

# 03/04 Digital Happiness

# The Synthetic Generation

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## The synthetic generation Growing up in an uncertain and changing world

### In this report

Sociologists agree: generations are made during the so-called "formative years". This takes place between the ages of 10 and 25. Events have an extra impact: the frontal cortex is still in full development, the nucleus accumbens, the stimulus centre, has life in its grip.

Today's children develop in two ways during those formative years. Physically, comparable to previous generations, but now also digitally. This is the first generation to come of age with this dual identity. What young people do online is a reflection of the uncertain and changing world in which this generation is growing up. Besides being leaders of this apparent dual life, they are the first generation to try to create a new order from this mix of realities. For them, the internet is both a metamodernist amusement park where every reality can be created, and a place that is covered with a moral fog and where new rules of conduct arise.

Generations do not get caught in a specific piece of technology. The character of a generation is never the technology itself. The education, the zeitgeist and everything they consciously experience in their youth play an important role. Like a sponge, they suck everything up and this forms the so-called "Grundintentionen" (basic intentions), to use the words of Karl Mannheim, the founder of generation thinking.

### Key takeaways

#### Volume, value and influence

A new generation is coming to the fore. Substantial in size (32 percent of the world population), it has different values than its predecessors, and is influential.<sup>1</sup> The first generation of young people already has a business impact before they start their career. With their ambivalent identity they grow up as "influencers". On TikTok or Boomoji the little ones learn to follow and being followed. They are experimenting with new forms of synthetic attention like mukbang and ASMR.

#### The synthetic generation

They are "synthetic" in two respects. This generation doesn't make a distinction between the digital and the analog world. For them it has been a synthesis from the very early beginning of their lives. Alongside this, they've built a different relationship with reality. Wondering who you can trust in this era of real-fakes and alternative facts, they turn their heads towards their own reality channels on the internet. We witness the rise of synthetic attention and authentic digital relationships, and it's only the beginning. Fake personalities on Instagram become so real that the distinction between reality and virtuality is no longer possible. Authentic images of political leaders are manipulated with synthetic media and forged into new truths. What is real, what is fake? The future is synthetic.

#### They are different, they are "Post"

This is not a punk rock generation that was largely antiestablishment. It is a generation that introduces new values. They are post-materialistic, post-hierarchical and post-realistic. Of course, the task of making something of the world rests on the shoulders of every new generation. But their mindset is quite different from previous generations. They have a (neo)romantic soul, longing for a better world, and are focused on self-expression and self-actualization.

#### DISCLAIMER

Just like a biography of a person, the biography of a generation can also be written. The important lesson of biographers is that you should always keep an appropriate distance from your object. Usually this means that a really good biography only comes out years after the death of a person because only in retrospective can we determine their meaning. This immediately shows the limitations of our work and that of others involved in describing a new generation that is still growing up.

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The responsibility for the text in this report is solely that of the authors and not those people mentioned above.

# From Digital Happiness to the Happiness organization

There are increasing calls for the 21st century to be devoted to human wellbeing. This is something that Sogeti has tracked since starting its Digital Happiness project, for which this is the third report. We have observed that there is a "Happiness Advantage" for every organization focusing on what makes customers really happy deep in their hearts.

The advantage for your organization of choosing Digital Happiness is that it is an inexhaustible source for improving your relationships, both with your customers and with your employees. The step from Positive Psychology to Positive Computing, as described in the first report in our Digital Happiness series, brings you closer to the core. Concepts proven in psychology to promote the wellbeing of people, such as empathy and empowerment, are the new design principles for organizations that want to adapt to changing times.

A lot has changed in the last decade. The decline in people's trust in institutions and organizations reached a climax last year. This meltdown of trust was central to our second report and shows the dissatisfaction with the current status quo. The alternatives emerging are platforms of trust, such as Airbnb and blockchain. Airbnb turns word of mouth into a new business model. Trust is a rating or a thumbs-up. Blockchain distributes trust and encrypts it into a chain of transactions. The analysis of the crisis of trust from *In Code We Trust* taught us that it is more a shift in trust towards a new human-to-human model than an actual meltdown. That is a positive fact.

This human-to-human model is in full development and is what we describe in this report. Young people follow each other and see the world through the eyes of their contemporaries. It is a game of influencing and wanting to be influenced by "ordinary" people. And it sees a turning away from the paths that other generations have followed. In our coming report *Utopia for beginners* we will look at the question where and how to start your digital happiness journey. We will turn to the experts once again for a final advice. What are the latest insights of all these digital happiness advocates? And what would their recipe look like for building better organizations?





lappiness advantage



Synthetic generation

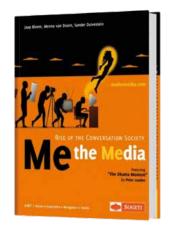
Trust crisis



Utopia for beginners

# Introduction: twelve years after Methe Media

Twelve years after our publication *Me the Media*, we risk a new dive into the social (media) life of young people. We recall our public lectures after the launch of the book. The number of people with a Twitter account was minimal. We got laughs when we shared our own social media escapades. Some complained and wondered about the business value of this social media nonsense. We also had to think about our customers! The fascination and absurdity of those days are still present today. While it was special at the time to see how quickly the news could spread, now we don't blink an eye when world leaders, top athletes and "ordinary people" use social media to share their breaking news.



Everyone is media. That's where the title came from: *Me the Media*. We used the term hyper egos to describe the ultimate users and were inspired by the hyper reality of philosophers such as Jean Baudrillard and Umberto Eco. Virtual and augmented reality would be the harbingers of a world in which fact and fiction run right through each other.

Today, alternative facts and fake news have brought us into another hyper reality. Web trolls undermine almost every election, and the institutions – from global brands to religious entities – all fall off their pedestals. What once seemed true no longer seems so. "Organizations now have to become ecosystems, although human behavior remains a difficult matter in the urge to automate."

Me the Media received both praise and criticism. In the Netherlands, for example, we were runner-up in the voting for the marketing book of the year. Suddenly we were also invited to speak at HR meetings. But for the hardcore IT community, we remained the odd one out. This was IT, but not as we know it. Architects, functional managers and IT managers didn't know how to deal with it. Fast forward to today and IT has found the words to make this matter actionable. The word "platform" is widely used and organizations now have to become ecosystems, although human behavior remains a difficult matter in the urge to automate.

We were specifically criticized for the word "Me" in the title of our book. Shouldn't that be "We"? There is a reason it's called "social media" and didn't Marshall McLuhan predict that the world would become one big village? Often our sessions ended in such debates. People become media, thus "Me media" we said. But how do you determine whether a generation is "Me" or "We"? The fact that all "Me's" become "Me media" does not necessarily mean that they become less social. But what do they become, and what exactly do they want?

For this report, we have broadened the focus on the new generation. We look at their characteristics as they emerge from generational research. The new human being – that of the post-millennial generation – is therefore central to this report. Some also call this generation Generation Z, Homelanders, The Founders, iGen or the fluid generation.



Part 1: Focus on this generation



Part 2: Focus on special media behavior



Part 3: Focus on the future visual

We focus on their special media behavior and what we can learn from it. It is a journey of discovery from mukbangs to the whisper practices of ASMR and other forms of digital expression and influence. Finally, we look to the future and how to anticipate the blurring of boundaries between what is real and what is fake.

In part 1 we focus on the synthetic generation and the characteristics that we can identify at this relatively early stage. The patterns from numerous studies confirm the picture that emerges from the World Values Survey (covering 110 countries and 90 percent of the world's population): younger generations have different values.

A number of this generation's characteristics are discussed in part 1, as follows:

#### 1 Synthetic in many regards

It is a synthetic generation for whom the concept of digital transformation is alien. Their self-reflection takes place simultaneously in two worlds, analog and digital, which for them have merged into one synthesized whole.

#### 2 Value shift and value conflict

We conclude from the many studies on this generation that there is a shift of values. This is a post-materialist generation that adheres to more secular values and is more self-actualizing than other generations. On the political stage, however, we see a polarizing effect of the old and new values.

#### **3** Authenticity and fluidity

Authenticity and fluidity characterize the value shift. You can be yourself and anything you want to be, as long as it is real.

#### 4 The founders

The name "The Founders", chosen by this generation, underlines the idea of self-realization. This is a generation that wants to realize something new that fits their values.

In part 2 we focus on the new media behavior, abnormal behavior perhaps in the eyes of older generations, but normal behavior in the eyes of young people. For them, the internet is something they grew up in, a metamodernist amusement park that offers endless possibilities. We conclude:

#### 5 They are all influencers

They show themselves in small-scale social media channels to friends and family or to an audience of millions to influence their environment. Whereas in the past only physical identity could reflect on the outside world, the reflection on their existence now takes place on the internet 24/7.

#### 6 Synthetic sensory system

They explore the limits of sensory possibilities. They experiment with sound, feeling and taste in new formats such as mukbang and ASMR. Well-known needs such as intimate contact, social food and confirmation are met digitally.

#### 7 Humans as an Institute

It is possible to earn anything from a few dozen dollars to hundreds of millions with these influencer practices. Post-materialism and materialism go hand in hand. The realization of the human is the new business model.

#### 8 Happy and full of stress

(Digital) happiness or unhappiness cannot be determined conclusively. The natural moral mist that is present when new areas are explored can lead to stress and burnout complaints. The optimistic conclusion is that this generation is still emerging as a happy generation in many studies.

In part 3 we focus on the future and in particular the new possibilities of media manipulation. Image, sound, video: everything can be set to your own taste.

#### 9 Hyper reality is advancing

The authenticity they strive for is commercialized and programmed. Computer-generated influencers, indistinguishable from real, live seemingly authentic lives. This is part of a new hyper reality that is rapidly emerging. The synthetic generation is better prepared for this than other generations.

The final strand of our report considers the synthetic organization. The idea behind the translation of this generation to your organization is to become like them: more attention to new values and better acceptance of the so-called "abnormal" behavior.

# Part 1 The synthetic generation

There is no official institute that determines what constitutes the different generations. There are some basic rules, but everyone has free play. Newspapers such as *USA Today* and *The New York Times*, other media companies such as MTV, obviously sociologists, government agencies such as cultural planning agencies, each have their own formats and labels.

Additionally, the average citizen who talks about "today's youth" can share their thoughts. The public is regularly asked to come up with names for the new generation. This is how the meaningless name Generation Z came into being after a call from a newspaper to its readers. People belong to Generation Z, the generation that follows the millennials, if they were born after 1995 or 2000, depending on which expert you consult. If you stick to the last starting year, we are talking about 32 percent of the world population. If we add the millennials (those born between 1980 and 2000), it is 63 percent.<sup>2</sup>



On social media, young people show who they really are, but there is always a filter. The media manipulation of themselves and the filtered view of the others they follow determine their perceptions and expressions. Growing up in this media reality, from raw reality to appearances, puts the digitized world and the so-called real world in a new perspective.

Sometimes a generation name is limited to that one letter, such as Generation X, which is generally known as a cynical generation. Generation X is also called Generation Nix here in the Netherlands. In this instance the last letter carries the full meaning that you actually want to convey (saying "nix" means "nothing" in Dutch [ed.]). In any case, the name should express something that determines that generation.

Presenting a generation of growing children as the synthetic generation needs some explanation. Certainly, this generation, like no other, is obsessed with authenticity. Playing with what we used to call "reality" has become the most normal thing in the world for them, because their formative years are dominated by screens, a world of gaming and Instagram filters. Growing up in a synthetic world – in the sense of "not real", imitated and manipulated – and at the same time seeing authenticity as the highest value, seems to be a contradiction. But if we consider it as a reaction from one to the other, there is a sense of logic. The thesis and antithesis come together.

For this generation, a missed "tag" on a photo is as bad as a birthday card that earlier generations didn't receive. Between the stream of messages that flow daily into their social media, a funny meme perfectly summarizes their mood that day in just a few seconds. In this constant stream of digital impulses, the phone is never longer than three minutes from their life. This is the standard, measured by the number of times the device is picked up. Converted into hours, this is easily six hours a day. You would think they are digitally active in between their activities. But this is not an intermezzo, it is the main act and there is only one room. Sometimes they are roughly pulled away from their world by parents who think it's a good idea to put the device aside during dinner. But they don't need to sit at the table for social interaction; they have that with their real friends anywhere, anytime and all the time. Their digital life is not separate from their analog life: it's the same. Analog and digital are intertwined: they get up with it and go to bed with it. In short, this is the first generation to grow up synthetically.

