instead of just spying.”

Sandra Matz - The end of advertising

Around a year after we invited Sandra Matz to share her thoughts on Cambridge Analytica, we received a message from one of the other people present at that event. It was Moran Cerf, a famous neuroscientist and professor at the Kellogg School of Management. He wanted to thank us for bringing them together. It turns out we’d been the Cupid of a new relationship that started from the event. On occasion they now work together, where they combine neuroscience with social science, as in their project on internal echo chambers. It’s a hopeful project that could lead to building bridges between people with different ideologies who have the same personality traits. One of Sandra’s personality traits is that she’s a naive optimist (as she told us). “Which is a positive thing, because you need to be a little naive to put energy into things you believe in that need to be changed.” And what needs to be changed is the way advertising works, how we get overwhelmed with useless messages and overpowered by the Big Tech corporations and their advertising platforms. “This is the end of advertising,” Sandra told us. And it’s also the beginning.

Her Utopia for Beginners implies giving consumers what they (really) want, breaking up the Googles and Facebooks, more local platforms, less power for brands, and higher value placed on caring jobs.

Sandra Matz is an Assistant Professor of Management at Columbia Business School in New York. As a computational social scientist, she studies human behavior and preferences using a combination of Big Data analytics and traditional experimental methods. Her research shows that “Money can buy you happiness”, which leads to the conclusion that organizations knowing you better could actually contribute to your happiness. Sandra Matz is an expert in personalized digital marketing and persuasion and has the accolade of being among the “Top 30 Thinkers under 30”.

Truly knowing the customer

Matz’s research shows that people are happier if the choices (products) they get presented with reflect their actual lifestyles. Therefore, you need to ‘know’ the customer. We ask her about the Utopian view on this – what will the future of ‘knowing the customer’ look like?

“I think, at some point, what’s going to happen is everything will become a lot more integrated. So, you probably won’t even feel like you’re a consumer anymore. My prediction is
that once we have these contact lenses, and glasses, and augmented reality, it just all becomes part of one experience. You can't really distinguish anymore between what is an ad and what's the stuff your friends are posting. This is going to become a lot more real. Once we have this, it's basically just walking around and getting personalized content all the time. And it's not necessarily obvious where it's coming from, or that it is an ad. Because once organizations become so good at predicting what people want, they don't even have to market anymore. So, I think the idea, like the whole concept of advertising, is going to shift a lot towards a recommendation style. It's the end of advertising."

Experiences taking over brands

And what does this mean for brands, we wanted to know. "I think that the big thing is, and everybody's saying this but nobody's really doing it, we really must start thinking from the perspective of the customer. Advertising goes away. If they're not doing a good job anticipating what consumers want, they're going to become extinct. Right now, it's mostly lip service. They're saying, 'we're customer centric.' But it's not really starting with the customer. You've got to know what the need is. If you don't go all the way with customer centric, it's not going to play out for you in the future. If you really understand what people want, you don't have to push it. Companies have to deliver the best product, and not the best marketing message.

"So, I think that's where the discrepancy is nowadays. You can have a product that's kind of mediocre, but if you're doing good marketing, you're probably still going to win. If it's going to become more and more pull, then you have to deliver the best product. It actually becomes a pull factor. This is not some kind of advertising approach, but is more driven by the needs of the consumer. It's just going to melt together. It's about having certain experiences, not about a company. I think brands are going to be much more important in the future. It won't be about the brand, but about a seamless experience where you go about your life, and then whatever you need is provided to you in the moment. Even if you just think about something, it will be integrated into your reality. So, in that sense, brands are going to be less important because it just becomes part of your day-to-day life. And brain interfaces might take a while, but the AR piece is not too far away."

Friending your brand

But what's the benefit of being known, of organizations knowing you better? Matz responds: "I think you can compare it to your relationships. What you like about your friends is that they know you. They know you. And you don't even have to say what you want because they already know. So, you don't have to make an extra effort to say that tonight you want to stay home and want to order Chinese. They already know you so well that this is something they might suggest by themselves. And I think that's something we appreciate a lot in close relationships. It's something that people don't really like about the way advertising is currently working, since nobody gets 'me'. They constantly send me stuff that I'm not interested in. Constantly being spammed with stuff that's not even vaguely related to what I like, or to who I am as a person. So, I think this is all about the idea of mimicking interpersonal relationships. The big benefit is that it's no longer restricted to our close relationships, it's potentially going to be a lot broader in giving people what they're really interested in."

"Once organizations become so good at predicting what people want, they don't even have to market anymore."

Sandra Matz

We're all beginners in a world without advertising

Is it truly the end of advertising we want to know, because you can also argue that it is just the beginning? "It probably isn't different. But if we really want to get people to feel that it's not just the same thing wrapped in a different paper, calling it the 'end of advertising' is a better way of moving it forward. I'm sure people will be a lot more skeptical if we're saying it's just the beginning of advertising. Advertising is so strongly associated with manipulation, with getting people to do something that they don't want to do. And even the kind of language we use to talk about it makes a difference. I can say it's the end of advertising and it's the beginning of something new like "recommendation", although I don't know what the new term might actually be. But I think in that sense, it might make people a lot more open to subscribing to the new model."

On getting spoiled and the higher risk of hacking humanity

An economy based on best friends serving you and anticipating your needs sounds really Utopian. But aren't we getting spoiled? What are the side-effects? "It depends on how you see it. If it's like in a partnership, you probably wouldn't call it spoiling. So, it's basically about the way we think about spoiling. We need to think about the unintended negative consequences. For instance, if we're giving a person what they need it can potentially be harmful to other people. The same with kids. If we give them everything they need, they don't have the ability to fail. They still have to make an extra effort to say that tonight you want to stay home and order Chinese. They already know you so well that this is something they might suggest by themselves. And I think that's something we appreciate a lot in close relationships. It's something that people don't really like about the way advertising is currently working, since nobody gets 'me'. They constantly send me stuff that I'm not interested in. Constantly being spammed with stuff that's not even vaguely related to what I like, or to who I am as a person. So, I think this is all about the idea of mimicking interpersonal relationships. The big benefit is that it's no longer restricted to our close relationships, it's potentially going to be a lot broader in giving people what they're really interested in."

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Machines will know so much more

We know from Sandra’s research, that personality traits are very important in the current models. The so called Big Five personality traits are used as predictors of our behavior. Facebook is a great platform for calculating your Big Five personality. These traits are very powerful now, but will they become even more powerful? “I think they’re actually becoming potentially less powerful. They’re powerful now because we can understand them, and because now most of the content is still created by people. In the future, if everything is just purely prediction and machine intelligence, it’s going to become less important, because then the computer can actually make sense of thousands, millions of dimensions, and not only predict what you want, but also know how to communicate that. The Big Five is to some extent reductionist. As we’re moving away from humans creating content, anything that is aggregating and diluting the actual behavior is probably going to be much less important.”

Creative computers and the future of human work

Machines creating the content. Should this be seen as positive or negative? If machines are becoming creative, how will it lead to a happier society? “This is also what the creative industry is very worried about. Right now, everybody is saying creative jobs are here to stay. Because that’s what makes us human, machines can’t really do it. But that’s still to be seen. On the other hand, what is really difficult to replace are interpersonal relationships. All the things that are related to caring, looking after other people, things that actually for most people are pretty valuable and that makes people pretty happy. Right now, we just don’t take enough time and it’s not valued enough. These kinds of jobs are not paid really well, all these social jobs. If all the other stuff is being replaced by machines, I think this is one of the things that is probably going to stay. And it could also help people to be happier. Not just because we’re happy when we’re taken care of. But also very much because people are really happy when they help other people. But currently it’s just a trade-off between you can either do something social, or you can make a lot of money.”

Getting there while Facebook is still around

Matz continues: “I think there should be some regulation for my Utopia to happen. You have Facebook and Google, the big players, they know everything about you. So, they’re going to dominate the market because there’s no way that smaller companies with the best product can actually get into that market. And without some kind of regulation it won’t happen. They have all the data about you from all different sources and from all people around the world. And there’s no way for a startup that really is taking this human-centric approach, and trying to think about the customer first, to enter the market. We should talk about breaking up companies like Facebook and Google. I personally think that might be a good idea. We’ve seen it in other industries. But how is it possible that we’re not even considering doing this? In the context of something that’s as powerful as social media. I think it all really depends on the next few years in terms of how politics are playing out. If governments break up the really big players, maybe something’s going to change. If that doesn’t happen, then I don’t see the day of them stopping doing what they’re doing, because it works beautifully for them. And then it would be incredibly hard for someone outside to come in. The only other big players that we see right now are like the Chinese ones, and they’re in no way better.”

What are the chances it will happen without interference? “Right now, they’re pretty slim. They’re pretty slim for two reasons. First, there’s just no right incentives to play according to the rules, and to do it in a way that benefits consumers most. The second reason is coming from consumers themselves. Because there is this distrust, we’re not rewarding companies for being transparent about telling us what they’re doing. Instead, everybody’s saying ‘they’re using my data’. Well, they’re the ones telling you that they’re doing it. So maybe those companies should be rewarded in comparison to all the other companies that are probably doing it too, but are just not telling you. Right now, most of the news we hear about personalization, whatever it is, is pretty negative. A strong distrust, to some extent, is undermining a positive development. Because it just means that it pushes companies to do it in the dark. The public distrust is just not helping.”

