The social impact of technology

As human beings, we do not understand exponential or self-amplifying. Particularly the impact on humanity. Richard Watson has written about it extensively. For example in “Digital versus human”. “Life 3.0” is not that dissimilar. We need to be careful what we wish for.

Gerd Leonard

I came across Gerd Leonhard as he was a speaker at the London Law Expo in 2017. I am following in his footsteps this year. They are very hard to follow. His book “Technology vs. Humanity: The coming clash between man and machine” is an absolute cracker.

Digital atomic bombs

We have not thought through what AI, IoT, big data, social media, cloud, ICT, genome editing, could possibly do. He compares it to the invention of the atomic bomb. Things were a lot less fast in those days. We are dealing with a digital nuclear bomb, and it might explode before we realise what we have gotten ourselves into. Exponential technology could soon trigger a
chain of “A-bomb challenges” or “digital Hiroshimas”

**Dark trends**

As Peter Diamandis’ 6Ds, he identified a number of effects. Call it the dark side of the 6Ds.

- **Dependency** – Leaving our thinking to software and algorithms because it’s just so much more convenient and fast.
- **Confusion** – Not knowing if it was the intended human who replied to my emails, or her AI assistant. Or even not knowing if I made my own decision or if I was manipulated by my IDA.
- **Loss of control** – Not having a way of knowing if the AI’s anticipation was correct or not, as we could not possibly track the system’s logic or even comprehend the workings of a quantum computing-fueled, machine-learning system. In other words, we would need to either trust it completely or not at all, similar to the dilemma that some airplane pilots are already facing with their autopilot systems.
- **Abdication** – Being tempted to leave more tasks to systems that would handle them for us, whether it is coordinating personal schedules, making appointments, or answering simple emails. Then, of course, it would be very likely that we would simply blame the cloud/bot/AI if something went wrong.

Reminds me of the “The Seventh Sense”. Do you think AI will let us when it has taken over?

**More dark trends**

Other dark trends he identifies are:

- **Social autism** (we love our screen more than we love people).
- **Addiction to technology** (“mobile devices are the new cigarettes”).
- **Digital obesity**. Every consumer in developed countries unwittingly ingests an estimated 150 pounds of additives—mostly sugar, yeast, and antioxidants, as well as truly nasty stuff such as MSG. Thus consumers are strung along by cleverly engineering a “need-for-more”
so that it becomes very hard to find the exit from that kingdom of endless, happy consumption. If this sounds like Facebook or your smartphone, you are getting my drift. The food industry actually calls this cravability or crave-ability. In the world of technology, marketers call it magic, stickiness, indispensability, or more benignly, user engagement. Craving and addiction as tech’s business model. Think 2020 and imagine billions of hyperconnected consumers becoming digitally obese, hooked on a constant drip of information, media, and data—and their own feedback loops.

- Digital feudalism (winners, ie platform winning it all).
- Security, because with virtualisation comes decentralising with many fewer points of physical control.
- Software soon eating biology,” and the increasing temptation to virtualise humans via brain-uploading or cyborgism—the dream of many transhumanists.
- Forgetting ourselves exponentially and sleepwalking through digital life, opening the door to a kind of global digital feudalism—where the overlords of technology rule us in ways that are beyond our understanding.
- Treating people in a social security environment just by the numbers, as disembodied data sources
- The development of digital egos as a true copy of ourselves thanks to a combination of fast, cheap, and ultra-powerful tools, including mobile cloud technologies, personalization, voice and image recognition, mood analytics, and sentiment analysis. Eventually, we will be constantly connected to machines, and they are getting better and better at reading our minds. It will lead to the end of free will.
- How our choices will be shaped if what we see and hear about each other is determined purely by algorithms that are designed to make you stay and view ads as long as possible, rather than by people? What if these tools are not publicly controlled, supervised or regulated...? As Taleb said “The difference between technology and slavery is that slaves are fully aware that they are not free”.
- Software no longer just “eating the world” but increasingly “cheat the
Everyone and everything becomes a data beacon, generating thousands of gigabytes per day, collected, filtered, and analyzed in the cloud by armies of IBM’s Watsons and Google’s DeepMinds applying their hungry, self-learning global AI brains every second.