Their predecessors are the "digital natives", better known as the millennials. The difference between this new generation and its predecessor is minimal in some respects and substantial in others. Substantial is in any case the difference of perspective between the two generations. In the eyes of the synthetic generation they are not digital natives and the term "digital transformation" is a label to keep the world in which they live separate: analog and digital. It is a term invented by people who grew up analog. They still see digital as a new destination. But the life of the new generation is synthetic; everything is intertwined and merges into a new whole. There is no longer a distinction between digital and analog. Seemingly disparate matters are now coming together.

## A **synthesis** is a combination

of disparate things, emerging into something new. The word is derived from the Greek words *syn*- (together) and *tithenai* (place).



Young people are no longer "online" and "offline", they are now "on life", to use the words of Oxford philosopher Luciano Floridi. With the arrival of this new generation, separating this into digital and not digital is a completely unproductive thought. The synthetic generation can no longer explain real life and digital life: everything is real. And everything is fake to some extent. The awareness of fake is part of the story of this generation. Older generations know this phenomenon too, but in the form of advertising or propaganda. The messengers were companies that used actors and creative agencies to tell their stories. Now children tell the story themselves. Initially to each other, daily, and sometimes with financial support from companies. They have always manipulated the perception of themselves via Snapchat, Instagram, YouTube, TikTok or Houseparty. They count the likes on their YouTube movies and soon learn that the world can be divided into followers and being followed. We sat in front of the screen, they sit behind it. The active role that the new generations play behind the screen, also in a commercial sense, makes them more aware of what they are part of.

**Synthetic** Used to describe things that are produced synthetically, by mixing elements, substances or entities in a unified unit. When the emphasis is on the distinction with natural things, give preference to "artificial".

If you want to emphasize the distinction with natural things, you have to use the word "artificial", we learn from the definition. But this new generation makes no distinction between what is natural and what is supposedly non-natural or artificial. They mix their own substances, living matter, with digital technology, a filter, an emoticon, and appear lifelike in images wherever they want. Some even go so far that they ask a plastic surgeon to manipulate their face so that they look more like their own Instagram account. Nowadays this is called "Snapchat dysmorphism". All artifacts on this earth are artificial and man-made. But these digital artifacts are of a different order. Digital is unique in its ability to link and disconnect, for example consciousness and intelligence or location and presence: a mixer of possibilities with a new generation of buttons. This synthesizer effortlessly manipulates image and sound; long deceased actors are brought back to life and appear in films and commercials. The rapid democratization of advanced deep fake technologies gives everyone the tools to synthesize their own dreamed experiences.

Synthetic as we describe here has three meanings for the new generation: a task, their competence and the crisis.

- It is a task: bring together the elements that appear to have nothing to do with each other and create a new synthetic reality. This applies to the whole spectrum of our society: from technology to new business models, forms of cooperation and communication, to new values and forms of meaning.
- It is their competence: they grew up in a synthetic environment from an early age. It is the first generation to grow up with multiple identities: a real and a synthetic variant and probably more of the latter category. The game of authenticity, real and fake is played every day and they become trained in ambivalence, the double layers and their potential consequences.
- It is the crisis: in this "post-truth" era, no one can tell what is still true and what is a lie. From the 2016 United States presidential election we learned that there are also alternative facts. The truth is makeable. And what seemed to be real, the intentions of the institutes – from big-name brands to religious bodies – turned out to be fake.<sup>3</sup>

# **1.1** The making of ... a generation

We are not going to talk about the social media behavior of young people here. We will save that for part 2, where you may be surprised at their excesses. It might elicit a smile or a reaction: "That's not how we did it in the early days" or a sighing "Today's youth ..." Fortunately, there has recently been an outlet for this kind of thought on Twitter. There are extremely interesting contradictions in views between Gen-Xers, baby boomers, millennials and the post-millennials under the following hashtag:

#### #bragaboutyourgeneration

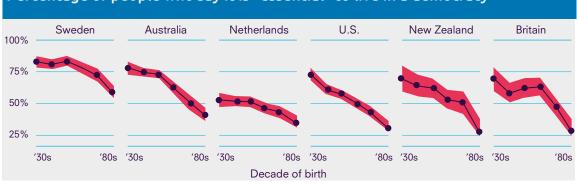
It's possible that you will object to generations being contrasted in such a manner. We all live on the same planet and you get along fine with your kids, right? If for any reason it becomes too much, you could always make a contribution on Twitter. We can see in the statistic<sup>4</sup> from the World Values Survey how different generations value being part of a democracy – being able to have their input. The horizontal axis represents the year of birth (decade) and the vertical axis represents the percentage of people who say it is essential to live in a democracy.

One could conclude that older generations attach greater importance to democracy (75 percent) than younger generations (25 to 30 percent). Another conclusion may be that the world (and democracy) only gains meaning with experience and through everything you have seen happening around you. What is "normal" can also be less "essential" if you don't know any better. Those who have lived through the post-war years of reconstruction know what it is like not to have democracy. Generations and their values and norms are shaped as much by the shared experience of historical events as by the shared lack of such events. Growing up with an internet identity is part of this shared experience and therefore of the formation of generations. Critical notes on the results of this research can be found in the article "That viral graph about millennials' declining support for democracy?" in *The Washington Post.*<sup>5</sup>

What is normal for one generation is abnormal for another. Sociologists call this phenomenon the *Wir-Schicht*, the "we-level". It reflects the norms and values, or what people find normal or abnormal. For a practical definition of what typifies a generation we spoke to Luciano Floridi, professor at Oxford University and specialized in information ethics. He gave us a description that exactly matches the following:

### "The implicit silent expectations of what is normal."

This layer is created in the formative years, between the ages of 10 and 25. The frontal cortex is still in full development and, once grown, the character of the person is more or less formed. What you experience as a human being in that period is decisive: a war, a stock market crash, economic prosperity, terrorist attacks, an Instagram addiction, the things that form the zeitgeist. The founder of sociological generational research, Karl



### Percentage of people who say it is "essential" to live in a democracy

Mannheim, emphasizes the importance of "location" in character formation: the location where you grew up, the time location and the place where you experience things and the biography of the life that takes place around you.

Mannheim died in 1947, when there was no digital birth location. But there is much to be said for adding a new location factor to the theory: the digital birthplace and associated biography that is written there. The sum is life in its entirety with all events together, digital and not digital. It is important to note that this is one fluid and synthetic whole for this generation. Henk Becker, internationally renowned generational scientist, already called the previous generation "the screen generation". But sociologists do not agree among themselves on how much influence digital life has on the character formation of a generation. What they all agree on is that the education, the norms and values that parents give to their children, plays a crucial role.

But not everything that makes children special should be seen as a characteristic of the generation. It could also be attributed simply to their age, a so-called life-cycle effect. Or it may be something that is a part of all generations simultaneously – a period effect – and is, therefore, not generation-specific. Sociologists talk about the "we levels" and "ground intentions" when it all belongs specifically to that generation: the cohort effect. In this respect, the cycle effect is a special phenomenon. This assumes that the interplay between four successive generations determines how a particular generation devel-ODS.

### **1.2** Growing up in uncertainty

The internet behavior of our children is a daily topic of conversation. For example, older generations cannot help but comment when they see youngsters sitting stuck behind their screens and call

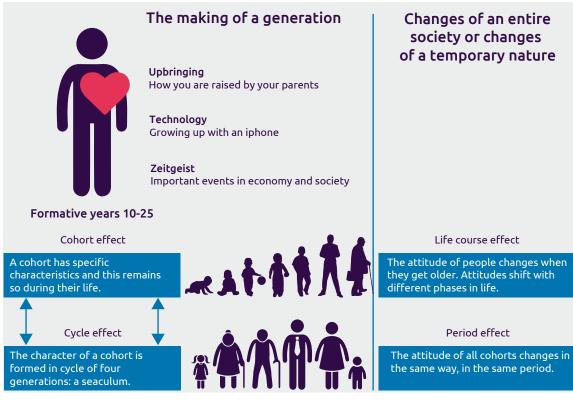
# **Uncertainty:**

there is danger everywhere

The millennials have been raised protectively. Their parents put "baby on board" stickers on their cars. The youngest generation of children are even more protected, safeguarded against dangers we did not know existed: pliable plastic in a child's toy, poison in vaccinations against measles, gluten and other dangerous substances in food. Institutions such as the Food and Consumer Product Safety Authority, schools, hospitals and the pharmaceutical industry are no longer trusted, and their work is increasingly being questioned.



Baby on board, baby yoga and healthier toys. Parents do everything to protect their children. The millennials were already raised in a protected way, the generation after them even more so.



On the left we see effects that form a generation. On the right we see effects that are not specifically related to one generation.

them zombies. Only when grades at school start to suffer, is action taken. One of the parents we spoke to was surprised at the reaction of his fifteen-year-old son: "My father sanctions, and I act on it". The sanction was to hand in the smartphone for three months and eliminate all bad grades. Which he did. Whatever is said about the new generation, pragmatism is something that certainly suits them. The good relationship that children have with their parents today also makes it possible to enter into such conversations. As part of the negotiations, the following can also be added: "As long as you live in my house, I determine..." But often this is not necessary; they have already worked this out for themselves. This generation stays at home longer than all previous generations. Parents cherish their children like never before.

We look at our children and ask ourselves about the kind of future they are facing. Will they be happy? Will they want to work in companies where we have made our careers? Will they be as well off as us? It is said that young people want to "share" everything, so owning cars or other material matters will be much less important in the future. But at the same time, money is still important. Consumerism continues to beckon, if only to show who you really are. We see a youthful inter-







# Antiestablishment,

from sub-culture to mainstream

Two baby boomers: Donald Trump (1946) and John Lydon (1956; also known as singer Johnny Rotten of punk band the Sex Pistols). Both are symbols of resistance against the established order. Greg Gutfeld of Fox News calls Donald Trump the "Punk Rock President". John Lydon himself calls Trump the "Political Sex Pistol".<sup>7</sup> One has no political education; the other did not take guitar lessons. One opposed ingenuine and oversophisticated music, the other political correctness. Both have an enormous aversion to the established order. est in all kinds of things. Older generations dreamed of becoming a manager of a multinational, a professional footballer, or a high sea skipper. Today's children want to become influencers: the ambition is to have their own video channel to stream their lives and earn a living.<sup>6</sup>

It is said they are more accommodating, less antagonistic. With the knowledge that generations naturally react to their environment, this is understandable. The society in which current generations grow up is much less transparent than that of their parents. Everything is so uncertain. Resistance to the establishment, once the hallmark of youth, is becoming mainstream for all generations. Every generation looks for its own identity, its own place in history. But if politicians start behaving like punk rockers, how does youthful rebellion find a way out? By focusing on new things and building something they believe in themselves.

This generation is anything but punk rock. They are much more cautious and pragmatic, and serious when it comes to their education: features that come in handy. Because the risks in the world are increasing and the leaders are prepared to take risks.

Marketing research agency Ipsos is reluctant to make conclusive statements about this generation. In their report *Beyond Binary: The lives and the choices of Generation Z* one thing stands out: they are fluid and "beyond binary". For example, sex-neutral clothing and perfume are much more common than in previous generations, such as the millennials. They add that it is much more than sex or sexuality. The advice is: watch out, this is a progressive generation. And it all goes much faster than you think:

### "Keeping ahead of change: what was progressive is now normal, what is now progressive will be normal".

It would be extremely unwise to start a campaign with the word "iGen" or "Generation Z" in it. This generation is initially unique. Their parents have told them this very often and they have come to believe in it. The smartest thing you can do is to make your toilets gender-neutral. The two boxes, man-woman, symbolize everything this generation doesn't want to be. If you are aiming to just do some "Gen Z washing", then you'd better leave it at that, because if it's not authentic, they'll see through it straight away. But if you want to put them in a box anyway, here is a list of what is being said about them. They are:

Uncertain, overprotected, gender fluid, serious, pragmatic, touchy, always-on and less religious, docile, their color is yellow (that of millennials pink), they are driven and ambitious, they take more years to reach their adulthood, stay at home for a very long time and drink and do drugs less and are less criminal than other generations.

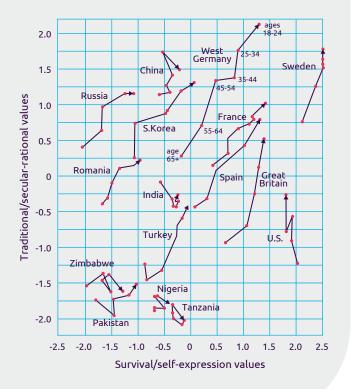
They are addicted to gaming and social media, but are also well-behaved, and they are good team players, although the studies differ on that. Above all, they want to have an impact on the world with the work they do. That's what 60 percent of this young generation say about themselves; for the millennials this was 39 percent.<sup>9</sup> This generation has an enormous drive to contribute to something.