Do we really need big corporations?

We’re taking a last shot at Utopia, a way out of ‘big is beautiful’ and back to an economy based on personal connections. Matz concurs: “My sense is that probably smaller to some extent might be more useful. For a long time, we were connected to small communities, and everybody knew everybody. It was mostly just interpersonal exchanges. So, it wasn’t a big cooperation, it was just like me giving you my chicken and you giving me whatever. Now that society is getting so connected, I wonder if this could actually be a business model that would work well. Even a societal model, where we don’t need corporations. When everything I can get is basically from other people being connected — it’s all about personal relationships. This is really going back to basics. It would make a lot of things harder, but people are more likely to trust each other. That would be a nice Utopia again. Why do we need the big corporations? Why can’t it be managed between two people? Much like Airbnb, Uber, it still needs to be organized, but it’s much more person to person. And who knows, maybe someone will come up with a brilliant system where you don’t even need the broker.”

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7 The Big Five Personality Traits
https://en.wikipedia.org/wiki/Big_Five_personality_traits
Vision III
The industrialization of the higher needs

This Utopia is based on two machine learning experts, both specialized in the impact of ML on our wellbeing. Professor Rafael Calvo, Director of the Wellbeing Technology Lab at the university of Sydney, and Nell Watson, Singularity University expert in machine intelligence and tech philosopher, sketch a Utopia in which our higher needs such as self-actualization, deep relationships, and autonomy, are supported by technology. According to them, companies need to decide what values they want to integrate in, and stimulate with, their products and services. Especially since it is a myth or an illusion to be able to ‘not influence’.

In order to reach this Utopia...
Organizations are advised to rethink their products and services in a way that truly helps customers to live a happier life. This way they address the growing market for purpose, wellbeing, happiness and self-development. Welcome to a Utopia where you can become the person you’ve always wanted to be thanks to technology.
Rafael Calvo - Beyond damage control: IT for wellbeing

Our conversation with Rafael Calvo started two years ago and it was obvious that we needed to go back to him for further insight. In his book *Positive Computing: Technology for Wellbeing and Human Potential* he makes a case for building a digital environment that can make us happier and healthier, not just more productive. Going beyond productivity is also the case we’re making in our current digital happiness project. Nowadays technology companies pay a lot more attention to terms such as positive computing, happiness and wellbeing. Rafael Calvo tells us that initiatives are now sprouting like mushrooms. But still, many of the initiatives are just about damage control for the negative side effects of technology. The next step is clear: making a deliberate choice for building something positive and good. This is becoming more likely now that public awareness of the non-neutrality of technology platforms has grown. In this Utopia we will need to take sides.

Rafael Calvo is Professor and Director of the Wellbeing Technology Lab at the University of Sydney. In 2015 Calvo was appointed a Future Fellow of the Australian Research Council to study the design of wellbeing-supportive technology. A keen player in the push for more ethical technology design, Rafael is a member of the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems, a part of the UN’s AI for Good Global Summit, and joined the Leverhulme Centre for the Future of Intelligence in 2019.

Anxious to influence positively

We start our conversation by asking about recent developments in his field. According to Calvo, things are moving in the right direction: “It has become increasingly clear to companies that technologies mediate the way we make ethical decisions. When you have a platform like Facebook, it allows people to do good things and bad things. This comes with the technology. Having the technology changes us in a way that makes us more likely to engage on this sort of behavior. So, it changes our own nature and our own decision making.”

Despite the growing awareness, Calvo mainly sees attempts to limit the damage caused by persuasion and manipulation and a reluctance to go one step further and influence positively. “Facebook, Google, and a lot of other people will tell you that the policy of promoting certain factors of wellbeing is a very risky approach. Because it has been
used by several governments, for example, to promote bad policies. It’s kind of a libertarian philosophy that they think there has to be minimal intervention because any external intervention is limiting personal freedoms. They don’t want to be pushing certain agendas, even if they are wellbeing agendas. The current belief is still that a platform can be value-free. But that idea is outdated now that technology has such a big impact on our lives. As soon as something has an impact, there are values attached to it. Even if you decide to do nothing, you still make a decision, so there are values in play.”

Calvo continues: “Take gender. When I talk to ML colleagues, most of my work until a few years ago was on ML, where what we were doing was reducing the errors and optimizing the system. We didn’t think much about representation. If you think about an algorithm, it is a pattern recognition for gender; the developer will be working on an algorithm that classifies with the most accuracy possible between female and male. But the female-male classifier is already a decision based on values. Why not have a continuum of genders, or three, or four? In the middle ages they had 27 genders, not only for humans, but also for angels and creatures. Many of those genders are illegal in certain countries where you would be stoned to death. I find it interesting how Utopia would mean something different in different countries. Obviously, there are certain behaviors that we should not allow. You could see how a tech company that wants to be a global company has to have global values and still needs to be nuanced. This is hard to achieve.”

**Ethical frameworks**

So, technology is value-laden, but how can developers with a technological background take this into account during their developments? Calvo responds: “I train engineers in many ways and often they don’t want to think about the values embedded in the technologies they make. They want to make gadgets and it’s fun to solve problems. Philosophy is not something the majority of engineers think about. There is an increasing number of initiatives that allow engineers to use an ethical framework enabling them and the designers to start making decisions in a more systematic way. It has been really interesting for me to see, for example, that many of the factors we took into account in positive computing, have become part of these ethical frameworks. Because they are supporting wellbeing and in the bigger sense, eudaimonia. The ethical frameworks tend to include autonomy, wellbeing, and things like transparency, that allow people to understand why the system is doing certain things.

“But these same frameworks have a natural weakness when used in reality. It is impossible to prescribe what should happen in every conceivable scenario. In practice, people constantly change ethical perspectives: in some contexts we consider norms and values more important; in other contexts we highly value the intention of the actor; and in others we find the outcome or the result of the action the most important. It is difficult to take this into account in frameworks. Humans have to keep on playing an important role in designing ethical or humane technology. Critical thinking and a developed moral compass will help.”

**Technology that serves two masters**

How will this develop? What will change in human-machine relationships? “We are having relationships with machines for thousands of years. Machines shape the way we make decisions and the options we have. If we don’t have a hammer we can’t take the decision to make a piece of furniture or to do something bad with the hammer. When I buy a hammer, the hammer will only do things I want it to do. The ethical implications of the hammer are very different from modern technologies. What is different is that machines are more autonomous and that they are agents now. The tools that we now use have sensors that provide data to companies for their own interests. We don’t really own these new tools, we have simply integrated somebody’s agents with their own interests into our lives. And that is one aspect we don’t tend to think about. We often have the idea that we own the technology and that it only does what we want it to do. We forget they have a conflict of interest. So modern technologies are agents in two ways: on the one hand, they are increasingly ‘acting agents’ with a certain degree of autonomy, and on the other, they are ‘representatives’ such as real estate agents. We often overlook the importance of this second meaning. A smart speaker keeps getting updates and changes along with its supporting company.”

Calvo mentions two recent experiences with Google Maps in the U.S. In his first example, Google Maps was occasionally navigating with descriptions such as ‘Turn right after McDonalds’. Google says it does this to get closer to natural conversations, but critics say this opens the door for product placement in Google Maps. Although it is still unclear whether this is deliberate product placement, Calvo’s point is clear: who is Google Maps serving? His second example also
shows how Maps mediates how we experience the world and can have a conflict of interest. "On Monday I had to drive to Houston. We passed through this little old town from the 1800s, which is quite rare here. Maps didn't even show all the restaurants and shops. I was going 60/70 mph and would have liked to stop for coffee, but Maps is market driven; these local companies don't have the money for advertisement. In the U.S. innovation goes so fast, but it is driven by capitalism."

Less global, more local

We mention that people in the U.S. could have different values and wishes regarding a product like Google Maps than people in Europe, Russia, and China. How should global companies deal with these different cultures and societies and a demand for highly individualized and personalized products? "I saw some advertising from a company that said: ‘We are a human scale technology company.’ That was an interesting framing. You can't have human centered technology at a scale that is not human, because there are certain values that come with scale. There are certain aspects of Google that are, because they apply to every human, not human. But I don’t think there will be total individualism because people need communities, even though there is a crisis of globalism. There will be products that are oriented to individual communities. No global products for worldwide distribution, but a resurgence of technologies that support autonomy by bringing up smaller communities. You can also see this in the geopolitical landscape in which some countries are trying to break out of some of the limitations they see in globalization. I associate this with autonomy and I think there will be more opportunities to give a sense of community. As tech designers we will have to look at how to build products that create meaningful communities with meaningful connections. And I think, in that respect, technologies should promote certain things like autonomy, competence, and relationships, but they should also hinder bad factors like greed, delusion, pollution and hate.

One thing is certain for Calvo, these new smaller communities will likely be, at least partly, supported by technology. And these digital environments can't be value free. That’s theoretically and practically impossible. Technologists have to decide whether or not to promote or to diminish values and characteristics. Even if they decide that they don't want to know about this and they ‘just want to build something', they make the decision to not take responsibility for the things they build. As Calvo says: “People rightly feel that you are promoting certain values. People will say, ‘If I want to be greedy, then that’s allowed’. It’s a freedom they have. That is entirely true, but again: we create environments and they have an impact whether we want it or not. So, we have to choose if we want these environments to reduce or increase the tendency for greed.”