Low-cost, ubiquitous digital technologies have made it possible for us to outsource our thinking, our decisions, and our memories to ever-cheaper mobile devices and the intelligent clouds behind them. These “external brains” are morphing quickly from knowing-me to representing-me to being-me.

In its darkest variation, the IoT could be the climax of machine thinking—the most perfect spying operating system (OS) ever devised, the largest real-time surveillance network ever contrived, enforcing total human compliance and killing off all remaining semblance of anonymity.

Sitting ducks

We will become sitting ducks for manipulation and undue influence by anyone who knows how to use the system. As biology gives way to technology, our biological systems will become increasingly optional, replaceable, and finally even vestigial.

Internalisation of technology

Technology is going internal—separating us from the world, increasingly disconnecting us from human experiences. We are already starting to confuse the magic of the tools with the drug-like effect of constant connectivity, mediasation, screenification, simulation, and virtualisation. The magic is already becoming manic—addictive, tempting, nudging, demanding—so what will happen when the magic quotient reaches 1,000, when technology becomes infinitely more powerful, cheap, and inseparable from us? At some point in the not-so-distant future we may have to consider the ultimate question: Do we now live inside the machine, or does the machine live inside of us? Data is the new oil: pay or become the content.
The gap

We are facing an enormous gap between what technology can do (the answer seems to be pretty much anything), and what it should do to result in overall human happiness. To safeguard humanity’s future, we must invest as much energy in furthering humanity as we do in developing technology. Algorithms can measure or even simulate everything except for what really matters to humans. Misdefining what human flourishing means, will only empower machines.

Humanity is at risk

The risk with that is that we will be losing humanity. Automation is exploding because it’s abundantly clear that humans are expensive, slow, and often inefficient, whereas machines are cheap, fast, ultra-efficient, and becoming exponentially more so.

Debug humanity

We are in danger of debugging humanity. Debugging mystery, mistakes, and serendipity, and debugging slow, tedious human behaviours like discussion, pondering, and emotions. Being human is just too cumbersome. Automation is exploding because it’s abundantly clear that humans are expensive, slow, and often inefficient, whereas machines are cheap, fast, ultra-efficient, and becoming exponentially more. Will we eventually be a species completely devoid of consciousness, mystery, spirituality, and soul, simply because there’s no room for these androrithms in this coming machine age? Zoom forward another ten years, and we may indeed end up 95% automated, hyperconnected, virtualised, uber-efficient, and much less human than we could ever imagine today.

Happiness

Humans seem happiest when they have:

- Pleasure (tasty food, warm baths)
- Engagement (or flow, the absorption within an enjoyed yet
challenging activity)

- Relationships (social ties have turned out to be an extremely reliable indicator of happiness)
- Meaning (a perceived quest or belonging to something bigger)
- Accomplishments (having realised tangible goals).

In contrast, technology will be of material help in furthering real relationships, or in establishing sense, purpose, or meaning. In fact, quite the opposite may be true, as technology can often be quite corrosive to relationships, as when we obsess with our mobile devices at a family dinner.

**Compassion**

Compassion—a unique trait connected to happiness. Can you imagine a computer, an app, a robot, or a software product that has compassion?

**Hacking happiness?**

Happiness cannot be acquired or purchased, and therefore would be impossible to stuff into an app, a bot, or some other machine. Supporting evidence suggests that experiences have a much longer impact on our overall happiness than possessions. Experiences are personal, contextual, timely, and embodied.

**Hacking happiness!**

However, the key argument of the techno-progressive thinkers is that being happy is just the result of the right kinds of neurons firing at the right time, in the right order. They reason that it’s all just biology, chemistry, and physics and can thus be understood, learned, and copied completely by computers.

Take a look at www.happify.com to see how the idea of organising happiness is already being marketed—a software tool that teaches you happiness! One can only imagine how this could turn out by 2025—an app that connects directly to our brain via a BCI or via tiny implants to make
sure we are happy all the time, and—critically—that we consume happiness all the time! Mood bots and tech pleasures Technology is already able to create, program, or manipulate pleasurable moments.

**Manipulation**

And soon, it will be done via very skilful manipulation of our senses. Computers will try to make us feel happy. They will try to be our friends. And they’ll want us to love them.