#### This generation is post-materialistic

This conclusion is derived from the World Values Survey (WVS). It is the secular, post-materialist values that are considered important by this generation. Interestingly, these are the values not only of this generation, but also of the millennials: it is a movement that has been going on for a long time. This has been established by a network of sociologists who work together around the world, researching 90 percent of the world's population and values in 110 different countries. The explanation for this is simple. An increasing proportion of young people today grow up in prosperity and ascend the famous Maslow pyramid of hierarchical needs. But older generations who have known other times are less sensitive to this. The clash between these values is now taking place on the world stage.

"In 25 EU countries, the number of young people caught by the police decreased by 42 percent in the period from 2008 to 2014."<sup>8</sup>





"This is a postmaterialist generation that adheres to more secular values and self-expression, and is focused on self-actualization more than other generations and goes through life in a metamodern way."



Ron Inglehart during his speech and the value shift he is talking about (above). The arrows follow the direction in which younger generations move in a country. The trend moves towards more self-expression and secular values.

#### Polarization: value shift and value clash

Professor Ron Inglehart, founder of the WVS, not only explains this value shift in his new book Cultural Evolution: People's Motivations are *Changing, and Reshaping the World*<sup>10</sup>, but also the value clash and the response to these values: Trump, Brexit and populism. According to Inglehart, the fact that new values have emerged and at the same time old values are doing so well in the election battle is the result of the emergence of the new "winner takes all" business models. Platform organizations and major IT players skew the balance. The important variable here is called income inequality and uncertain future. The excessive wealth of the happy few, combined with the fear of robotization, is causing a revival of the old values in older generations. In the meantime, younger generations are adopting different values and a so-called value clash is emerging. That is why we see the old values and the new values side by side at the same time. The Gilets Jaunes ("yellow vests") protests in Paris are a typical expression of this, just like the escalating "Black Pete" discussion in the Netherlands. See also Inglehart's presentation about this matter on YouTube.<sup>11</sup>

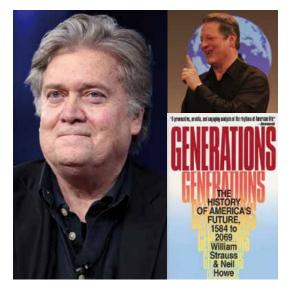
A METAMODERN LIFE <sup>12</sup> From old values	To post-materialistic values
<b>Traditional values</b> Importance of religion comes first, parent-child bond, respect for authority and traditional family values. Rejection of divorce, abortion and euthanasia.	Secular-rational values Opposite to traditional values. Religion, authority and traditional family values are deemed less important. Divorce, abortion, euthanasia and in a certain way suicide are more accepted.
<b>Survival values</b> Economic and physical safety are paramount. It is accompanied by ethnocentrism and a low level of trust and tolerance.	Self-expression values Above all, protection of the environment and a higher tolerance of foreigners, homosexuals and lesbian couples, gender neutrality and more wanting to have a say in the economy and politics.

#### The value shift according to the World Values Survey

The post-materialism referred to by sociologists has its philosophical equivalent and is called metamodernism: the introduction of a new kind of engagement. We initially saw manifestations of this in art (film, music), now we also see them in other areas, for example in the new social-media behavior (which we will discuss further in the next chapter). Whereas postmodernism still led to an ironic superficial feeling for life, metamodernism is a new kind of discovering meaning. Irony and involvement go hand in hand, with childlike innocence and experimental behavior as driving forces. The synthetic generation, based on its new values, gives the impetus to new thoughts and solutions. Metamodernism is therefore a philosophical transition theory that builds on the sociological post-materialism of Inglehart.

# **1.3** The transition: building something new

For the name givers of the term millennials, the Americans Neil Howe and William Strauss. the polarization outlined here is very clear. Under the plastic name of "cycle effect'" we introduced the idea of Strauss and Howe earlier. In their view – and theory – recurring patterns and contradictions can be discovered in the transitions from one generation to another. Alternately, generations are more focused on the collective and then again more individualistic. There are generations in which children are raised very protected, alternated with much freer parenting and other parent-child relationships. The patterns appear in cycles of four generations (with a wingspan of about 90 years, a saeculum). Howe and Strauss are not sociologists but historians. Based on what they have discovered in their historical research, they draw an important conclusion. This generation is, just like the silent generation (born in the thirties), out to build something new. The precarious thing about these conclusions is that the silent generation, and this generation too, is the product of a



Political and social commentators Al Gore and Steve Bannon are both fascinated by Strauss-Howe theory. Al Gore was already a fan in 1991 and gave a copy of the book *Generations* to all congressmen. Steve Bannon is now also a big fan. He draws energy from it to make the crisis that has been predicted a reality. crisis. For the silent generation the crisis was the Second World War, for this generation the question is which climax the crisis will reach. According to the Strauss-Howe theory, the tipping point will have to occur around the year 2025.

The magnus opus by Strauss and Howe, the book *Generations* from 1991, has caused a lot of controversy and it still does.

The far-reaching suggestion that the researchers make with their predictions is based on an analysis of modern American history and all generations that America has known since the year 1584. The parallels they found are extended to the year 2069. All the praise and criticism they have received with this mega-exercise is described in detail on the internet.<sup>13</sup>

#### This generation is outward looking

The transitions to new generations are called "turnings" by Strauss and Howe, but are also sometimes referred to as "mood swings". If we take a close look at the most recent cycle, we see the following patterns: If we add a column to the right, it would say "Generation Z".<sup>15</sup> The characteristics would be similar to those in the column on the far left; the silent generation. Here we see, among other things, the over-protected upbringing again, the adaptive character – the fluidity – and all this against the background of a crisis in which this generation is growing up.

That silent generation is a post-crisis generation, born in the 1930s, and helped build the post-crisis world. In that sense, the silent generation was seriously working to make this world a better place. It is also a generation that is less focused on the inner and more on doing and making. That inner came later, brought in by the baby boomers. They grew up in a time when children were emotionally neglected (at least by today's standards). The baby boomers started to follow their feelings and put them central: do we want to conform to this society? The answer was no, and resistance was the logical consequence. The flower power movement emerged. The cynicism of Generation X that followed is nothing more than the realization that the euphoria of the sixties did not bring Utopia and that going back to

THE FOUR GENERATION TURNINGS 14					
	Crisis	High	Awakening	Unraveling	
Period	1929-1945	1945-1963	1964-1985	1986-2005	
Main sentiment	Shame	Conformism	Euphoria	Guilt	
Upbringing	Overprotected	Less protected	Under protected	Protected	
Community		Can do – not feel		Can feel – not do	
Who grows up	Silent generation	Baby boomers	Generation X	Millennials	
They grow up as	Adaptive	Idealist	Reactive	Collective	
"Me" or "We" period	Rising collectivism	"We" period strong collectivism	Crumbling collectivism	"Me" period strong individualism	
Institutional order	Institutional crisis Old order	Institutional construction New order	Resistance to cultural meager period	Downfall of trust	



Culture clash between different generations. The G.I. generation that preceded the silent generation. Their grandchildren, the baby boomers, are constantly in conflict with each other. The contrasts increase when you list four generations.

the fifties makes no sense either. Nothing makes sense. Then Gen-Xers – with baby boomers as parents – begin to convey a new awareness to their children: you are here to improve the world. This is the heavy burden that rests on the shoulders of the millennials. The morality of Generation Z (our synthetic generation) is much more pragmatic: do what is best in each situation.

Howe (Strauss has now passed away) calls this youngest generation "Homelanders". This is a generation that grows up with a Homeland Security to protect the country from terrorist attacks. This is a generation that grows up in a world, where alternative facts are used. For them Volkswagen does not stand for German reliability. Dieselgate, #MeToo, climate change; due to an increasing transparent world, earlier trusted institutions and icons no longer seem trustworthy. The difference is that there is no foundation to fall back on. Generations are formed by the spirit of the times, events and education. This is the result: a generation with many of the characteristics that have been reviewed before: adaptive (fluid), they want to *do* something, they are "The Founders", and they are more collectively oriented: not a "Me", but a "We" generation.

#### The prophecy: Trump as president

Strauss and Howe are very clear about who will bring the crisis to a climax: these are the baby boomers. Their archetypal behavior is that they always cause a new crisis. The baby boomers are complacent and idealistic in the eyes of Strauss and Howe. A dangerous cocktail that can easily put things on edge and explode. There is a passage in their 1991 book *Generations* in which the authors, as a figure of style, address each generation personally. The moment they arrive at the baby boomers, they say the following:

"Maybe you are already beginning to realize that your baby boomer generation mates, with all their narcissism and lonely games, will play a decisive role in civilization, like we have never seen before and which is not comparable to anything else. Your intuition is right. History suggests that this will happen."

And then follows the prospect of getting people like Trump and other baby boomers to power:

"You may feel some disappointment in the Dan Quayles and Donald Trumps who have been among your first agemates to climb life's pyramid, along with some danger in the prospect of Boomer Presidents and Boomer-led Congresses farther down the road."



#### How the story ends

Strauss and Howe predict that the baby boomers will bring the crisis to a climax. They expect a positive turnaround from the millennials, who are just a bit more idealistic and are "pre-programmed" by their parents to create a better world. In addition, they are now older than the new generation and are likely to occupy more powerful positions. They make a pact with Generation Z which, as said, is adaptive and outward looking. They are millennial-minded and don't really care about other generations. Together, these generations will work to overcome the crises.

#### How the story continues

The youth channel MTV also did research on this generation. It is striking to see how the classical characterization of Strauss-Howe comes close to the results of MTV. In-depth interviews and an extensive survey preceded the question of what name this generation would like to give itself. This generation sees itself as a bridging generation and a generation that has something to build.

You could say that the work of this generation of founders has already kicked off. It is set on the internet and is related to one of the most striking behaviors of this generation: the mutual influence of following and being followed. Children of six years old are requesting: "I want my own YouTube channel". It's like they're picking up society as a whole, turning it a guarter of a turn and saying, "You should look at that". This shift in attention takes place on a large scale by the top influencers with millions of followers, and on a smaller scale in Instagram accounts where one learns the art of getting a few followers and harvesting likes. At an early age, children get tried and tested in managing their own reputation. This new generation is turning away from the old generation because of this shift in attention, without a clear generation conflict. Rather, there is a lack of interest of the young generation towards the old generation (and its world) and a simultaneous fascination of the older generations for the younger. Observe the next chapter as a metamodern view of the world: as brief momentums that must contribute to something you believe in at that moment. They are digital experiments, apparently artificial, but for them it's all just like reality.<sup>17</sup>

# "The Founders"

MTV calls this post-millennial generation "The Founders".<sup>16</sup> It's a word chosen by these young people themselves. The Founders see that they have a task. One of the boys expresses it as follows in an interview:

"I see my generation as a sort of foundation that sets off what's going to happen in the next 50 to 100 years."

Others describe themselves as the bridge to a new era, while others view themselves as a transition generation from what used to be to what is to come. These are big words and we see extensive time horizons. But little is said about what will happen exactly. The fluid character emerges in statements such as "In order to be cool, you can't act fake" and "People are mostly united in different things: they don't feel alone any more". Inclusiveness and gender neutrality were important themes raised by young people.

"They [The Founders] have this selfawareness that systems have been broken, but they can't be the generation that says we'll break it even more."

Chris McCarthy, vice-president MTV



# Part 2 The special media behavior of the synthetic generation



Nina is eleven years old and likes to post videos on the platform musical.ly (now TikTok). Sometimes she makes as many as thirty in a day. Recently she has received two VEED Awards as a newcomer to the world of vloggers and as best "Muser" (that's what the children who show their skills on the musically platform are called).<sup>18</sup> Meanwhile, Nina has 1.2 million followers around the world. This Dutch girl often receives nice messages from England or China. This year she is going to attend high school. Quite exciting, because she has already heard from friends that there are many children at this new school who already know her. She continues filming "if she can keep it up", because "a good education is also very important", she says. It occupies a great deal of her time, also because she has a YouTube channel with 90,000 followers.

The superstar status of Nina is not for everyone. Nonetheless, more and more organizations are using young people as their voice, from religious entities to global brands.