Nell Watson - The augmentation of the human heart and soul

We speak to Nell Watson just before she goes on a holiday. We’ve known her for more than three years, since we invited her to our Unorganized event, and we follow her work closely. She regularly features in big media platforms such as the BBC, Wired, Forbes, and The Guardian as a machine intelligence specialist with a philosophical view. Her Utopia is created with the help of technology. If we implement it the right way we could use machine intelligence, machine economics and machine ethics to become better, more complete and satisfied human beings. We could understand other people better, become more self-actualized and ultimately augment the human heart and soul. In this Utopia there is an industrialized market around the fulfilment of our higher needs.

Eleanor ‘Nell’ Watson is a Singularity University expert in Machine Intelligence, educator, and tech philosopher. She helped to develop pioneering Machine Vision techniques at her company Poikos (now QuantaCorp), which enables fast and accurate body measurement from two photos. Watson is
involved in many different initiatives, for example she serves as Vice-Chairman of the IEEE P7001 Committee creating new safety standards for autonomous systems, and she is the Co-Founder and Chairman of EthicsNet.org, a community teaching pro-social behaviors to machines. She serves as a Senior Scientific Advisor to The Future Society at Harvard, and holds Fellowships with the British Computing Society and Royal Statistical Society.

When we ask about her view on happiness and Utopia, Watson starts with a quote from Leo Tolstoy’s novel Anna Karenina: “Happy families are all alike; every unhappy family is unhappy in its own way.” Watson sees the same principle for societies: “Every society is unique, but in order to become truly happy they all need to tackle a bundle off prerequisites. Failing on only one of these prerequisites will lead us away from Utopia. One of those prerequisites is trust. It is an extremely important predictor of happiness in societies. Trust makes coordination a lot cheaper, which causes trust societies to have a high GDP. History teaches us that a society increases in complexity when trust and coordination are at a sufficient level. Should a society lose its ability to have strong trust and to coordinate well, then its complexity will reduce to a level that is once again sustainable.”

The interdependence revolution

Watson thinks that, once again, society has the opportunity to ‘level up’ in complexity. She calls this ‘The Interdependence Revolution’, and it’s not only an opportunity but also a necessity: “If we don’t get this right, we cannot advance to the next level of civilization. We cannot advance to be able to make this civilization sustainable. If we fail at this, we will run out of resources. We will get too mired in our environmental catastrophes, and our civilization will collapse. So, it’s kind of like, it’s one or the other, and it’s really all dependent on the social technologies.”

Watson asks us to take a look at Maslow’s pyramid of needs. “We have gotten quite good at meeting our lower needs, such as food and shelter, and we now have the bandwidth to attempt to meet our higher needs, such as love and belonging, self-esteem and self-actualization. But how do we meet them? We are trying our hardest, but we don’t have good solutions. We haven’t yet industrialized the meeting of those higher needs.” Watson thinks there’s an amazing opportunity coming in the 2020s to begin to industrialize the meeting of those higher needs. And this industrialization will come through the confluence of three elements: machine intelligence, machine economics, and machine ethics.

Element 1: Understanding the ineffable with Machine Intelligence

We are intrigued and ask her to explain these elements. "Machine intelligence gives us the ability to understand the ineffable. To make sense of chaotic situations where there are thousands of different interdependent cross correlated variables, or things we can’t really put into language. Machines can help us with that. They are now, for example, helping us to analyze thousands and thousands of different scientific papers, to look for areas in which knowledge is missing. Or to predict how certain alloys of different metals put together might create new interesting material effects. Machine intelligence is becoming like a genie in a bottle. We can ask for stuff and it will figure out how to give it to us. The form of machine intelligence we’re seeing now is kind of like the ultimate way to manage by objective: you set the agenda, you tell it what you’re trying to do, or you give it some examples, and machines will be able to take that suggestion and work with it. So that’s machine intelligence, we have two other very important elements as well.”

Element 2: Aligning incentives with Machine economics

Watson cites machine economics as the second important element for industrializing the meeting of our higher needs. “Machine economics is how I describe elements such as blockchain, distributed hash table technologies, and crypto because, generally speaking, that’s what they’re involved in. Think of fungible tokens and aligning incentives in different ways. This enables shared knowledge, aligned incentives, increased trust, in a decentralized manner. And this technology enables us to get people to work together and to coordinate and to share information where they otherwise might not have a desire or an incentive to do so. These kinds of technologies can help to align incentives as well. Because we can tokenize all kinds of services, or all kinds of interactions. So, we can give people little tips, micropayments, for doing small tasks. This means that we can increase the complexity of society.
"The worlds of crypto and the worlds of AI are very different. Because crypto is very deterministic, it’s very decentralized. And the world of AI is very stochastic, it’s very random. We are starting to see a convergence of these two worlds. Initiatives like oceanprotocol.com and singularitynet.io, are kinds of networks that marry AI and blockchain to make it easier for people to trade in information securely, to trade their AI models securely, or to trade some data securely to others in a way that guarantees payments if it is used. And this is leading to a sort of an Uberization of AI services. In the next one to three years, we will start to use this kind of Uberization of AI problem solving. So, you can say ‘I have a problem, I would like it to be solved’, or ‘I have some data, I would like somebody to make sense of this’. And then people can compete to offer you different AI services and models that work with that. So then you might have the premium option, or the regular option, or you can have the cheaper option where you can bundle in with other people who have similar issues, just like you do with Uber. We are transforming into a world where instead of needing six months to apply AI to a problem, you can do it in six minutes or six seconds. And this is going to change everything. This is when AI gets real, when these things are so integrated, and so automatic, that these bundles of different services just happen to materialize whatever we need when we need it without even asking. Just like a really skilled butler or a comfortable kind of ‘Life Manager’ without you even needing to make a request. Just when you happen to be thirsty, or just when you happen to be ready for that glass of brandy, it just materializes. That’s what machines are going to be doing for us in the coming one to three years."

**Element 3: Depolarization with Machine Ethics**

The third element in Watson’s interdependence revolution is machine ethics. "This is about value alignment, about teaching machines our preferences, about teaching the things we like as a society that generally make life a little bit nicer. And machine learning happens both ways. It’s not just machines learning from us, we learn from machines as well, because we’re interacting with them. It’s inevitable. And so that means machines have a lot of opportunities to influence us for good and for bad."

**Augmentation of the human heart and soul**

Watson continues: "When you put these three elements together, you get the intelligence to make sense of incredibly difficult problems and to create meaningful answers to them. You get the ability to align very different people together to solve problems in a way that is non-zero sum. That’s not about winners and losers. And you get, through machine ethics, the wisdom to apply this to the finest of purposes, that actually make people happier and more fulfilled in a meaningful way. That’s what is coming to you in the 2020s. Not the augmentation of human muscle as we had in the industrial age, not the augmentation of the mind that we had in the informational revolution. This is about an augmentation of the human heart and soul."

We ask Watson for some more examples. "If machines can perhaps help us to share our life experiences in ways that resonate with other people, then we will become more self-actualized. We’ll be better able to deal with the challenges of existence, and to be able to better understand our capabilities and our talents. And where to best apply those in the world from the most meaningful results that will take us to self-actualization. So, this is how we can begin to industrialize the meeting of these higher needs. And that’s going to lead to a society which is transformed in its capability to really construct fully functional human beings."

"There will be a kind of Cambrian explosion, if you will, of new products, services and ventures, which begin to meet these kinds of needs in the 2020s. I think there are many opportunities to connect with consumers in ways that enhance the brand of an organization, by helping to meet their needs. So, in a way that is welcomed and meaningful. For incumbents this means they need to rethink themselves for the industrialization of our higher needs. We’re likely to see an incorporation of certain brands with their own little avatar or mascot. And through those friendly little avatars, corporations will be able to have more direct conversations with their customers in ways that are less about selling and more about solving real problems. Those kinds of little conversations are about truly building relationships with people to understand how to best meet their needs."

**Automated Externality Accounting**

Lastly, Watson argues that in the coming industrialization of our higher needs, there will also be a need to better understand the broader implications of products upon the planet, upon society, upon non-human animals. She gives an example: "When you go to the local convenience store, and you get a bottle of pop or a bag of chips, this will give you 10 minutes of convenient refreshment, but you’ve created an externality that may last for 10,000 years. And other people in other parts of the world far away, and people who aren’t even born yet, will have to deal with your mess for your 10 minutes of convenience. Companies don’t have good
technologies at the moment for being able to track these externalities, to understand who made a mess and make them accountable for it. That mess is not part of the pricing strategy and we’re not accounting for it. I am very much engaged with the idea of ‘Automated Externality Accounting’. This will help people to manage spillover effects like pollution in a better way, and to bundle it in with the price. This needs to change, because the world is accelerating at such a high degree. We cannot bring everyone under the marquee, we cannot bring everyone under this big tent of giving them a wonderful developed world lifestyle unless we figure out how to protect our environment. And we are running out of time. It’s like we’ve put on a diaper that’s been very convenient, but now it’s getting rather full.”