We will unravel the genetic determinants of key neurotransmitters like serotonin, dopamine, and oxytocin, and be able to manipulate happiness genes—if not serotonin-related 5-HTTLPR then something like it—with precise nanoscale technologies that marry robotics and traditional pharmacology. These “mood bots,” once ingested, will travel directly to specific areas of the brain, flip on genes, and manually turn up or down our happiness set point, colouring the way we experience circumstances around us.

**Mental arms race**

In a review of “The science of selling” am predicting an arms race between mindfulness and (sales) manipulation. Compassion and happiness, like consciousness, simply do not exist in mere biological or chemical terms but in the holistic interplay of everything that is human. Machines or software are unlikely to ever attain these states, even if they quickly become better at simulating them to some extent.

**Good enough**

Attempts at first defining and then programming a human characteristic such as compassion, or something as mysterious as consciousness, seem like a far-fetched and unrealizable concept in the foreseeable future. But then again, is the real danger that a great simulation (which will include AR and VR) will quite possibly be “good enough” for most of us?

**Can your program happiness?**
Happiness cannot be programmed into machines, automated, or sold. It cannot be copied, codified, or deep-learned. It needs to emanate from and grow within us, and in between us, and technology is here to help us—as a tool. We are a species that uses technology, not a species that is destined to be(come) technology.

**Human rights**

He suggests five new human rights for the Digital Age

1. The right to remain natural, i.e. biological – We must have the choice to exist in an unaugmented state.
2. The right to be inefficient if and where it defines our basic humanness
3. We must have the choice to be slower than technology.
4. The right to disconnect – We must retain the right to switch off connectivity, to “go dark” on the network, and to pause communications, tracking, and monitoring.
5. The right to be anonymous – In this coming hyperconnected world, we should still have the option of not being identified and tracked,

**Rules**

And some rules:

- We shall not empower machines to empower themselves, and thereby circumvent human control.
- We shall not seek to minimise human flaws just to make a better fit with technology.
- We shall not attempt to abolish mistakes, mystery, accidents, and chance by using technology to predict or prevent them, and we shall not strive to make everything explicit just because technology may make it feasible to do so.
- We shall not create, engineer, or distribute any technology with the primary goal of generating addiction to it.
- We shall not confuse a clean algorithm for an accurate picture of human reality
• We must not pursue efficiency over humanity

**Could or should?**

What can we do about technology taking over where it should not? How can we protect ourselves from merely becoming the objects of bot-fueled hyper-efficiency, feeding a giant AI that in turn dictates our lives and tells us what we can no longer do? In the very near future, it will no longer be about whether technology can do something (the answer will almost always be yes) but whether it should do. He is concerned that we may soon become completely useless without technology—slow, incomplete, dumb, deskilled, lazy, and obese.

**Erosion of humanity**

Imagine what would happen if we continued to chip away at and ultimately erode quintessential human qualities such as privacy, mystery, anonymity, emotions, spontaneity, surprise, intuition, imagination, and spirituality—just so that we can keep up with the machines.

**Stewardship**

We must become much better stewards of humanity. Every single business leader, technology pioneer, and public official needs to accept and act upon his/her responsibility for shaping the future of humanity. Technology has no ethics, yet a society without ethics is doomed. Exponential technologies often morph rapidly from magic to manic to toxic—achieving a balance is essential.

• We need to teach both STEM and CORE (compassion, originality, reciprocity, and empathy) skills. Technology and humanity must both be on the curriculum; indeed science and philosophy belong in the same classroom.
• We need to retain a clear distinction between what is real and what is a copy or a simulation. Total connectivity, thinking machines, the smart cloud, and cognitive computing are our inevitable future, yet we should not abandon the distinction between simulation and being,
between computation and sentience, between machine-kind and mankind.

- We need to start asking why and who, not just if or how.
- We should not let Silicon Valley, technologists, the military, or investors become mission control for humanity—no matter what country they are in. Those who fund, create, and sell exponential technologies are unlikely to be the ones who will want to curb their power or scale of potential applications.

**Seven questions**

When we evaluate exponential technologies, we should ask seven essential questions:

1. Will this technology inadvertently or by design diminish humanity?
2. Will this technology further true human happiness?
3. Does this technology have any unintended and potentially disastrous side effects?
4. Will this technology give too much authority to itself or to other algorithms, bots, and machines?
5. Will this technology enable us to transcend it, i.e. go beyond itself, or will it make us dependent on it?
6. Will humans need to be materially changed or augmented to actually use this technology?
7. Will this technology be openly available, or will it be proprietary?