The many studies of this generation show that they mainly look for ways to be "authentic". In this completely mediadriven world with reality soaps and reality stars, they take their cameras to show themselves to the world. "This is me, I deserve to be, just like you, and what you see here is real", is their motto. It's all about authenticity in a world where real and fake can no longer be distinguished from each other. Imperfection is elevated to art; common is elevated to special, as expressed by a Gen-Zer in a study by consultancy Irregular Labs conducted among thousands of his contemporaries. "Gen Z craves a personal, authentic connection. We grew up watching and interacting with YouTube stars who were just like us, not elusive, Hollywood celebrities. As such, we appreciate the chance to engage with authentic, imperfect art."<sup>19</sup>



Top left: Nina with a fan in a shop who has recognized her from a movie on her YouTube channel. Bottom left: seven-year-old Ryan who earns \$22 million a year with his toy channel. Right: two-year-old Quenisha who has 250,000 followers on Instagram.



With likes, views, shares, comments and emoticons the shared content is then assessed. The above-mentioned study among thousands of Gen-Zers with five hundred in-depth interviews concludes: "they curate their existence" – they organize their existence. It's quite different from how previous generations behaved when growing up. Now they grow up with the internet and carry their smartphone with them all the time.

# **2.1** Influencing, flowing into the world of others

Although influencing is now clearly hip terrain, it's naturally been around for millennia. Influencing is derived from the Latin influentia, which means 'to flow in'. For us as homo sapiens, social group animals, it is impossible not to "flow" into someone's psyche to a greater or lesser extent when we work together or interact. The clothes someone is wearing, social status, a look, dominant, rushed or quiet body language, the specific use of words and intonation, everything has a large or a small influence. This also includes a posting on Instagram that is deliberately read and viewed. And here, too, the extent of the influence varies. Influencing others through catchy texts, sophisticated photos, sensational films and meaningful emoticons is in the blood of this self-confident generation.

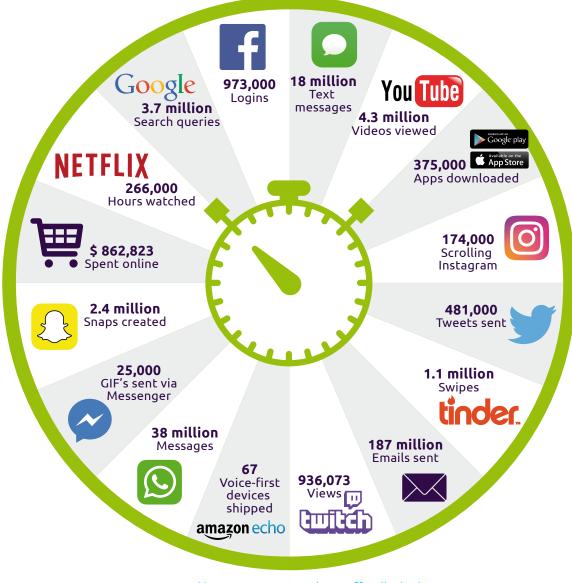
## **Everyone** is constantly being judged

In an interview with the Dutch newspaper *NRC* three adolescents, Shenia Spalburg (14), Puck Jagt (14) and Saffron Okubamikael (13), let us know how placing a photo on Instagram has to adhere to all kinds of standards:

"If you place a selfie on Instagram, it is an unwritten rule to tag all your friends in that selfie. So, you tag your two best friends on the eyes, your love interest on the mouth and all the other friends on the edges of the picture. Everyone does it."

### In only **a minute** ...

... 4.3 million YouTube videos are viewed, 2.4 million "snaps" are produced, 18 million text messages, 38 million WhatsApp messages and 481,000 tweets are sent, and nearly a million people log into Facebook.<sup>20</sup>



Created by: **Y**@LoriLewis and **Y**@OfficiallyChad

The influencer has clearly developed further than the teenager who simply tells us about his day. In an interview with The Atlantic, a 13-year-old talks anonymously about her dissatisfaction with an old-fashioned job: they often require training, and "Then you have to, like, physically go out and do the job for hours a day.". It seems like a lot of hassle compared to her new gig of posting sponsored content on Instagram: "Doing this, you can make one simple post, which doesn't take a while. That single post can earn you, like, \$50." In one month, this 13-year-old with her 8000 followers has earned a few hundred dollars.<sup>21</sup> But it is not as easy as it sounds, with research showing that 96.5 percent of everyone who wants to become a YouTube star does not generate enough income to exceed the poverty line of \$12,140.<sup>22</sup>

The above-mentioned practice is also called "micro-influencer marketing". Common Instagrammers, with several thousand to tens of thousands of followers, promote a product for a fee. According to the article in *The Atlantic*, thousands of teenagers earn a little extra pocket money. Some are their own managers; others use a specialized mediation agency. Besides the micro-influencers, we also see the emergence of so-called "shopper influencers".

Platforms such as The Insiders and Influence.co have millions of common influencers and Instagrammers in their network and play matchmaker with product campaigns.<sup>23</sup> The deal is usually a free product in exchange for a post or review. Corporate influencers are of course not left behind; the views vary from dozens to more than a million. The American Mediakix, a company specializing in influencer marketing, calculated that in 2018 €1.3 billion will be spent on collaborations worldwide through Instagram. And, according to a rough estimate, influencers, large and small, will raise between €4 and €8 billion by 2020.

Followers	You Tube	Facebook	
100k - 500k	\$ 12,500	\$ 6,250	
500k - 1m	\$ 25,000 \$ 12,500		
1m - 3m	\$ 125,000	\$ 62,500	
3m - 7m	\$ 187,500	\$ 93,750	
over 7m	\$ 300,000	\$ 187,500	
	Snapchat	Vine	
100k - 500k	\$ 5,000	\$ 3,750	
500k - 1m	\$ 10,000	\$ 7,500	
1m - 3m	\$ 50,000	\$ 37,500	
3m - 7m	\$ 75,000	\$ 56,250	
over 7m	\$ 150,000	\$ 112,500	
	Instagram	Twitter	
100k - 500k	\$ 5,000	\$ 2,000	
500k - 1m	\$ 10,000	\$ 4,000	
1m - 3m	\$ 50,000	\$ 20,000	
3m - 7m	\$ 75,000	\$ 30,000	
over 7m	\$ 150,000	\$ 60,000	

### Earning from a media message

*The Economist*<sup>24</sup> calculated that top influencers with more than 7 million followers, depending on the platform, raise between \$60,000 and \$350,000 for a social media post. With "only" 100,000 followers the amounts are between \$2,000 and \$12,500.

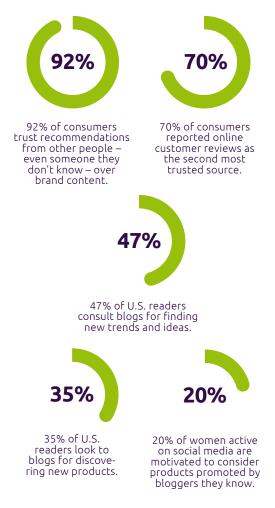


### Generation Z and social

influencing have grown hand in hand. YouTuber PewDiePie saw his followers grow to nearly 66 million in 8 years, during which time he uploaded on average about 1.2 films a day. His income for 2017 was estimated by Forbes at \$12 million. Half sisters Kylie Jenner and Kim Kardashian have built up their followers to several hundred million. The net value of the sisters is estimated at \$900 million and \$350 million respectively.

The platforms have grown along. Instagram, Snapchat and TikTok now have 500 million, 191 million and 150 million daily users respectively. Superstars like Beyoncé and Kylie Jenner announce their pregnancies and births on Instagram instead of on magazine covers. Stars involved in scandals post text or video statements and apologies before news websites can publish their articles.

## Influencing builds on the trust of word of mouth.



#### We like to be influenced

The lucky few of this generation can have more followers than many a country has in terms of inhabitants. And they are commercial, religious or politically driven. Meanwhile, even the first influencers have been killed off, because opponents found their influence on social media too great. E.g. in September 2018 Tara Fares was shot dead. She was an Iragi social media star who occasionally criticized religious, tribal and political leaders. Her murder was the fourth in a spate of fatal attacks on women who were all outspoken social influencers.<sup>26</sup> The time when influencing could be laughably dismissed as a crazy activity of young people is clearly over. The first influencer training courses in Europe have already started in Milan and Ghent <sup>27</sup> and scientists are investigating the exact meaning of these groundbreaking new behaviors. From a commercial point of view. the meaning is now clear. The consumer likes to be influenced by other people. Almost everyone (92 percent) is sensitive to recommendations from others and half of them scour social media in search of new trends and ideas, according to American research.<sup>28</sup>

It is therefore possible to make good money with this influence, because it drives many purchasing decisions. This generation likes earning money; we now know that post-materialism and money simply go hand in hand. But it is more than just making money. The targeted influence of microor macro-influencers on buying started with people who wanted to be seen and live an "authentic" and happy life. We therefore dive into four popular influencer genres to learn more about the motives and behavior of this generation:

- 1 Mukbang: eating in front of the camera;
- 2 ASMR (Autonomous Sensory Meridian Response): a new form of meditation and intimacy;
- **3** YY: large-scale life streams;
- 4 e-sports: watching people playing a game.

#### 2.2 In Pursuit of Happiness: sensory internet experiences

The four most important influencer genres that we are looking at are also peppered with money. We will endeavor, where possible, to look at the amounts, but predominantly it's all about the pursuit of happiness. Overcoming loneliness<sup>29</sup> for example by eating together, looking for intimacy by whispering and making contact in a different way, by playing and singing and, especially, to do all this under the constant scrutiny of others watching, empathizing and reacting. The core is authenticity. Everything they do in front of the camera, from their behavior to their clothing, everything needs a touch of authenticity. Influencers live their own reality soap. But how real is real?

# A. Eating together with mukbang

Videos with slurping, tasting and even burping sounds. It's too insane for words, but millions of people look at strangers who eat huge amounts of food in front of the webcam. It is one of the biggest trends from the east in recent years. Starting in 2010 in South Korea, this hype quickly spread to the rest of the world.



Mukbang means "social food". The name is derived from the Korean words "eat" (muokda) and "broadcast" (bang song): an eating broadcast. People turn their kitchen into a television station and tell us what they are cooking or eating. On average, a mukbang lasts a few hours, in which eating takes up half an hour. The rest of the time is used to digest the food and chat. In South Korea, the makers of these videos are called "broadcast jockeys" (BJs). Some are so famous that they can hardly walk the streets without being recognized.

The Koreans started this phenomenon because many people were alone at home after work in the evening. This was a way to get in touch with others and have a social life. Watching mukbang videos makes people feel like they're eating with a friend. Meanwhile, mukbang has become a lucrative activity for many and famous eaters earn about €9,000 per month. Some are paid based on the number of viewers. or through advertisements. For others, it is the viewers who pay by buying and sending virtual gifts. One of the best-known platforms to watch mukbang artists is the website afreecaty.com, where more than 5 percent of life streams now consist of mukbang videos. Many videos on YouTube have also generated tens of millions of views. Meanwhile there are spin-offs such as "Study With Me", where live or recorded study sessions can be viewed. You can, for instance, study together using the Pomodoro time management method, in which large assignments are divided

into 25-minute parts. The BJ studies in extreme concentration; occasionally a page is audibly turned, or a pen is picked up. Some videos have soothing background music.<sup>30</sup>

#### What researchers say about mukbang

Mukbang is a new phenomenon and the explanations why millions of people look at it vary widely. It seems that the social aspect is particularly important in Korea. In Europe and America on the other hand, it's about enjoying what is being eaten. Some viewers use the mukbang videos to arouse their appetite, others to enjoy a rich bite while dieting. This last need is also fulfilled when the BJ takes on the role of "avatar of the viewer" and does exactly what the viewer wants. Health professor Traci Mann underlines the enjoyment and sin through the other and adds: "It makes your own virtues clear, because you are not the one who does it. The people in the videos do something worse than you would ever do and that makes you feel better about yourself compared to them."<sup>31</sup> In an interview with *de* Volkskrant<sup>32</sup> Liesbeth van Rossum, internist-endocrinologist and professor of healthy weight at Erasmus MC in Rotterdam, tells us that people like to watch people eating. "Seeing food triggers a hormonal reaction in our bodies. Our saliva production is stimulated, the gastrointestinal tract starts to work and, if we eat along, a feeling of happiness may arise". We invite you to type in "mukbang" on YouTube and ask yourself the question: "Is this digital happiness?"