Watson concludes: “These elements will help companies to position themselves for the 2020s. Because as we start to account of externalities, and as machines start to make decisions about what products people should be buying according to their values, those companies that have already done the work, and figured out how to make people maximally happy and not to mess up the world, are going to be in a very good position. And the laggards that haven’t bothered to do the work, those are the ones that may find themselves outcompeted.”

“There will be a kind of Cambrian explosion, if you will, of new products, services and ventures, which begin to meet these kinds of needs in the 2020s.”
Nell Watson
Vision IV
Making Utopia work:
The power of a great narrative

In this Utopia we combine the Utopias from internet professor Luciano Floridi and happiness professor Claudia Senik. Both professors look at the world from a meta perspective and sketch the boundaries and prerequisites for their Utopia. A unifying story is key. According to Senik, we have lost the sensation that we live in a society with other human beings. Floridi foresees a polarization of jobs and an unequal distribution of wealth. A well felt unifying story is necessary and could be about fighting climate change, but also about finding solutions for current winner-take-all models so the whole society can flourish from the benefits of new tech. Working on solutions for the greater good brings people closer together and if the story is right, other solutions for problems such as subconscious manipulation by technology and the lack of room for creativity will follow. This Utopia is about finding purpose, uniting people, and turning our never-ending chagrin into an unstoppable power. Floridi phrases it well: “The most important characteristic of people is their incorrigible dissatisfaction. It has driven us out of the caves into the country, from the country to the cities.”

In order to reach this Utopia...
Organizations are advised to reinvent themselves and create a narrative that connects with the current zeitgeist.
Luciano Floridi - Controling the blue and supporting the green

Visiting Oxford is like walking through a Harry Potter book. Its medieval architecture goes back to the early 15th century and, in fact, was the scenery used in many of the Potter movies. Students are everywhere, carrying their books silently while church-bells are ringing. If Silicon Valley is the center of innovation, Oxford is the center for information ethics. We’ve known Luciano Floridi since before he went to Oxford, and we’ve visited his office on St. Giles’ Street several times. One time, it must have been around 2014, we were there to work on future scenarios, together with Michael Osborne and a team of AI researchers. It was shortly after the Oxford publication of Michael Osborne and Carl Frey on the future of employment (and how susceptible jobs are to computerization). This research reached pretty much all the international media. AI’s impact on jobs is again a topic Floridi wants to address in our conversation. And there are more things to be concerned about, he says, like the re-animation of the world through advanced technologies. We tend to think there are ghosts behind or in the technologies. It’s why we become even more susceptible to nudges and lose the control over our lives. Floridi presents two Dystopias and one Utopia. In Floridi’s Utopia, we educate our children and teach them that machines are not animated. Furthermore, there will be blue and green taxes: blue stands for the tech giants, and green for a sustainable, green economy. And since it’s Utopia, he dreams of a world in which those who don’t like their jobs get compensated more than those who do.

Luciano Floridi is Professor of Philosophy and Ethics of Information at the University of Oxford. Floridi is one of the most influential advisers of the European Union on the field of information ethics. He also advised Google how to deal with the new right for citizens to be forgotten on the internet. He is director of the Digital Ethics Lab, an alliance between Oxford University and business. The aim of the lab is “to spot and increase the opportunities of digital innovation while reducing risks and avoiding shortcomings”. Among the companies that support the Lab are organizations such as Tencent, Google, the European Union, Microsoft and The Rockefeller Foundation. Our own organization, Sogeti, also features on this list.

Dystopia 1: AI will re-animate the world.

Floridi apologizes for the fact that he first has to take some time to explain something about human nature. “We have
perceived the world for a long time as it was imbued with spiritual forces, in a sort of animalistic way, the river had its own power, the wind, the seasons. Now we move away from that. We have a very physical material, almost mechanistic, almost Newtonian view of the world. These days, no one thinks that trees have souls. But that tendency of the human hasn’t changed. When you see action, you see intention, that hasn't changed at all. So, we are reanimating the world through forces that are entirely physical. These things, for example computers, interact with me, operate with me, they may anticipate my needs, or they may suggest possible alternatives, etc. This is a real animation of the world that comes with some potential risks. And we may forget that the thing is not alive. It doesn’t have a ghost indoor, so to speak, it is a screen, it doesn’t speak to me, it doesn’t communicate. But we anthropomorphize the whole thing."

"Educate your children, make sure that they don’t believe there are ghosts in the machines." Luciano Floridi

so-called small ‘nudges’ that Floridi is talking about. As he says, it is only a by-product of the animistic phenomenon. But one that we deal with collectively on a daily basis. His father recently spent hours watching YouTube because Floridi had sent him a link to a video. At the end of the video another new video was shown, and another new one, to which his father responded that it had become very late because it went on and on and on. Floridi has written about exactly that irony in his books and article. “The question now,” he says, “is whether we could have spent the time in any other way. Not if the videos were enjoyable to watch.” Floridi sketches a world without a stop button. “Slowly but surely the algorithms are pushing us in a certain direction. We must be able to intervene in this. And educate your children, make sure that they don’t believe there are ghosts in the machines.”

Relocation of autonomy

Since Floridi spends a lot of time analyzing technologies, we wonder if there have been any surprises for him in the past few years. “One thing that I wasn’t quite so clear about a few years ago, is that autonomy is being relocated. As machines become more and more autonomous, the risk is that we are eroding our own autonomy. At that point it is very easy to see this shift in autonomy from man to machine. That wasn’t very clear to me at the time. What was clear, however, is that we are delegating, which causes a lack of responsibility. “The more the machine does things for me, the less I have to be worried. And the less I’m responsible, it’s the machine’s fault for what goes on.’ But it goes a bit deeper than that. All of a sudden, I am in the hands of that thing, rather than those events. So, if I end up watching anything that Netflix suggests, who’s autonomous here? The algorithm is learning from my behaviors and keeps suggesting for me, so that I’m watching everything Netflix tells me to watch. I might be enjoying myself, but that was not a choice. I mean, it was but I am not sure I could have done differently if I wanted to because by then I’m so dependent.”

Dystopia 2: Polarization of jobs

The second warning from Floridi goes back to the studies of Michael Osborne and others about the effect on our jobs. The labor market is going to polarize thanks to AI and Floridi points to the special nature of digital technology. He calls it a third-order technology. “An example of a first-order technology is an axe with which you cut down a tree. It is a simple and effective tool. We know second-order technologies from the industrial revolution. For example, cars can only function well in a system. You can’t do much with a car without roads, gas stations and garages. It is a system. We are now experiencing technology of the third order. An Amazon department store is fully automated. Computers control computers and the surveillance of those automated systems is done by automated camera surveillance. Man is, as it were, pushed out of the system, but above and below, jobs will continue to exist. The difficult jobs for the computer continue to be done by people. Getting a porcelain glass out of the cabinet; we will leave that to a person. People will keep on lacing their own sneakers. Deliveroo deliverers rush over the canals of Amsterdam. Not complex jobs, but difficult to perform by robots.”

Difficult

Skills

Easy

Computational Resources

Tie shoes
Iron shirts
Turn the light on
Wash dishes

Solving problems that require high degrees of skillfulness are difficult to automate. Complex jobs, like dish washing (or playing chess) are easy to automate. Source: Luciano Floridi (March 2019), “What the Near Future of Artificial Intelligence Could Be”, Philosophy & Technology
**Utopia**

At the end of our conversation we crown Floridi as king of Utopia. We assume that Utopia is a society as advocated by his Digital Ethics Lab: open, pluralistic, tolerant and just. Floridi comes with a surprising proposal for the polarization of jobs: “I think that the policy we need is about how we reward jobs. I mean, in theory, this is totally, totally Utopian. If you’re a professor at the University, and you do a job that you really enjoy, you should be paid less than the guy who cleans the professor’s room who does a job that he probably doesn’t like. He should have twice my salary. Imagine a Utopian system where you are paid not in terms of supply and demand, but in terms of the more terrible the job is, the better you’re paid. Now, at some point in a proper market that works, those two things are not separated. Jobs that nobody wants to do would demand higher salaries. But it doesn’t work that way.”

Then Floridi goes on to a different topic. He would have taxes for the “blue” and the “green”. Blue stands for digital giants such as Google and Facebook. The winner-take-all models must share their profits with the rest of society. The effects of innovation are thus distributed more fairly. Green stands for a healthy environment, the circular economy. To build a sustainable society, green and blue go hand in hand in this scenario. Compared to this, the problem of nudging algorithms is apparently just a piece of cake. This can be solved with the introduction of rules to stop invisible nudging. The outlined problem of job polarization can be tackled with a different appreciation for work.

Floridi insists several times that this will not happen. It is really Utopia! In the real world there are interests and lobbies and nobody wants to give up their status quo. “It’s not going to happen!” he adds again. But then he comes back to the question how he came to that throne as king. “My story got me there. People make sacrifices for good stories”. The king of Utopia has shown his people a future that they believe in and can long for. It is the story about the green and the blue future that is important. “You have to separate the content; you have to talk about the story”.

We conclude with an optimistic note about dissatisfaction. “The most important characteristic of people is their incorrigible dissatisfaction. It has driven us out of the caves into the country, from the country to the cities,” says Floridi. With a good story, this can put us in the hands of a circular economy.