**Dark version of “Filter Bubble”**

This book is a very dark version of “Filter Bubble” or “Gutenberg versus Zuckerberg”. This one is a lot more existential.

**Arm yourself**

Do yourself a favour and learn how to meditate, invest in your mental capital and make sure you control your own brain. Read:

- **Buddha’s Brain**
About Ron Immink

Ron helps build businesses. He has worked all over Europe and the USA with a variety of clients. He is respected keynote speaker, mentor and author of entrepreneurship and strategy focused books. Ron combines social media, narrative, story telling, dialogue learning, collective wisdom, peer-to-peer and social learning with innovation, intrapreneurship and strategy. Ultimately helping businesses to succeed. INTERNATIONAL EXPERIENCE Ron has worked all over Europe and the USA with a variety of clients, including the Irish government, European Bank for Reconstruction and Development, ILO, OECD, Arizona State University, DCU, UCD, Institute of Commercial Management, RBS, Allianz, Deloitte, AIB, Bank of Ireland, British Irish Chamber of Commerce, Primark, Enterprise Ireland, Ulster Bank, HP and many more. For more details visit linkedin.com/in/ronimmink

Subscribe

Book reviews, thought pieces and more on a weekly basis, no spam!
Technology vs. Humanity is a call to arms against the adversary of dehumanizing technology. An influence of tech futurists such as Ray Kurzweil, Alan Turing, Alvin Toeffler, and sci-fi writers such as Ray Bradbury, is evident. Leonhard extrapolates present trends far into the future, but his call to arms is not readily dismissible. Leonhard cautions that we should not anthropomorphize our technologies too much or confuse our priorities when it comes to making important societal choices and decisions, and we should not forget our responsibility as we venture out to create technology that may end up surpassing us. Unfortunately, slow but systematic reduction or even discarding of algorithms is already underway. The title itself suggests a clear antithesis. Technology vs. Humanity - The coming clash between man and machine, by futurist and keynote speaker Gerd Leonhard, is a book that doesn't beat about the bush. It has a message to send out, and that is that if we do not reflect effectively on the changes underway, we will relinquish every chance of steering them. With Ke Jie or with AlphaGo? Will we become more like machines, or will they become more like us? We can no longer waver between celebrating the technological revolution and mourning a lost world. We can no longer indulge in the Hollywood-style dualism between utopia and dystopia. According to Leonhard, the moment has come to face a debate that can no longer be postponed. Technology vs. Humanity is a last-minute wake up call to take part in the most important conversation humanity may ever have. Will we blindly outsource and abdicate big chunks of our lives to the global technology companies or will we take back our autonomy and demand a sustainable balance between technology and humanity? By supplying a Socratic and humanistic critique of the Megashifts currently recasting our world, Gerd Leonhard provides the prologue for this great debate. Now is the time to join the dots between big data and digital ethics, to start discussing the moral framework required Technology vs. Humanity is the second in the company's "FutureScapes" series of books, looking at the core issues and ideas shaping mankind's future. The book is available at fastfuturepublishing.com and there is a 20% pre-launch discount for purchases made before the September 8th launch date. As we blur the distinction between human and machine with implants and ingestible inserts, Gerd Leonhard makes a last-minute clarion call for an honest debate and a more philosophical exchange on what society needs and wants, and how best to steer the relentless pace of innovation. Leonhard argues that, "Before it's too late, we must stop and ask the big questions: How do we embrace technology without becoming it? I came across Gerd Leonhard as he was a speaker at the London Law Expo in 2017. I am following in his footsteps this year. They are very hard to follow. His book Technology vs. Humanity: The coming clash between man and machine is an absolute cracker. Digital atomic bombs. We have not thought through what AI, IoT, big data, social media, cloud, ICT, genome editing, could possibly do. Does this technology have any unintended and potentially disastrous side effects? Will this technology give too much authority to itself or to other algorithms, bots, and machines? Will this technology enable us to transcend it, i.e. go beyond itself, or will it make us dependent on it? Will humans need to be materially changed or augmented to actually use this technology?