# B. Digital meditation with ASMR

We exchange the videos with tasting sounds for videos in which people whisper and produce hardly audible sounds with all kinds of attributes. The aim is to create an Autonomous Sensory Meridian Response (ASMR): a pleasant shiver or a tingling sensation that starts at the crown and descends down the spine. People get this tingling feeling from certain sounds or touches. It is a euphoric sensation that feels like a nice head massage at your hairdresser.

The ASMR movies create peace and relaxation through images and sound. This is done by rubbing a microphone with a brush, grating pieces of soap, squeezing oasis (floral foam), whispering with a stereo effect, sucking a microphone or making ticking sounds on glass. The largest ASMR channel is currently Gentle Whispering ASMR, with more than 1,500,000 subscribers. The most popular movies have more than 10 million views.

Isabel earns quite a bit of money from this trend with her YouTube channel Isabel Imagination



Isabelle Meijering, ASMR artist doing a role-playing video

ASMR. In daily life she runs a fitness business, but there are some months in which her videos earn her double what she normally earns with her own business. "In one month I might earn enough from YouTube to easily afford some city trips on top of my rent, groceries and other costs. In other months, I may only earn half my regular salary and I can only pay my basic rent with my YouTube money". She has nearly 240,000 followers who generate her millions of page views and the corresponding advertising revenues through Google. One of her most popular whisper videos is a school nurse video in which she examines the viewer, asks questions about his or her body and comes very close to the camera to clean the viewer's ears. Following these trends, there are now also so-called 'whisper lodges" in various cities worldwide. People visit them to undergo an ASMR treatment. You are welcomed into a serene space and then exposed to all kinds of sounds, smells and touches to arouse the tingling in your brain. This can be done in groups or individually.

#### What researchers say about ASMR

ASMR is typical behavior for Generation Z: 34 percent say they watch YouTube movies to fall asleep and 43 percent say they do so to reduce stress.<sup>33</sup> Professor in biopharmaceutical sciences Craig Richard, associated with the University of Shenandoah, has been researching the ASMR phenomenon since he first encountered it in 2013. He became fascinated by the phenomenon and founded the website ASMR University to investigate it. Richard compares the behavior with that of a parent caring for a child and the intimacy that goes with it: you often hear a calm and soft voice and a caring look enhances the effect.<sup>34</sup> It is a moment when the viewer receives (synthetic) dedicated attention in a world where attention is continuously fought over.

Dr. Stephen Smith, psychologist at the University of Winnipeg, did research into ASMR via fMRI scans. His first impressions are that certain aspects of ASMR correspond to meditation, for example full attention focused on the sound and soothing feeling. Smith says in *The New York Times*: "If I can

#### Inside the brain of ASMR Take a look at how ASMR is theorized to work. Jackie Hur | Graphic SmithsonianMag.com, ASMRUniversity.com | Sources Different networks of **ASMR**, or Autonomous the brain such as Sensory Meridian Reported vision, touch, Response, is characteri-**Benefits:** hearing and zed by a variety of concentration Relaxation soothing sensations activate atypically, • Relieves stress due to gentle stimuli. resulting in a and anxiety blend of senses Serotonin is released Decreases similar to synesfrom the pituitary gland, elevating thesia. chronic pain mood and inducing sleep. Relieves Endorphins are insomnia released from the Oxytocin is released from the pituitary • Elevates mood pineal gland, causing gland, causing relaxation and increased feelings of euphoria and Increased focus endorphin receptor sensitivity. a tingling sensation.

\* Disclaimer: ASMR is still relatively unknown, and not all of the included information has been clinically proven.

Scientific research has shown that a certain area within the brain is activated when people listen to ASMR.

better understand how these people experience positive emotions and relaxation, it gives us the opportunity to develop programs that can increase their well-being. But Smith also sees a downside of the feigned intimacy in the videos: "There's so much online that allows you to not actually interact with other human beings yet still feel close – artificially close– to other people. ASMR does that."<sup>35</sup> Research into ASMR, the digital meditation of Generation Z, is still in full swing. Meanwhile the influencers score big with millions of views and the viewers enjoy a moment of rest in a life of information overload.

# C. Factories full of influencers

The documentary *People's Republic of Desire* shows us how life streaming has become the hippest trend in China. It gives an insane view of what may be in store for us in the West in the years to come. With a computer, a webcam, a headset and a microphone, everyone can share their life online from home. Eating, singing, gaming, shopping or just talking, it all happens through a life stream. In this world, one of the most beautiful places to immerse yourself in is the Chinese website yy.com. There is a professional industry (YY's annual turnover in 2017 was \$1.8 billion) behind it: factories full of influencers. The website has over 300 million active users every month and more than one million video channels. YY can handle a capacity of over 100,000 viewers per channel. Here you can choose from tens of thousands of people who all do their own thing in a virtual space.

Each channel has the ability to interact. Short messages from viewers flash over the image, to which you can react. If you like what the influencer does, you can reward him or her by giving a virtual gift such as virtual roses, lollipops and cuddly toys, which you can, of course, buy online. If you buy a lot of gifts and give them away often, you will be labeled "king" and you can enter the chatroom in a virtual Lamborghini. Some "celebrities" earn around \$200,000 a month thanks to these gifts.

More serious applications can also be found on the platform. For example, an educational plat-



The Chinese website yy.com has over 300 million active users monthly and an annual turnover of \$1.8 billion in 2017.

form is offered via the subdomains edu.yy.com and 100.com where all kinds of tutorials are broadcast all day for interested parties. For instance, a pharmaceutical company in China uses this platform to continuously keep its employees informed of the latest state of affairs. Teachers are also encouraged to share their knowledge through this platform and earn money.

## What researchers say about factories full of influencers

The success of life streaming is obvious, but the question remains of why all these influencers have an audience. Although these platforms offer the possibility of interaction through chatting and sending gifts, the viewer usually remains a stranger to the influencer. Conversely, it turns out that many viewers think they know the vlogger or streamer through and through. While the media personality does not (or hardly) know about the existence of the individual viewer, the relationship can feel as real as a normal friend-

ship for the viewer. This is also called parasocial interaction (PSI): a "friendship" with a media personality. The model comes from social psychology and explains similarities between one-sided relationships with vloggers, television personalities, gods, spirits and political figures. It turns out that a PSI relationship develops roughly the same as a normal interpersonal relationship: the relationship must be voluntary, provide companionship and be socially attractive, and the more contact there is (consuming content) and the more the viewer is exposed to the vlogger, the higher the PSI score. As the relationship develops, the viewer increasingly sees the vlogger as a reliable source of information and therefore seeks his or her advice. The viewer seeks and finds confirmation of himself in what the vlogger says, considers the vlogger as a friend and has the idea they are a significant part of the life of that personality. Buying products linked to a media personality can therefore follow the same pattern as the famous word-of-mouth advertising.<sup>36</sup>

# D. Influencers: the new top athletes

We used to play on the streets. Then on the (game) computer. In the last decade we have started playing online. Now we're looking at other people playing online. This is the world of e-sports. In this sporty form of influencing we see tens of thousands of cheering fans gathered in the Incheon Munhak Stadium in South Korea. Another 200 million viewers follow the event at home in excitement. In the middle of the stadium there are cameras aimed at ten young people. They are two teams of five players and each team has its own team shirt, fans and the most advanced gear. The gamers wear a headset and have one hand on a gaming mouse, the other on the keyboard. The cheering is loud; the final of the 2018 League of Legends World Championship is about to begin. The professional gamers are ready; they have trained for years. Each of them is determined to go home with the grand prize of \$2,418,750.

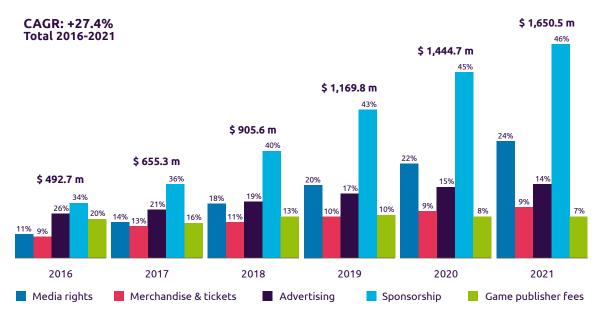
The scenario may sound strange to you, but this is already the level e-sports has grown into. Indeed, e-sports has assumed many of the components of traditional professional sports, such as players, teams, managers, championships, competitions, smaller events, endorsement deals, player transfer costs and scholarships. Less positive phenomena such as match fixing and doping are also emerging.<sup>37, 38</sup> The competitions are often held in huge locations, such as stadiums, where the audience watches the professionals compete for first place. The players and tournaments are sponsored by large corporations and the matches are often streamed with live commentary. This rapidly expanding world of competitive video games is played on a variety of platforms, with mobile taking up a rapidly growing segment.

## The **figures**

Influencers have made this sport famous.<sup>39</sup> Many of the e-sports influencers are on Amazon's streaming platform Twitch. According to twitchtracker.com, about 1.2 million people are watching how other people are gaming on this platform at any given time. Every month there are about 3.2 million unique streamers.<sup>40</sup> Some of them reach thousands to hundreds of thousands of viewers. Many others spend months in vain broadcasting their own game adventures to a non-existent audience.<sup>41</sup> By the end of 2018 there were around 380 million e-sports viewers and popularity will increase further in the coming years according to Amsterdam research agency Newzoo.<sup>42, 43</sup> Newzoo estimates e-sports sales for 2018 at \$906 million, an annual growth of 38.2 percent.

## What researchers say about e-sports

The figures indicate a growing trend that can guickly become mainstream. But why would anyone look at how a digital avatar scores a goal or beat an opponent with a *legendary combo*? Surprisingly enough, the motivation for e-sports viewers seems to largely correspond to that of normal sports viewers. From a survey of viewing motivation, eleven out of fifteen factors scored as high with fans of e-sports as with fans of a real competition. The reasons mentioned included: "Watching a sporting event gives me the opportunity to connect socially with others", "I can cheer for my favorite player", "The athletes inspire me as a role model" and "I can increase my understanding of strategy by watching the game". The same research showed that going to a real stadium can strengthen family ties; this is less the case with e-sports because so much takes place virtually. Remarkably, e-sports score much higher on the ladder of public enthusiasm.44



Research firm Newzoo predicts that revenue growth in e-sports will continue to \$1,650 billion in 2021.

It should be mentioned that there are also concerns about this form of entertainment. Of this synthetic variant of sports, in addition to the lack of physical activity, the addictive property is a serious concern to many people. Addiction psychiatrist Dr. Petros Levounis tells *The New York Times*: "I have patients who come in suffering from an addiction to Candy Crush Saga, and they're substantially similar to people who come in with a cocaine disorder."<sup>45</sup> ESA, the American gaming industry association, still calls it a "passion", but now the World Health Organization has officially included "gaming disorder" in its list *International Classification of Diseases*.<sup>46, 47, 48, 49</sup>



In February 2019, DJ Marshmello held an in-game concert of 10 minutes in Pleasant Park in the game Fortnite. By one estimate, 10 million concurrent users attended the show. Millions of others watched the show afterwards on YouTube or Twitch.<sup>50</sup>

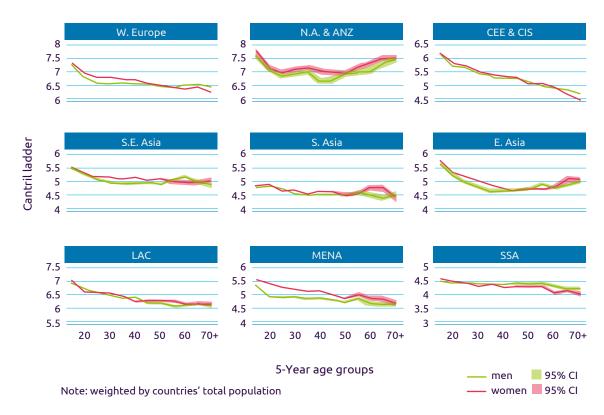
### 2.3 Happiness crisis?

Conversations about young people and their media behavior are one of the most interesting areas of tension of our time. Our biological design, our DNA, which has evolved over millions of years, changes only slowly, while our environment, on the other hand, changes rapidly. We have seen that countless new digital interpretations are being found for well-known old human needs. For a quiet experience, you don't just go out into the woods anymore; you play an ASMR video, and if you don't want to eat alone; you play a mukbang stream. The key guestion that many researchers and critics of society now ask themselves is whether something important is lost in this digital frictionless and instant gratification. What about the short term, but also the long term? Are we moving further and further away from ourselves or do we know better and better what it is like to be human?