**Claudia Senik - A recreation of the sensation that you live in a society**

A few days before our meeting, Claudia Senik was still at the Élysée. President Macron invited her to the presidential palace to converse with sixty other intellectuals and scientists. To outline his Utopia, as Senik told us. The French President had just toured the country for 2.5 months under the flag of “The Great Debate”. It is an attempt to temper the riots of the so-called yellow vests. There is unrest in France. Many people express their dissatisfaction with the situation by taking to the streets and protesting. There must be revolutionary change. We agree with President Macron that Senik is one of the right people to ask for advice. Senik’s studies have been an important source for us in our reports and we have met her several times since. Now we are connected to her via videochat in her hometown of Paris. In her Utopia, there are more opportunities to be creative and everybody has the feeling they have a place in the future. To achieve this, one important thing is needed: a shared story, or common enemy, or threat that connects society once again.
Claudia Senik is professor of Economics at the Sorbonne-University and the Paris School of Economics. Her main research area is the economics of happiness. She knows all about measuring happiness and participates in United Nations surveys that determine happiness scores per country. She was also co-author of the very first World Happiness Report from 2012.

A definition of happiness

Of course, the first thing you want to know from a happiness scientist is how we can best define happiness. She opts for a description of the psychologist Mihaly Csikszentmihaly, one of the representatives of the so-called positive-psychology movement. Csikszentmihaly wants to use psychological insights to make the whole of humanity happier, not just those with psychological problems. Senik dictates:

“Happiness is the right compromise that each person can find between two conflicting objectives, which are comfort and excitement”.

She explains: “So, comfort is having a shelter. Everybody tries to build the comfort, but if you do too much of that, then you get bored and depressed. Excitement is a pleasure, you know. But if you are over excited and only excited then you can become too nervous and unstable. So, each person has their own compromise, the optimal point, your cursor between comfort and excitement.” So, it’s about the balance. Proverbially speaking, the French are better at that: ‘Living as a God in France’ – we all know the proverb and we all want it the French way. But ten years after Sarkozy’s action plan, France is number 24 in the United Nations happiness ranking, behind Mexico. It cannot compete with the Northern European countries that have been leading the ranking for years.

The borders wherein our Utopia lies

Senik sketches us the borders of the dream land where happiness can be found, the new Utopia. It is determined by creativity, a social safety net and your own self-image. “Ultimately, it’s about control over that lucky situation, the ability to step in and out of your comfort zone and find comfort, or then want to feel the tension again.” The most important thing that we can conclude from this is that everything revolves around the fact that people are creative. We do not want to live life as a coloring exercise, but to create ourselves, to add to it. So, at the end of the day the happiness insights of Csikszentmihaly are about human creativity. Furthermore, our happiness is determined by our self-image, the feeling of accomplishments and living up to our own standards. And last but not least, whether there is a social safety net and whether you have enough friends that you can count on when you need them. That is one of the questions that is addressed in the World Happiness Index to which Senik contributes. The contours for a dreamland, the new Utopia, have thus been drawn conceptually.

Senik’s Utopia is dependent on the play between creativity, a positive self image, and a strong social network.

Senik continues: “So create a world of opportunities and progression, don’t give the impression of people that are stuck somewhere, and they will never progress and their kids will never reach the same level. I know that it’s not easy in our world. Maybe it’s not possible anymore. We must find it in other dimensions, to let people be able to expect that there’s going to be more, or that there’s going to be new things in the future and that it’s not just the repetition of the same old stuff.”

Five dimensions of a Utopian society and a warning

But what does Senik means by these other dimensions? Her story is about doing more different things instead of just working more, about capital building bridges in a society, about the importance of a common enemy, about keeping the creative person active and the media at a distance, nature and its importance. And it’s about the empathy that we have to recoup and finally about the danger that the truth is in crisis.

1. Basic income: Free money in the new Utopia?

“I think Universal Basic Income (UBI) is an answer to the job market. Historian Yuval Harari and others warn us that jobs are being threatened, we are becoming redundant. One of the things that is related to this is that the platform economy makes the people who work on it no longer employees. They have no secure income, so the UBI is a response to insecurity. It is a safety net. Uncertainty goes against happiness. So, yes, it is a good idea. You don’t keep people from working,
it’s a basis, a minimum. If people don’t work then there’s an economic problem, and I think people can’t be happy without being creative and making something. This goes back to my earlier definition. And working also brings you into contact with other people and provides a social network. My real question about UBI is that if you give 600€ to people, how many will choose to live from this and how many will continue to work alongside it? If people continue to work, the UBI immediately contributes to happiness, because it removes part of our uncertainty and sense of insecurity.”

2. Alternation in jobs and tasks

Senik says that she is now working on whether variety in tasks makes people happier. “People who do multiple things, different and more diverse, are happier. But working from home also makes it different, it’s all about the variety. In France you now have the 35-hour working week. This gives you more time to take on more and more diverse tasks, and whether France has implemented it correctly is a completely different question. The research that I am currently working on provides evidence that there is a positive relationship between variety in activities and human happiness. People now spend too much time working without being really creative.” Senik returns to her favorite topic, human creativity as an indispensable building block for her Utopia.

3. Bridging and bonding capital

Her second point about the Utopia economy is about the importance of capital. Not the importance of the financial capital that we know, but something that she calls “bonding” and “bridging” capital. Senik: “Bonding capital is you and the ties with your family. If you have a happy childhood with family, you have a strong foundation from which you can experience the world. Your own background is important. Then you can explore more. If you lose those with whom you are connected, a happy life becomes more difficult. The ties with your family, if you have a happy childhood with family, you have a strong foundation from which you can experience the world. Your own background is important. Then you can explore more. If you lose those with whom you are connected, a happy life becomes more difficult. The ties with your family, if you have a happy childhood with family, you have a strong foundation from which you can experience the world. Your own background is important.”

4. A little media makes you happy; too much is killing

Senik believes that a little TV makes you happy because there is a common experience through conversations like ‘Did you see that yesterday?’ She continues: “These little chit-chats create ties. It helps to form a collective soul. But too much TV is too passive. After all, a person must be actively creative to be happy. Boredom from the TV is killing. New media is much more active. ‘Does that bring happiness?’ we want to know. Here too, the adage is ‘a little usage is quite okay’. It can be fun when people respond, but if you take it too far you could become obsessed with your self-image. It is fake, but you can experience it as something real. Social networks are, above all, about managing your self-image. And they are addictive, you keep coming back there. You want to read a book, but ultimately you are twittering. You have to do something about it and take things back in control. In a successful Utopia, ways need to be found to curb the use of media.”

5. A green economy plus a huge dose of empathy

Next, Senik talks about the importance of having a relationship with nature. “Green makes you happy. You see it in countries such as the Netherlands, Norway, and Latin America, which have a stronger relationship with nature. Nature is more integrated people’s life there. Take, for example, Sweden, the country has a tradition of going out into nature in the summer. In an isolated log cabin to be more connected with our roots. Maybe they should hand out nature vouchers in Utopia.” But what about that relationship, we ask Senik. Because in 2012 the World Happiness Report opened with an alarming outlook on the environment. We read the following:

The Anthropocene will necessarily reshape our societies. If we continue mindlessly along the current economic trajectory, we risk undermining the Earth’s life support systems - food supplies, clean water, and stable climate - necessary for human health and even survival in some places. World Happiness Report 2012

To this Senik replies that we need a lot of empathy to save this generation from the work of the former. She adds that the youngest generation is super aware of this problem. But how do you create a huge amount of empathy? “If you are obliged to feel what you are doing to the other person, empathy will grow. If we experience water that does not come out of the tap at times, electricity failing, a natural disaster. Then empathy grows. Then you will feel what we are doing to future generations.”
Populism, ideology and the importance of myth formation

People who are less fortunate vote for the extremes. And that is happening now, according to Senik. “You see a clear split from a quarterly survey in France. This is evident on all fronts: income, work, family relationships. People leave the city, shops close. There is a sense of social isolation. Part of the country is not integrated. People do not feel connected to a group, so no longer feel part of society. There is the idea that the cosmopolitans, the elite, have betrayed the people. My answer to Macron’s question is that we need a project. “We need a common enemy or a common threat. And that may be the tax competition in Europe that undermines our welfare states. And it is global warming, the destruction of the planet is a big problem. Working on solutions for this brings people closer together.”

“You have to recreate the sensation that you live in a society. There’s no common Myth anymore.”
Claudia Senik

How should we see this quest for a new myth in the light of emerging populism, we ask Senik finally. "The problem becomes clear. People don’t trust science more than Google. The disrespect of scientific truth is the genesis of the general disrespect of authority. There is no more hierarchy of truth. There is no reason why some have more to say, more respect, if everyone can claim their own right.”
Vision V
California dreamin’: A wake up call

In this final Utopia we see conflicting views, and maybe that is the only way to truly make progress. Silicon Valley critic Andrew Keen and technologist Peter Leyden both foresee decades of rapid change, but they have different opinions about who and what will be the key players. Keen states that the current problems such as the splinternet, polarized opinions, and inequality, definitely need to be addressed from a social and political perspective. Leyden has tremendous faith in Silicon Valley, California, and the power of innovation. He sees our current problems as the last convulsions of an old world. This is an attitude Keen would describe as a characteristic opinion for a well-meaning technologist. Leyden’s wake-up call is simple: this is only the beginning of change. And he’s right. The deployment phase of all Californian tech-innovations is right in front of us. Keen sets the alarm bells ringing for the social system we need to develop now to truly progress.