#### Happiness, stress and depression

Let's start with a hot potato: those new behaviors are all very well, but how does the new generation feel? Is this synthetic generation happy? There is, of course, only one good answer to such a question: it depends. Factors such as the country, the place of residence, the exact age, gender, level of education, social environment, conditions, etc. all make an impact. On average we see that young people score higher on reported happiness in life than older people.<sup>51</sup> Youngsters in the Netherlands do exceptionally well and score regularly as the highest in the world on their own life satisfaction.<sup>52</sup> Despite the digital changes, they still report being very happy and content with their social relationships.<sup>53, 54</sup>





#### Regions: Cantril ladder by gender and 5-year age groups

An overview from the 2015 World Happiness Report shows that young people score high on reported happiness compared to older age groups.

Yet there are concerns. They often come from two angles: increased performance pressure and digital behavior that has got out of hand. In 2001, for example, 16 percent of Dutch high school students experienced pressure from school work, while in 2017 this was more than 35 percent.<sup>55</sup>

This is partly explained by the fact that nowadays there is simply more attention paid to mental health and the taboo of mental problems has diminished. However, according to sociologists and psychologists, the increase in reported stress, restless sleep and the feeling that everything is difficult is also due to the almost limitless choices, the resulting choice stress and the continuous comparison with others via social media. Research by the American psychologist and professor of social theory Barry Schwartz had previously shown in 2004 that too many choices led to higher dissatisfaction. A simple experiment with jars of jam in a local supermarket demonstrated this. It turned out that the supply of more different flavors of jam led to fewer purchases. The more choice, the more doubt. Nowadays the choices are endless: the most exotic jars of jam are delivered the next day and Tinder offers an unlimited range of dating options. Scarcity seems to be an increasing exception. Even the question of whether you are a man or a woman has become a fluid gender question. At the present time, so much is allowed and possible and we are constantly bombarded with extreme successes and excesses. As a result, expectations about one's own life have become sky-high and cannot always be met.<sup>56</sup> Even when expectations have been met (or exceeded), there is doubt in this generation and it is constantly afraid of failing. In psychology this is known as "impostor syndrome" or "scam syndrome."<sup>57</sup>

Activity	Time spent (hours)	Net affect
Intimate relations	0.21	4.74
Socializing after work	1.15	4.12
Dinner	0.78	3.96
Relaxing	2.16	3.91
Lunch	0.52	3.91
Exercising	0.22	3.82
Praying	0.45	3.76
Socializing at work	1.12	3.75
Watching TV	2.18	3.62
Phone at home	0.93	3.49
Napping	0.89	3.27
Cooking	1.14	3.24
Shopping	0.41	3.21
Computer at home	0.46	3.14
Housework	1.11	2.96
Childcare	1.09	2.95
Evening commute	0.62	2.78
Working	6.88	2.65
Morning commute	0.43	2.03

The increased performance pressure is too great to be attributed solely to technology use and social media. It is a trend that has been developing for decades, reinforced by the economic crisis and the current crisis of trust. The total picture is still missing, as is the detailed picture of the precise role of the use of technology. What does seem to become clear is that the average screen usage of

## In **Pursuit** of Happiness

The fact that this generation pursues digital happiness is evident from this list of most blissful activities. It comes from our first report from this series: The Happiness Advantage. Nobel Prize winner Daniel Kahneman mapped out the activities that contribute most to people's happiness. The number of hours spent daily and the net effect on happiness are shown here in the columns. We see that "intimate relationships" and "socializing after work" lead the list, followed by dinner, relaxing and a little physical exercise. The latest internet trends mukbang, ASMR, YY and e-sports reflect that happiness top 5. The digital variants of eating. relaxing, exercising, intimacy and socializing are all represented. It is striking that this social dimension is constant, because watching and participating with the influencers is ingrained. Another striking fact is that the sensuality of the experiences in all these forms is very central, from sounds, touch and whisper (ASMR) to cheering and movement (e-sports), singing and dancing (YY), and finally chewing with your mouth open and swallowing (mukbang). They seek the limits of the possibilities of synthesizing the senses.

young people is so high that it has a negative influence on their own reported happiness, self-confidence and life satisfaction. One to two hours of screen use per day seems to be the sweet spot, while the average use is many times higher.<sup>58</sup> There is awareness of this issue: more than half of the surveyed British teenagers, for example, look at their smartphone more often than they would like and estimate that social media has a negative effect on their net happiness.<sup>59, 60, 61</sup>

France has recently introduced a smartphone ban in schools and young parents are already taking tougher action against smartphone use than older parents.<sup>62</sup> Companies are now positioning themselves as guardians of their customers' digital happiness. For example, following insistence from customers and shareholders, Android and iOS now offer a digital well-being monitor on their smartphones, an app that provides insight into usage. But for generational expert Jean M. Twenge this is probably not enough. According to her, a whole generation is in danger of being unhappy because of the smartphone. In the long title of her recent book on the synthetic generation she summarizes her concerns: *iGen: Why Today's Super-Connected* Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood—and What That Means for the Rest of Us.

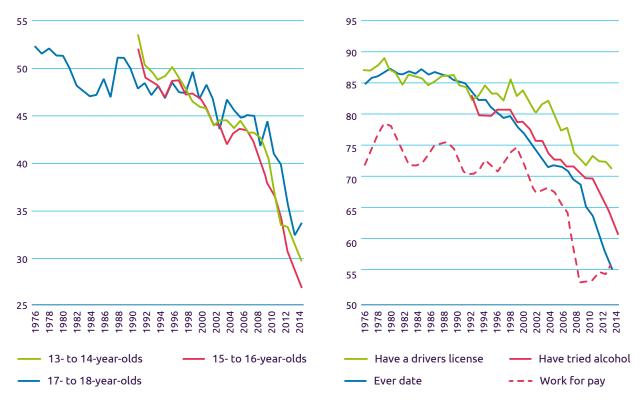
Twenge bases her book on numerous comparative studies, each of which shows a turning point in trend around 2008 (see the graphs on the next page): one year after the iPhone was released. Teenagers see their friends less often than before and the time they spend on texting, social media, internet and gaming has only increased in recent years. And although this generation is more "connected" than previous generations, it is also lonelier. Some even call Generation Z the loneliest generation ever.<sup>63</sup>

According to Sherry Turkle, Professor of Social Studies of Science and Technology at MIT, this loneliness and digitization has led to a fear of conversations, a fear of doing wrong and a fear of spontaneity and interaction. For example, she sees the desire for an editable life in a university student who only wants to communicate with his professors via e-mail; so that he can review and revise his words and not spontaneously say something wrong.

In her book *Reclaiming Conversation* Turkle blames the whole of society for this problem and explains how we have exchanged conversation for connection in work, at home, in politics and in love. We avoid educational interaction and mainly share opinions that our friends will agree with. The studies that Turkle analyzes show a loss of empathy as a result.<sup>64</sup> Twenge also sees less open dialog and debate at the universities where she teaches. She tells us that colleagues are shocked when students no longer question the material, but immediately complain, cry and appeal to their "right not to be hurt". In recent years, so-called "safe spaces" have even been popular on student campuses, where students are protected from ideas that they find offensive. If students are upset because of a controversial speaker, they can go to a safe place to comfort each other. If anything is in danger of being lost, according to both professors, it is the fruitful dialog and ultimately democracy. We may be happy, but we miss friction. We have few comparisons in some areas and there are many variables. It is therefore already difficult to identify the short-term consequences, let alone the longerterm consequences. Critics argue that we currently underestimate the long-term consequences, as we did with junk food, tobacco and alcohol. In the long run, will we no longer have the social and self-care skills that are essential to become happy? In the end, as with every generation and every child that is growing up, it remains to be seen how the synthetic generation will eventually follow its life path.

# **2.4** A metamodernist amusement park as a closing note

If we look a little further than the observed behavior, we see young people experimenting with identity, friendships, recognition, influence, attention, authenticity, happiness and meaning. These are typical themes for young people of all generations.<sup>65</sup> But times have changed. The metamodernism we introduced in the previous chapter shines a special light on this. On the one hand we see that the platforms have become a metamodernist amusement park: pick a conviction and in no time you will find an authority (vlogger with many followers) that thinks the same. Trends, lifehacks, tips and tricks for hobbies, choosing an education or profession, discovering one's own sexuality and undergoing physical changes such as a growth spurt: the exchange of these tips and tricks literally and figuratively crosses (international) borders. On the other hand, you see, and now we quote the definition that comes from the founders of metamodernism: "That it is always about initiating stories that somehow give meaning, stories that are doomed to fail or are downright artificial." As we have discussed, influencer behavior is just as much a business model as a search for new meaning based on new values. It characterizes the aforementioned transition. There are no large ideological programs as in modernity, no blueprints for the future. They are brief meetings that must contribute to something you believe in at the time and that can ultimately lead to something new. Metamodernists believe in building hope and optimism in a (postmodernist) period in which the standard purpose frameworks have been abandoned and cynicism and despair prevail.



Two of the many graphs in Twenge's book *iGen* that show a turning point around 2008. On the left: The percentage of young people meeting with friends every day or almost every day is decreasing. On the right: The percentage of 17-18 year-olds having a driving license, having tried alcohol, having dated or working for money has fallen dramatically.

The self-awareness while growing up, the self-actualization and the struggle with (one's own) authenticity characterize this generation. For this synthetic generation, it seems only a logical step to look for digital variants, often a path of little friction and an instant satisfaction of needs. We clearly see a striving for digital stimulation, sensation and a better synthetic interpretation of real human needs. This is done through the path of an ever better imitation of human contact, such as the pleasant stimuli of ASMR, which has given rise to the creation of whisper lodges in cities. In this whirlwind of experimentation and human needs there is fierce fighting for each other's attention. Democracy may be less valued, but in a sense this generation is learning better than ever before what their voice, or "like", is worth. Possibly, this might be the harbinger of a time in which mindful attention is actually our most valuable and most distinctive possession.

And although the examples we saw are all digital, interest in each other, in people, dominates. Norms, values, manners and worldviews are implicitly and explicitly propagated and viewed in abundance. And the latter value, authenticity, is central to an important area of tension. Whereas in the Middle Ages seeing your reflection was a unique, exceptional experience, young people are now constantly confronted with how they come across to others and how many likes this or that pose produces. Many taboos have been broken and the choices of who you like and want to be seem endless. Take the commercialization of the experiences; it becomes very difficult to know what "just be yourself" means and it becomes almost impossible to distinguish between "real" and "fake". A long read that expresses this beautifully recently went viral. The author, Zander Nethercutt, former Yelp manager, complains about the fact that every new-generation media expression, however original, is immediately picked up and commercialized by marketers. There are no more niches in which you can hide. As soon as something is on Instagram, it is public. It is copied, imitated and widely distributed. The imitation becomes the standard and this creates a "cosmetic class" so that Instagrammers are no longer authentic, but follow the standard of the medium itself. See "The Instagram Generation"<sup>66</sup> and "The End of Authenticity"<sup>67</sup> for further insight. As further borne out in the following chapter (part 3), we can only conclude that it will be much more difficult to be authentic and to distinguish between authenticity and fake.

# Part 3 The synthetic future

Authenticity, the word that so often appears in studies of this generation, is under pressure. Authentic means of undisputed origin, not of a copy, genuine. Following real people, observing the world through the eyes of the so-called influencers, has everything to do with the desire for authenticity. At the same time, the world being looked at is almost never real.

Photos, videos and comments are quickly manipulated for someone's gain. This generation grew up with this media manipulator. In this context, we look ahead to the possibilities that the media offer to make even more use of our own power. Initially, our interest was aroused by the rise of so-called CGI (computer-generated imagery) influencers. Behind this an industry of "digitized people" is emerging, providing models or avatars for real-life chatbots; artificial intelligence gets a face with these virtual people. What is real and what is fake will be increasingly difficult to unravel. An alarming conclusion perhaps. But we stick to the fact that this generation is better able to handle this illusion. After all, they grew up with it.

#### 3.1 Easy to trick

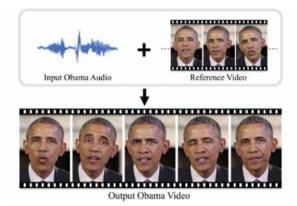
If we look ahead through the lens of technology, we can see that finding out the truth is becoming increasingly difficult. What is real and what is fake? The truth can easily be manipulated. A picture of Justin Bieber eating a burrito on a bench in a park across the street went viral recently. It turned out to be a lookalike (Brad Sousa). Everything was staged to warn people about fake news. Recordings of CNN reporter Jim Acosta, who was banned from the White House, also went viral. The video was only manipulated a little, sped up at some point and then slightly slowed down. This made it seem as if the reporter behaved a little more aggressively towards the press officer. The real and fake game does not necessarily need advanced technology to trick us. But the possibilities to manipulate voice, video and faces in such a way that it is impossible to distinguish fake from real are increasing.

Is the sender of a communication still who he or she says they are? Is it a human being or a computer? Is the voice original or imitated and does it seem lifelike? The article "Synthesizing Obama" from the University of Washington<sup>68</sup> explains how real and fake are becoming increasingly difficult to disassemble. Original images and texts are used as a basis to create a comput-

Above we see the "real time as-a-service" of production agency OSF and below we see Ami Yamato walking through the streets playing a game of reality.

OSF is a British technology company specializing in virtual productions. The man standing here in the so-called green room is projected real-time in a domestic environment. It is impossible to discover what is real and what is virtual with the naked eye. This advanced technique is used in the film and advertising industry. It is becoming increasingly easy to create virtual productions that are lifelike.

Ami Yamato is a 3D vlogger with 135,000 followers. The photo below clearly shows an avatar, but she projects herself into real-life environments. As a result, real and fake are intertwined in an alienating way. Yamato is Japanese, lives in London and reveals little about who she really is. er-generated synthetic version of Obama that can then put any words in his mouth.



From a technological point of view, imitations of real people are becoming increasingly lifelike. Cloning your voice using online tools such as Lyrebird, Voicepods or Deep Voice has become easier and easier. Live images can now be projected in real time in virtual spaces.<sup>69</sup> Soon, vloggers will no longer have to leave their homes. Ami Yamato is a confusing example of how real and fake can be confused. Yamato's video channel is hence called "videos that confuse people". You can clearly see that the vlogger is an animation, but she runs through the streets of London, which are real.





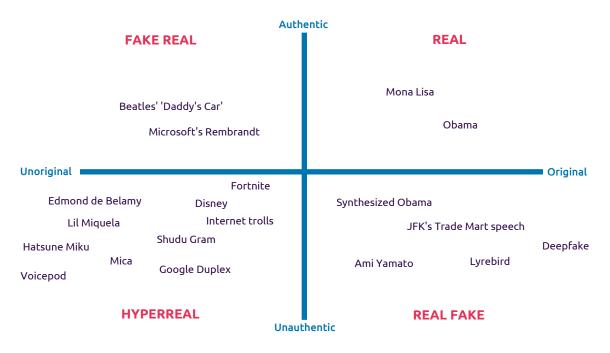
The virtual space where you can meet Magic Leap's Mica and the painting by Magritte that was hung on the wall. Nothing is what it seems.

The new standard for lifelike has been set by the agency Magic Leap, which showed the virtual assistant Mica to the world in October 2018, a human avatar who can be admired with augmented reality glasses.<sup>70</sup> Those who put on the augmented-reality glasses, entered into a space where Mica looks you questioningly in the eyes and suggests certain music, according to your mood. In a remote room people were given the opportunity to sit one on one with Mica at the table. Although Mica didn't speak, she could make it clear what she wanted. There was a picture frame on the table, and with a few hand gestures it was made clear that it had to be hung on the wall. As soon as the bare frame hung from a nail, Mica touched it with a finger and the famous painting *Ceci n'est pas une pipe* by the Belgian artist Magritte appeared, illustrating that

nothing is what it seems. Gigglingly Mica then took the pipe from the painting, stuck it in her mouth and disappeared behind a wall.<sup>71, 72</sup>

### 3.2 The real-fake-quadrant

In his article Artificial Intelligence, Deepfakes and a Future of Ectypes, information philosopher Luciano Floridi asks the question where technology can still stretch the boundaries of reality. He introduces the word "ectype", a Greek word for a copy that still has a special relationship with the original, but is not "the real thing". CGI influencers are an example of ectypes: the original is human, but they are not "the real thing". They are hyper-real, inspired by man, but can never be traced back to which unique man exactly.



The synthetic media quadrant classifies media expressions by authenticity and the link to an original source.

Paintings by famous master forgers can also be authentic, as long as you know who the forger is. Some of these paintings are even worth a lot of money. For example, Microsoft's artificial intelligence produced a painting by Rembrandt that he never painted, but is based on his style of painting. It is an authentic painting, but an "unoriginal" one, because the original does not exist. Just like the Beatles song "Daddy's car", which is a one hundred percent product in the Beatles style, but was not written by the Beatles themselves. It was written by an AI that listened to the Beatles' complete catalog and then composed the song itself. However, there are traces of the original source in this new song. For the "real" quadrant it is a piece of cake to find out the truth. We stand face to face with the original and recognize it. The "real fake" is able to sow the most confusion. It is originally the one human being, but media manipulation can put anything it wants in the mouth of the fake.

At Google Duplex, Google's voice falsifier able to make an appointment for you at the hairdresser,<sup>73</sup> was far from authentic when it presented itself as a real person in a conversation with the hairdresser. After much criticism in newspapers, magazines and social media Google intervened and ensured transparency: in the new demo Duplex starts the conversation by making it known that the listener is talking with a chatbot. Google Duplex is authentic when it communicates it is a program, a "real fake" example, but when it presents itself as real human, it belongs to the "hyperreal".

In an article for *The New York Times Magazine*, author Max Read makes the point that everything that happens on the internet is fake: from statistics to people to companies to politics. The dividing line between what is fake and what is real has, as far as he is concerned, been crossed. He calls this "The Inversion."<sup>74</sup>

## **3.3** The rise of hyper-real influencers

Real influencers of flesh and blood now have a competitor: the computer variant. The bestknown fake influencer is Lil Miquela Sousa, a 19-year-old Brazilian-American model. She's not real, but a real-life simulation that is hard to distinguish from real. She has a freckled face. full lips and two little buns on her head. Miquela is a computer animation developed by the company Brud, which specializes in robots and artificial intelligence and their application in digital media. Together with her fellow competitors Bermuda, Blawko, Noonoouri and crowdsourced pop star Hatsune Miku, she blurs the line between reality and social media, where reality is hard to find as it is. Lil Miquela is "an exaggerated version of the beauty standard" typical of Instagram.



# Four famous CGI influencers

- 1. Shudu Gram with her likewise virtual colleagues
- 2. Vocaloid pop star Hatsune Miku performs in a sold-out venue
- Instagram influencer Noonoouri poses with super model Isabella Khair Hadid.
- 4. Instagram influencer Lil Miquela poses with music legend Nile Rodgers.

From virtual influencers to virtual employees. Four groundbreaking

### digital humans

- Daniel Kalt, head economist of the Swiss bank UBS who – supported by IBM Watson technology – talks to clients as a digital clone.
- Nadia, developed by FaceMe, is a health coach who keeps an eye on patients' hearts from a distance.
- AI, news anchor at the Chinese news channel Xinhua, reads out the news 24 hours a day. He speaks Chinese and English.
- Mica, the virtual assistant of Magic Leap, is indistinguishable from real and evokes emotions.



Miquela wears expensive designer clothing, gets backstage passes for exclusive events, has been on the covers of two renowned magazines, temporarily took over Prada's account to promote their new clothing collection and released a well listened single "Not Mine" via Spotify. She also stands up for transgender rights, supports the LHBT+ community and supports the Black Lives Matter movement. In short, she leads a perfect life that teenage girls worldwide dream of and represents all the values that this new generation loves so much. Marketers love it too, because it is easier to control CGI influencers than real people. The risk that your brand will be damaged if you get into trouble with a real influencer is much greater.

According to many, authenticity is a prerequisite for success as an influencer. Does the poster look authentic? Is the match with a brand logical? How "real" or "fake" is the other person? According to philosopher Joep Dohmen, the concept of "authenticity" has become very complex in our time. People experience it as a task to be true to themselves, but at the same time have no clear criterion by which to measure it or what it exactly means to be oneself. At the same time they are judged on their authenticity on social media.

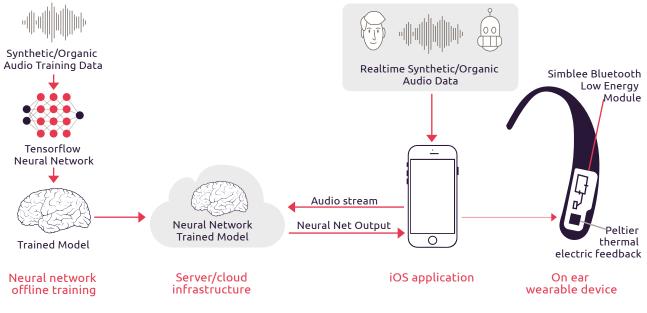


### "How do we work with fake influencers with fake followers and fake engagement in a more authentic way?"

Top photographer Cameron-James Wilson went one step further with his creation Shudu Gram. His digital character is the world's first digital supermodel. With its striking appearance, Shudu Gram now has more than one hundred thousand followers.<sup>75</sup> "We live in such a filtered world that everything that is real becomes fake," says Wilson about his creation. "Our society is just incredibly fake and I want to mix up this "real" and "fake"." Lil Miquela has something to say about this herself:

"I think we are at a time when it is becoming increasingly difficult to find authenticity. People can interpret and project any desired meaning onto the images they see on Instagram. Regardless of those different interpretations, I have created real friendships and relationships with people online."

As with any problem created by technology, a technological solution is emerging. The Anti Ai Ai project offers artificial intelligence as a solution to quickly detect fake information. A neural network trained on tensor flow recognizes synthetic media, such as Obama's voice from our example. As an interface to warn us we can get thermal feedback – literally cold chills – if we are fooled.



This Anti Ai Ai listens with you and analyzes whether the voice you are talking to is human or manufactured. If the latter is the case, it makes a thermoelectric cooling element that you have stuck to your spine icecold. So you literally get a cold shiver when (unconsciously) talking to an artificial entity like Google Duplex. See http://antiaiai.info for more details.





# **3.4** Armed against the InfoCalypse

What happens in the end when we no longer know whether what we see or hear is authentic, when we can no longer distinguish between real and fake? Aviv Ovadya, Chief Technologist at The Center for Social Media Responsibility, talks about an upcoming InfoCalypse. We spoke to him in Chicago, where he told us that if we don't take this problem seriously, we get bogged down in a reality-apathy because we have to constantly ask ourselves whether something is true or false, manipulated or authentic. At the same time, we are dealing with a synthetic generation that grew up with this ambivalence of real and fake. They are experienced experts with a good bullshit detector. Just checking a photo of someone on Google (with the reverse image search function of Google) before you go on a date is quite common. Is this person real? Just a fact check.

Will the synthetic generation find the answers to these problems? It looks hopeful, but more help is likely to be needed. The solutions that both Luciano Floridi and Aviv Ovadya offer to this problem are new legislation and technology itself. For example, the artificial intelligence of Anti Ai Ai can warn us whether we are dealing with a human being or a robot, and in our previous report (In Code We Trust) we gave examples of blockchain applications aimed at eliminating fake news. The European Union has now come up with an action plan against disinformation, focusing in particular on Russian fake news and the European elections. In 2019, the executive service, the European External Action Service (EEAS), will have about 50 new employees and more than €3 million more to carry out its tasks.<sup>76</sup> In addition to this monitoring function, the information industry must comply with codes of conduct.<sup>77</sup> Fake news producers should be restricted in this way. Tech platforms have much more to explain about how they operate and give fact checkers access to their platforms. The advertising industry itself is working on new standards. In the UK, for example, the Advertising Standards Authority (ASA) has published an Influencers Guide to educate influencers about advertising rules.<sup>78</sup> The aim is to make influencers' advertisements authentic and engaging within the boundaries of what is permissible. In short, the media wisdom of this generation combined with political and technological solutions will have to guide us into the synthetic future.

# To conclude: the synthetic organization

Just like people, organizations operate under the influence of the zeitgeist and are shaped by events and their family chronology. Organizations are – as people – sponges that absorb the spirit of the times and respond to it in order to survive or simply to be happy. The synthetic organization is an idea to make the zeitgeist manifest by "wanting to be like that new generation". This allows you to anticipate what's coming, while still believing that you do not want to alienate other generations from you.

To this end, we have reduced the content of this report to three conclusions. For the sake of convenience, we add the prefix "post" to underline that we are all – people and organizations – constantly on the way from what was once to something new. You know the pre-era only too well. It all took place in earlier times, possibly better times if you are a bit nostalgic in nature. Institutes were respected and brands were put on the market in a controlled way. Now there is an open playing field in which everything is in motion and everything seems possible. Your only handhold is your own fluidity, just like that of this synthetic generation: keep all options open and do the best in every situation.