In order to reach this Utopia...
Companies are advised to prepare for radical change. Now is the time to deploy what California has invented. But only for a change in a new direction, Utopia, where purpose is king and equality is queen.
Peter Leyden -
The California way forward

In 1997 futurist Peter Leyden and scenario planner Peter Schwartz wrote a groundbreaking article for the magazine Wired. The article The Long Boom told the history of our future from 1980 to 2020. Surfing on a wave of technological innovation, according to them, the world is moving towards a new golden age characterized by progress, openness, tolerance and a better environment. Now, in 2019, we have come to the end of their periodization. A few weeks after the interview we received a message: there will be a follow-up! - a Long Boom 2. Things got rolling when Peter Leyden contacted Wired after we did the interview. There will be a cover story in Wired at the end of this year, the concept title will be “Long Boom squared” it will be as Utopian as the first one, but now looking ahead for 2010 - 2050.

Peter Leyden is founder of Reinvent, a company that drives conversations with leading innovators about how to build a better future. Leyden started his career as a journalist, including working for Newsweek magazine in Asia. Leyden was managing editor at the original Wired Magazine and is the co-author of two books on new technologies and the future: The Long Boom and What’s Next.

To give you a feeling of the tone of voice in “The Long Boom” we want to start with an excerpt from Peter’s article written in 1997:

“We are watching the beginnings of a global economic boom on a scale never experienced before. We have entered a period of sustained growth that could eventually double the world’s economy every dozen years and bring increasing prosperity for – quite literally – billions of people on the planet. We are riding the early waves of a 25-year run of a greatly expanding economy that will do much to solve seemingly intractable problems like poverty and to ease tensions throughout the world. And we’ll do it without blowing the lid off the environment. If this holds true, historians will look back on our era as an extraordinary moment. They will chronicle the 40-year period from 1980 to 2020 as the key years of a remarkable transformation. In the developed countries of the West, new technology will lead to big productivity increases that will cause high economic growth - actually, waves of technology will continue to roll out through the early part of the 21st century. And then the relentless process of globalization, the opening up of national economies and the integration of markets, will drive the growth through much of the rest of the world. An unprecedented alignment of an ascendant Asia, a revitalized
America, and a reintegrated greater Europe - including a recovered Russia - together will create an economic juggernaut that pulls along most other regions of the planet. These two metatrends - fundamental technological change and a new ethos of openness - will transform our world into the beginnings of a global civilization, a new civilization of civilizations, that will blossom through the coming century.

A momentary setback

We meet Peter Leyden at the renowned Kimpton Fitzroy Hotel. The restaurant is an exact copy of the dining room of the Titanic. At the bottom of a marble staircase, seated on two gold-decorated chairs, we interview Peter. We cut right to the chase: the rise of populism, global warming, fake news, manipulation by the Russians, Brexit, robots taking over our work, the rise of China, immigration, the Yellow Jackets in France. Shouldn’t the article have been called *The Long Contraction*?

“No,” Peter laughs, “we are just entering into another period of prosperity. The things you describe about what’s happening in our society, I see it as the inevitable setback caused by the fundamental transformation that we have completed successfully. What we need now more than ever is yet another positive message that takes us to the next level. In that respect you are shooting the Utopia in the midst of the Utopia... The idea of a global civilization, a new civilization of civilizations, the idea of an inclusive society, that is still the image for the coming years.

“The co-founder of Wired, Louis Rossetto recently said, ‘The digital revolution is over, and we won.’ What he means is that all information that could go digital will go digital. Back 30 years ago that was an argument, but today it’s a fact. That does not mean the digital transformation is over. Many fields are still working it through, and some, like in the public sector, have a long way to go. But there’s no doubt about it happening. It’s inevitable now.

“The more interesting twist going forward is that the information of life, DNA, is now digitized, and so, in the next 30 years, we’re going to see the stuff of life get transformed. We’re going to write the code of life to create new physical things. The analog will become digital, so to speak. That vision of the next 30 years is now a controversial argument, but it is as prescient and disruptive as the digital revolution idea was 30 years ago.”

The importance of optimistic stories

Both California and Peter himself are known for their optimism. We ask him if, and if so why, optimistic future visions are important. “One of the things humans have learned in the last 30 years is how to accelerate and scale innovation. We now have clear processes of how innovation works and how to apply it in all directions. One of the big leaps forward was a clear understanding of design thinking. And the first step of any design thinking process, to innovate in any direction in any field, is to understand the goal – what you want to achieve in the end. The same holds true for the world at large. We need to clearly see what is possible and then desirable. We have to understand what we are shooting for with our economy and society, our government and our politics. This is where optimistic visions come in. If all you can see are Dystopian futures, then it’s going to be extremely difficult to move forward in positive ways. If everyone can see a positive, plausible way forward, then human energy can be much more efficiently and productively aligned to achieve that goal.”

But isn’t it too easy to dismiss all negative global trends with the comment that this is just a temporary ‘setback’? “In 1997, when The Long Boom was first published, Apple Computer was almost bankrupt. Amazon was a startup with a goofy name just selling books online. Today they are two of the most valuable companies on the planet. It was almost inevitable that there would be a tech backlash once they became the most powerful companies in the world. To be sure, some unintended consequences blew up in the last couple years that brought more outrage. The Russians using Facebook to impact a Presidential election was one obvious example. My feeling is that the basic DNA of the tech industry is still pretty decent. Further, the industry does have the capacity to pretty quickly right itself and get better aligned with the goals and general good health of society. The tech titans, and certainly average techies working in the trenches, do not want to be the bad guys in the coming decade. I think they will go a long way to adjusting their industry to be more harmonious with society, and they will be willing to make major concessions to governments around the world. They will play ball with the rest of us.”

The last convulsions of an old world

As far as Peter is concerned, we are witnessing the last convulsions of an old world, an old system that does not understand the new and plays into fear. But Peter doesn’t believe in a story based on fear. It’s not what people want; fear will never win over hope. “Luckily we now see a new generation rising, born during this transformation. These Millennials and Generation Z understand like no other how this new world works. And from both generations we see the new leaders of this new world arise. They will be decisive for our future and build it themselves. They are going to solve
the big problems that we are facing. This new generation is a generation that dares to dream. They are keeping the California Dream alive.”

Talking about the California Dream, this optimism goes back to the time of the gold diggers and later Hollywood, the Californian aerospace industry and now it is digital technology. What exactly is this California Dream? Leyden responds: “The California Dream is the American Dream squared. There’s a sense that anybody with a big idea, a bunch of ambition and a ton of hard work can have a decent shot at being really successful. There’s a sense that almost no idea is too crazy and will initially be taken seriously. And it does not matter who you are and where you come from as long as you have ideas, some talent and work hard. This is a very different attitude from the East Coast where your class, family, schools and more all matter a lot more. This is the major reason that generations of young people, entrepreneurs and dreamers from around the country have migrated to California. This California Dream continues and is reaching a critical mass now. And Silicon Valley, the San Francisco Bay Area and California at large have now attracted a global mix of entrepreneurs and innovators from around the world. There’s really no place like it on the planet right now and the innovation is getting supercharged. A lot of the innovation to emerge in the next decade will have an impact well beyond America. It’s now a global melting pot that is creating what will be global models about how to do things in the near future.”

The Long Boom

As mentioned in our introduction, Peter Leyden is currently working on this new story. Of course we asked him what it will be about:

“My current thinking is to call this new piece not The Long Boom II but The Long Boom2 – as in the scale of growth and transformation will be exponential compared to the last era from 1980 to 2020. The new story will start in 2010 and go to 2050. Most people underestimate how many new technologies are going to get layered into our work and home lives in the next 30 years. And then how much economic growth will be created off those new technologies. Just take Artificial Intelligence alone. That is a tech capability that over the coming decades will become as ubiquitous as electricity – with AI augmenting much of human activity and being applied to every industry and corner of the economy. And AI will greatly accelerate our ability to innovate and transform the world. And that’s just one technology to come.

“Then there’s the driver of climate change. It seems now that the world finally really gets that climate change is real and adversely impacting us now. The next 30 years will see a fundamental shift to new energy technologies and a rework of our built and manufactured environment to sustainable models. This alone will create gargantuan economic opportunities for a wide range of players, from the stewards of global capital, to the rural workers of red state America who will be retrofitting houses and creating wind and solar farms.

“Finally, the initial Long Boom was driven off both new tech and globalization, and in particular the rise of China. China and those emulating its model raised close to 2 billion people out of poverty and on the path to middle class lifestyles. This was a world historical achievement but there is much still to be done. I expect in the next 30 years we will see the rest of the under-developed world move up that same path – and driving a lot of economic growth in the process. I understand there is a current backlash against globalization, but I see that as temporary, and the larger trend lines have been pretty steady in the direction of raising up the welfare of those in the developing world. This is good for them, good for the developed world, and will contribute to the new Long Boom as well.”
Andrew Keen - Social change lies ahead: technology is not the answer

It’s 08:00 and we join Andrew Keen at breakfast in the Moxy Hotel in Amsterdam. Keen is author of numerous books and a well-known Silicon Valley critic. We have known him for years and have discussed many trends and developments with him. On his LinkedIn profile pages gleams the job title ‘Chief Unhappiness Officer @ Sogeti’, which may give you a glimpse of his perspective on the world. In his Utopia we don’t believe in the well-meaning technologists anymore. There are no quick technological fixes for the current political and social problems. Keen sees some naïve dreams have come to an end: the internet has not created a global society, instead he sees the rise of the splinternet. China, Russia, the U.S. and Europe are all creating different digital societies.

Andrew Keen is a British-American entrepreneur and author. He was among the earliest to write about the dangers of the internet to our culture and society. Keen’s new book, How to Fix the Future, based on research, analysis, and Keen’s own reporting in America and around the world, showcases global solutions for our digital predicament. Keen is executive director of the Silicon Valley innovation salon FutureCast and an acclaimed public speaker around the world. He is the host of the “Keen On” show, a popular TechCrunch chat show, and was named one of the “100 Most Connected Men” in 2015 by GQ magazine.

Utopia means ‘no place’

Our first question is about what Keen’s own Utopia looks like, but the question makes no sense to him: “That’s an absurd question, because there’s no such thing as Utopia. Utopia means ‘no place’ in Greek. It doesn’t exist and we will never be able to get there.” We immediately recognize the familiar dynamics from our previous, well treasured, conversations. Keen goes on: “The use of Utopia in my book is to remind people there isn’t one. You don’t get magical change. It comes through political action through humans working together, not on their own, not through dreaming, not through fantasizing.”

Keen sees it as his job to push technologists and policymakers in their thinking. In the book he references, How to fix the future, he warns people we are heading towards a Dystopia. We are destroying creativity and are undermining the creative economy. “I’ve been warning about it for years,
about the issue of big tech and their impact on our general happiness. And now the Zeitgeist has been shifting to much more public criticism of Big Tech.”

**The fantasy of well-meaning technologists**

So, Utopia is a Fantasy and we need to take matters into our own hands. We ask Keen about the role of technology in shaping our coming future and start talking about initiatives like Solid, a web decentralization project from World Wide Web inventor Tim Berners-Lee, blockchain solutions and Humane AI projects. Keen is not too keen on this. “It’s mostly the fantasy of well-meaning technologists. I mean, I have a great deal of respect for Tim Berners-Lee. He is clearly a good man. And his achievement in building the World Wide Web was the most significant achievement in the 20th century. But these initiatives are the pipe dreams of well-meaning technologists.” The idea of returning to the original principles of the internet and an ideology where everything can be publicly owned is not realistic anymore according to Keen.

“Tim Berners-Lee says ‘Let’s rebuild the internet and fix all the problems’, Don Tapscott says ‘Well, blockchain is like the original internet, but with blockchain, you have all the solutions.’ That’s just wrong. It’s just falling into the same old traps. Einstein had some famous quote about that. If you make a mistake once it’s fine, but if you keep doing the same thing, it is a form of insanity. And I think, whether it’s Tapscott or Berners-Lee, it is a form of insanity to keep on imagining that you could go back. I think that those kinds of initiatives are a distraction and meaningless. That they are ultimately not very helpful. The thing with the Berners-Lee initiative, it seems to reject the market and money, as if it is a bad thing. I think that the most interesting initiatives are the ones that have the market built in.” Since the first cracks appeared in our global internet dream, Keen sees very smart people becoming some sort of caricatures of a well-meaning technologist, who doesn’t understand the reality of politics power. “We thought highly centralized power would go away because of the internet, but it’s just taking different forms,” he asserts.

**The rise of the Splinternet**

We ask Keen how he sees the coming years developing. “I think you are seeing the rise of the splinternet. On the one hand there’s a Chinese system which maintains an authoritarian, totalitarian system and social credit visions, which are profoundly chilling. Some sort of the digital version of 1984. Whether they can pull it off, this is one of the great questions of this age. Will the Chinese people actually rebel? The other question is to what extent are we overdramatizing? Is this Chinese system as ubiquitous and extensive as some people say?”

And ‘the other hand’? Next to the Chinese internet, Keen distinguishes an American and a European internet. Europeans will increasingly regulate and treat social media companies as traditional media companies. Europe will build regulation around people and the rights of data, which will undermine the current business models. “European initiatives can really challenge the dominance of Silicon Valley companies, whether that results in the emergence of European companies or the embracing of European values by American companies. Either way it could set a digital future that’s obviously very different from the Chinese or the American way.

“Marx predicted that the state would be withered away by industrial capitalism, which is of course entirely wrong. Some of the more extreme Silicon Valley types predicted in the early days that the state would wither away – you remember that famous declaration of cyberspace?” The opposite is what we’re experiencing says Keen. The age of smart machines will have more governance and we’re seeing the rise of authoritarian leaders. He continues: “We have a crisis of democracy, we have the reappearance of nationalism and hostility to outsiders. Because for all the premise of digital cornucopia, the one thing that digital hasn’t changed is physical territory. Governments from Italy and Poland, to Hungary and Turkey are all sort of focused on the superiority of their race, their group, their religion, and show hostility to outsiders. And what you see with the splinternet, is that the internet is being fragmented into national territorial arrangements, which reflect the current political realities. So, digital global platform, doesn’t exist. And I think we are waking up to that now.”

**The myth of the universal human being**

So, the internet has not brought us a global civilization. Keen sees the opposite happening, and names it as one of the greatest paradoxes of the digital revolution. “McLuhan, a very good historian and futurist, says that the nativism, the localism of the village, has acquired a kind of global dimension. That’s one of the most striking and interesting and disappointing things about the digital revolution: it has compounded localism. It has compounded the parochial. It does it in terms of echo chambers. It does it in terms of only talking to one another. It does it in terms of this sort of retreat to individualism and ultimately narcissism.

“We don’t talk to one another. When was the last time you had a conversation, a real conversation with someone from...
a completely different culture, China, Korea, from Africa? It just doesn’t happen. People just go to the places where they feel the most comfortable, and they congregate there. And it compounds their own certainties. You also see it in television, and particularly on the internet, and in the decline of traditional newspapers. And of course, in the rise of intolerance, the sort of intolerance of the left in the form of political correctness, a sort of micro aggression movement. And an intolerance on the right in the form of hostility to immigrants, to women, to homosexuals, to Jews.

“So, it’s one of the most raveling, but also intriguing things about this early part of the 21st century. We have this supposedly global media platform on which everybody can share and communicate, we could send an email to China and in ten seconds you get one back. And you can call real time on your phones and Snapchat with people anywhere you want. We’re more and more local, more and more divided, more and more separate, more and more sort of withdrawn into ourselves. So, the real dream of a universal society, or universal man, that kind of enlightenment, of the international person, is a myth. There’s very little evidence that one of the big dreams of the digital revolution and this kind of universal man is being realized. In fact, the reverse is true. And it’s reflected in the rise of a sort of xenophobia, authoritarianism and the crisis of democracy. I think one of the great challenges is making people more tolerant and more interested in other people’s cultures. And to stop the Echo chambers, to stop feeding people what they already know about. I mean, there’s no ambivalence in digital. And to have a real sort of serious conversation there needs to be ambivalence, not certainty.”

Andrew Keen

“To have a real sort of serious conversation there needs to be ambivalence, not certainty.”

Technology is not the solution, politics is

Keen believes that we live in a very impatient age. “We think we should have fixes to everything. We have these devices that allow us, in some ways, to do amazing things. Communicate all over the world, find out anything that’s going on, keep up to the minute on politics, sports, buy stuff, have stuff delivered. There are big social political issues, which have been compounded by the digital revolution. They are just as hard to fix now as they’ve ever been. And we have to have patience, it will take generations. It will take the work of well-meaning responsible politicians like Margrethe Vestager, Dutch politician and European Commissioner. We’re going to need a similar kind of regulatory state evolving in the United States, and we see the beginnings of that. But there are no magical cures. The problem is that the solutions to all this tech stuff is not technical. It’s not going to come from virtual reality, or augmented reality, or blockchain, or edge technology, or quantum, or any of these other things. Even though these are all real, and they’re all interesting, and they create very exciting business opportunities.”

Agency is key. We need to take control

Finally, Keen urges a need to make changes in the conventional economy. “But we’ve got to be patient. So, what I’m laying out is only the beginnings of a kind of long-term structure. The key is agency, to shape the technology before it shapes us. And the clock is running. We can’t just sit back and wait for something to happen. So that’s why you see more and more activity on the regulatory side, and I think you’re going to see a similar wave of innovation with entrepreneurs, especially in Europe, of people determined to come up with companies and products that serve people better than the first wave. But there’s no quick fix, no matter how well-meaning you are.”

laws about work, taxation, safety, all the stuff that was absent at the beginning of the Industrial Age, which created a huge amount of human suffering, immediate pollution in cities like you have now in China in industrializing cities, that took generations to work itself out.”
Where to begin?

We’ve asked nine experts about their dreams. They were our guides into the undiscovered territories of the future society and economy. Some of them were extremely optimistic. We’ve listened to dreams of more love and understanding “augmenting the human heart and the soul”. A happiness economy supported by what technology can do for humanity truly sounds like a golden Age. Others were more Dystopian, warning us of the unprecedented impact of technology on the future of jobs. Or they were warning us about the way Big Tech companies are spying on us and trying to influence us with their “owned” devices and “owned” data. Either way, these Utopian or Dystopian views reflect the current Zeitgeist and will give direction to what’s needed to be done. We’ve looked at the commonalities and the differences in viewpoints in these interviews and labeled them as four shifts of inequalities.

Your digital transformation is not about how to become digital in the world of today. It is much more about how to anticipate the rapid changes in the society of tomorrow.

Our main message here is that we are no longer living in the technology era. Desires and dreams of what we should do are taking over the debate about technology itself. Technology eras are more about money and GDP. What’s in front of us is about desirability and purpose. Like in previous revolutions, these desires can lead to a new golden age. We say ‘can’, because it all depends on the decisions we’re going to make as a society. The Victorian boom, post-war prosperity and the Belle Époque were Golden Ages. Golden Ages are inclusive. The antagonist of a Golden Age is called inequality.

Four shifts towards a new Utopia

- **Shift 1**: From planet inequality to the planet roles in the core of business
- **Shift 2**: From data inequality to friendly market conversations
- **Shift 3**: From labor inequality to purpose economies that scale
- **Shift 4**: From global inequality to glocal (balancing global and local) community building

The business implications of these shifts are already being felt today. Whether it is the splintering of the internet that is making the world more local, the data-awareness of the consumer, global warming, or the quest for purpose in a world that is dominated by computers. You need to prepare for it, because the newcomers in your marker definitely will. At least, if you want to be at the creative side of ‘Creative Destruction’.

What do you need to prepare for? Four shifts; four directions towards a new purpose. Let’s take them one by one.
Shift 1: From planet inequality to the planet roles in the core of business

What to prepare for: flight shaming, meat shaming, plastic shaming, waste shaming, inequality shaming.

Pieter Elbers, the CEO of KLM Royal Dutch Airlines, took a head start by publishing an open letter in which he urged people to ‘fly responsibly’. He’s asking questions like “Do you always need to meet face to face? and “Why can’t you take the train?” An airline that is asking you not to fly? Who could have imagined that ten years ago? You should prepare for more lifestyle changes, because the empathy for future generations will grow each time the effects of climate change hit the headlines. On the back of shaming and blaming, the discussion about the impact of production and consumption will fire up. Financial incentives and tax reforms will continue to push the economy in the direction of smart green growth. This will be good for the business models of a sharing economy and the maintenance and repair industry. Initiatives like Automated Externality Accounting, True Pricing and tax reforms like ‘sin taxing’ will create new price mechanisms that support the green economy. This will make the world more transparent and easier for consumers to identify the true character of a company and product.

A note from the authors. We were working on this report in June 2019, the hottest month ever measured. In the Netherlands a new record was set at 40.7 degrees Celsius. A few days later, on June 29, we ‘celebrated’ world overshoot day. Meaning the global economy had consumed one planet of resources in the first six months, and we were only halfway. This same month we were informed that large parts of the Polar area were on fire – at a scale unprecedented in human history. In Siberia, Alaska and Greenland a total of 250 - 300 fires were reported in some cases areas up to 100.000 M², emitting an estimated 100 megatons of carbon dioxide (CO₂).

What to do: from green washing to green production

Organizations have been preparing for this for a long time. There’s already a lot of knowledge on sustainable production and CO2 footprint. The silos between CSR and top-line growth need to be torn down. Green washing is no qualifier for the green economy. Other smart businesses will outcompete you.

The leap into the Utopian future of friendly market conversations comes from giving up ownership (of data) in return for a better relationship with your customers. The win will be enormous. The data quality will improve by getting the experts in – the individuals who produced the data. Their intentions, wishes and dreams will meet the market in a far more friendly way when ownership flips from one side to the other. Friendly market conversations are conversations friends can have. They know you, you know them, and as good friends you want to do what’s in their best interest. Like information systems, conversations are never neutral, there’s always an intention (in this case, best interest). That means there’s a new space to be discovered. Designing systems in such a way that it is explicitly targeted for happiness and wellbeing of the individual is turning every IT-decision into a moral decision. This is Utopia versus Dystopia. Meanwhile the agony around the data practices of the tech industry is coming to a climax. Cambridge Analytica might have been what got the ball rolling, but the rolling hasn’t stopped. There will be an equal playing field one way or another, inequalities are never sustainable. A voice assistant is probably the only fully equipped ‘owned’ device by a third party, in a house full of stuff that is owned by you. And we’re right in the middle of this debate of what that all means. Both from a Utopian and from a Dystopian view there’s a lot to be gained for society as a whole when we settle this case of data inequality.

What to do: give up data ownership and start reversing the model

On the one hand you need to prepare for a much better relationship with your customers, and on the other hand this turns against your current customer relationship management practices. But these CRM-practices have underperformed and will continue to underperform because it’s just not how relationships are built. The reverse model is much less about the brand, rather it is about experiences.

Shift 2: From data inequality to friendly market conversations

What to prepare for? Redefined relationships with customers based on a balanced data model. Spying will be penalized by government and public.

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Shift 3: From labor inequality to purpose economies that scale

What to prepare for? A booming purpose economy.

Technology enables us to industrialize our higher needs. As a society we will climb the Maslow pyramid by augmenting our hearts and souls. It will make us more aware of what is important to us and what is truly valued. The industrialization of our higher needs and the revaluation of human tasks go hand in hand. Care will be valued more highly. A caring industry is a human industry. Caring for people makes us happy and gives meaning to life. Receiving care is fulfilling our...
needs. New types of lifestyles will create a demand for new kinds of care. Lifting our economy as a whole to a purpose economy that scales can only be done when we revaluate jobs and tasks. First to a level where these jobs reflect the value they create. Out of the box solutions, like paying more for a job that is not satisfying, will compensate the imbalance at the bottom of the labor market. The introduction of a Universal Basic Income is a more mainstream solution to temper the anxiety at the bottom level of the economy. This purpose economy can only scale at large, as soon as we realize that at the bottom of the Maslow pyramid things like energy- and water supply can be guaranteed. This purpose economy and taking care of the planet goes hand in hand.

What to do: create a new story for your company

While society is climbing the Maslow pyramid, markets (labor- and customer-) will be triggered by the purpose of brands and companies. Building strategies upon strong opinions on labor inequality in the broadest sense is a good starting point. Career paths based not on what you want to offer, but how you can contribute to the higher goals people have in life and how they want to fulfill them. So, working on better stories of what your company is doing at the top and at the bottom of the Maslow pyramid will help you make this shift.

Shift 4: From global inequality to glocal community building

What to prepare for? A revaluation of local while staying globally connected.

The tech era connected us on a global scale. The economy is very much global, but happiness is very much local. Those need to get balanced. First everyone was outward directed, building world wide networks and on top of that a global economy. Smart players have gathered enormous powers and wealth by going operating internationally. Now more and more governments are trying to get a grip on technology companies by rethinking taxes and governance. We see the rise of a splinternet with local information societies. And while our geopolitical understanding of the world has grown, we start to see the complete world as one ecosystem. People that who feel left out of the globalization story of globalisation will connect through ‘glocal’ initiatives. There is a strong revaluation of our roots, the soil where we are born, the people we meet in person, sustainable local food, and being mindful and grateful in the here and now. Happiness and wellbeing, as we know from research, is are very much rooted in that, and this will all come to the surface know.

What to do: recreate the sensation of living in a society

The intrinsic value of the local has been overlooked for a while due to the shiny new possibilities of the global. Now and the value of the local has to be found, created and celebrated again. Countries and companies need to recreate the sensation of living in a society and community, while being globally connected. One of our biggest problems, global warming, could be an excellent example in this balancing act. It is an issue with global and local causes and consequences and has the potential to reunite us and to create local and globally connected communities against a common enemy.

Reaching your Utopia

Looking back at history we’ve seen amazing technologies changing our world. Canals, trains, rails, steel, automobiles, the internet: it brought opportunities and prosperity and catalyzed new dreams. But not in straight lines. At first, it’s all about the technology installment and how (few) people gain from this techno bubble. Then it’s about benefits for all and societal changes. It happens after a ‘turning point’, as Carlota Perez calls it. We’re at such a turning point right now. It’s a time of confusion. Conventions are broken. Populism and new ideologies are trending. From this point on we progress. New rules coming from our Utopian dreams will guide our society into a new phase. Collective ideas that have been bubbling in society for a long time, now take the lead.
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Part of the Capgemini Group, Sogeti operates in more than 100 locations globally. Working closely with clients and partners to take full advantage of the opportunities of technology, Sogeti combines agility and speed of implementation to tailor innovative future-focused solutions in Digital Assurance and Testing, Cloud and Cybersecurity, all fueled by AI and automation. With its hands-on 'value in the making' approach and passion for technology, Sogeti helps organizations implement their digital journeys at speed.

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SogetiLabs is a network of technology leaders from Sogeti worldwide. SogetiLabs covers a wide range of digital technology expertise: from embedded software, cybersecurity, AI, simulation, and cloud to business information management, mobile apps, analytics, testing, and the Internet of Things. The focus is always on leveraging technologies, systems and applications in actual business situations to maximize results. SogetiLabs also provides insight, research, and inspiration through reports, articles, presentations, and videos that can be accessed on the SogetiLabs website.

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