The three 'posts' we introduce are: post-materialistic, post-hierarchical and post-realistic. These are in line with the term "ContinuousNEXT" recently presented by analyst firm Gartner, and which represents Gartner's new long-term view of the future of organizations.

#### **Post-materialistic**

Post-materialistic does not mean that material things no longer matter. "Pecunia non olet" is the Latin saying: "Money does not stink". But sometimes it does stink, and then it soon goes wrong. Young people disengage when it is not related to "higher" matters. How do we imagine that as a synthetic organization? Choosing one side in an ethical debate, for example as Nike did this year with its new campaign? Turnover rose because of the slogan "Believe in something". Colin Kaepernick, the man in the picture, believed in something but it cost him his American football career. Not kneeling before the American anthem and flag at the start of the competition, drawing attention to the poor living conditions, racism and the violation of civil rights of black Americans, became expensive for him. The caption to the campaign reads aptly: "Even if it means sacrificing everything". This step by Nike is generally seen as best practice for companies

that want to appeal to the new value system of young people. The shares first went down, but turnover increased and young people joined in. In their eyes, Nike was on the right side of history.



Hand this in	Use this instead
Survival values	Values of self expression
Exclusive management	Inclusive management
A smaller vision	A larger vision
Managementb**it	Working together in a coaching manner
A place in the share- holder economy	A place in the purpose economy

### **Post-hierarchical**

Post-hierarchical: judge everyone on their own merit and not on rank, not to be confused with non-hierarchical. Because hierarchy is still there, only it is organized differently. Before this generation tags you on the mouth in an Instagram post. there's probably still a lot to do. But it would be a nice ambition. After all, the hierarchy of the synthetic organization goes through the likes and the number of followers on social media. This line is consistent with what we noted in our previous report: trust shifts to distributed systems. With YouTube as a platform, and itself as the new institutions, the new generation presents an alternative trust model. The trust that is placed in people over trust in an institution is an example of this. The hierarchy in the synthetic generation is built on authenticity. Post-hierarchical is therefore above all authentic.

Hand this in	Use this instead
The organization as an institute	Human being as an institute
Central trust	Distributed trust
Position-based leadership	Authentic leadership

#### **Post-realistic**

The unambiguous reality seems to be a thing of the past now that fake news is proving to be an extremely powerful digital supplement. New opportunities are emerging in this respect. A news video is not just reality, nor is video calling with a human face. Influencers on Instagram appear to have been generated by the computer, but this does not result in a loss of followers. What is digital and what is not, what is real and what is fake is smoothly interwoven. Distortion and simulation of voices, images and faces can be made terrifyingly real with the help of artificial intelligence. A simple post-realistic approach is to join the synthetic reality of this generation. They are also on YouTube and Instagram and your presence there is a simple stepping stone. The synthetic organization has an influencer strategy in which humans are the sender. As a spectator and actor, this generation knows the tricks of the trade of influencers and therefore easily pierces through facades. Put more plainly: they have developed a decent bullshit detector. This applies to both the media and the message.

Hand this in	Use this instead
Comprehensive paralyzing marketing rules	Influence enablers
Video and image as truth	New anchors for truth
Resistance to digital assistants	Enthusiasm for digital avatars
Digital and analog separation	Synthetic approach

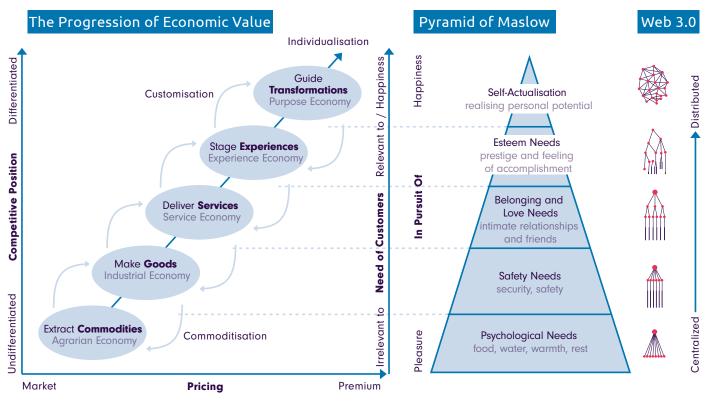
### **Climbing the pyramid**

Value creation does not take place primarily in the production process, but rather in the hearts and minds of people. To succeed governments, institutions, companies and brands must guide or coach people successfully in their search for happiness, for their soul and salvation, for what drives them. They must follow the right path. The shift to new values, to new forms of trust and to a new reality is a constant development. This generation is looking for it and embodies this change most strongly. But the millennials that preceded it come close. Together they will soon have the upper hand in all areas. A world in which post-materialism, post-hierarchy and post-realism take the lead is becoming increasingly discernible. Gallup research shows that 88 percent of millennials want to work for a company for more than 5 years if they are "satisfied with the company's goal"; only 27 percent report that they are satisfied with the values of their current company.<sup>79</sup> From prosperity to wellbeing and people-centric organizations; this brings us back to the overarching theme of Digital Happiness.

New frameworks must be developed for this purpose, because the current organizational conceptual framework is no longer enough.

We are already looking ahead to the follow-up research on this topic. What does the design of the 21st century organization look like? Inspired by the work of Joseph Pine, the founder of the Experience Economy, we compare the progression of economic values with the progression of personal values and the developments of the internet. Pine was spot-on with his vision of the Experience Economy and now he presents us with the sequel, the Purpose Economy. Instead of designing brief experiences, the focus is now on designing meaningful and rooted transformations. New values such as wellbeing, happiness, self-actualization and self-expression will be at the forefront in this Purpose Economy.

It will help to give younger generations a position higher up in the organization pyramid. Conflicts cannot be ruled out, however. On the world stage values are polarizing, and the work floor is the world in miniature.



From left to right: Based on Pine and Gilmore's Model - The Progression of Economic Value - Maslow Pyramid and The evolution of hierarchy - Web 3.0.

## Notes

- 1 Miller, L. & W. Lu, "Gen Z Is Set to Outnumber Millennials Within a Year", Bloomberg, 20 August 2018, https://www. bloomberg.com/news/articles/2018-08-20/gen-z-to-outnumber-millennials-within-a-year-demographic-trends
- 2 Miller, L. & W. Lu, "Gen Z Is Set to Outnumber Millennials Within a Year", Bloomberg, 20 August 2018, https://www. bloomberg.com/news/articles/2018-08-20/gen-z-to-outnumber-millennials-within-a-year-demographic-trends
- Also see our second Digital Happiness report *In Code We Trust:* https://labs.sogeti.com/research-topics/digital-happiness/#in-code-we-trust-2-of-4
- 4 Foa, R., Y. Mounk & R. Inglehart, "The Danger of Deconsolidation", *Journal of Democracy*, July 2016, Volume 27, Number 3, http://www.journalofdemocracy.org/sites/default/files/Foa%26Mounk-27-3.pdf
- 5 Voeten, E., "That viral graph about millennials' declining support for democracy? It's very misleading", *The Washington Post*, 5 December 2016, https://www.washingtonpost.com/news/monkey-cage/wp/2016/12/05/that-viral-graph-aboutmillennials-declining-support-for-democracy-its-very-misleading/?noredirect=on&utm\_term=.06977a4073e9
- 6 For example, one in three British children between 6 and 17 wants to become a fulltime YouTuber. Source: https://www. bloomberg.com/news/articles/2018-02-27/-success-on-youtube-still-means-a-life-of-poverty
- 7 Bird, P., "The Punk Rock President", *American Thinker*, 20 December 2017, https://www.americanthinker.com/ articles/2017/12/the\_punk\_rock\_president.html
- 8 Ipsos, *Beyond Binary: The lives and choicesof Generation Z*, 2018, https://www.ipsos.com/sites/default/files/ct/publication/ documents/2018-07/ipsos-thinks-beyond-binary-lives-loves-generation-z.pdf
- 9 Wartzman, R., "Coming Soon to Your Office: Gen Z", *Time*, 12 February 2014, http://time.com/6693/coming-soon-to-your-office-gen-z/
- 10 Inglehart, R. F., Cultural Evolution: People's Motivations are Changing, and Reshaping the World, 2018.
- 11
   Inglehart, R. F., "The Rise of Trump and the Xenophobic Populist Parties: The Silent Revolution in Reverse", 14 September

   2018, https://www.youtube.com/watch?v=3YWI15T-gul&feature=youtu.be
- 12 World Value Survey, Inglehart–Welzel Cultural Map, http://www.worldvaluessurvey.org/WVSContents.jsp?CMSID=Findings
- 13 Strauss-Howe generation theory, see: https://en.wikipedia.org/wiki/Strauss%E2%80%93Howe\_generational\_theory
- 14 W. Strauss & N. Howe, *The Fourth Turning: An American Prophecy*, 1997.
- 15 Strauss and Howe will keep 2005 as the starting year of this new generation. In other words, a difference of 10 or 5 years with other formats.
- 16 For a detailed report and the video publication see http://mtvinsights.com.
- 17 Verschuer, N. van, "Metamodernisme: ironie én enthousiasme tegelijk", 26 June 2016, https://www.vn.nl/metamodernismeironie-en-enthousiasme-tegelijk/
- 18 musical.ly is now called TikTok.
- 19
   Handley, L., "There's a generation below millennials and here's what they want from brands", CNBC, 9 April 2018, https://

   vwww.cnbc.com/2018/04/09/generation-z-what-they-want-from-brands-and-businesses.html
- 20 Desjardins, J., "What Happens in an Internet Minute in 2018?", *Visual Capitalist*, 14 May 2018, https://www.visualcapitalist. com/internet-minute-2018/
- 21 Lorenz, T., "Posting Instagram Sponsored Content Is the New Summer Job", *The Atlantic*, 22 August 2018, https://www. theatlantic.com/technology/archive/2018/08/posting-instagram-sponsored-content-is-the-new-summer-job/568108/
- 22 Says Mathias Bärtl, professor at the University of Applied Science in Offenburg, http://journals.sagepub.com/doi/ abs/10.1177/1354856517736979
- 23 Nielsen, "Global Trust in Advertising", 28 September 2015, http://www.nielsen.com/us/en/insights/reports/2015/globaltrust-in-advertising-2015.html
- 24 The Economist, "Celebrities' endorsement earnings on social media", 17 October 2016, https://www.economist.com/ graphic-detail/2016/10/17/celebrities-endorsement-earnings-on-social-media
- 25 Jung, L., "Influencer marketing is the new king of content", *The Shelf*, 17 March 2015, https://www.theshelf.com/theblog/2015/3/17/influencer-marketing-is-the-new-king-of-content
- 26 Belhaj, S., "In Irak worden beauty-experts en influencers vermoord. Wat zit daarachter?", NOS, 1 October 2018, https://nos. nl/artikel/2252943-in-irak-worden-beauty-experts-en-influencers-vermoord-wat-zit-daarachter.html
- 27 Condé Nast Italia's Social Academy in Milan and in Gent a postdoctoral Digital Storytelling.
- 28 Markigence, *Influencer Marketing: Case Studies & How it Works*, 27 December 2017, https://www.markigence.com/blog/ influencer-marketing/
- 29 Loneliness is one of the basic human fears. See also *The FrankensteinFactor*, our report on where the fear of artificial intelligence comes from. We base our report on the work of psychologist Irvin Yalom and his theory of the "Big Four" of human fears. Loneliness is one of them. https://labs.sogeti.com/research-topics/machine-intelligence/#frankenstein-factor-anatomy-fear-ai
- 30 See the channel TheStrive Studies on YouTube: https://www.youtube.com/channel/UCSQkQjPhnZw12Hj-SfsbX8w
- 31 McCarthy, A., "This Korean Food Phenomenon Is Changing the Internet", *Eater*, 19 April 2017, https://www.eater. com/2017/4/19/15349568/mukbang-videos-korean-youtube
- 22 Linge, D. van, "Waarom de mukbangs het internet overnemen", *de Volkskrant*, 17 March 2017, https://www.volkskrant.nl/ cultuur-media/waarom-de-mukbangs-het-internet-overnemen~b174fe4b/
- 33 Awesomeness TV, "GEN Z: LEADERS OF THE MOBILE SOCIAL MOVEMENT", October 2017, https://awesomenesstvnetwork. files.wordpress.com/2017/12/awesomeness\_mobile\_report\_final.pdf
- 34 Marks, A., "The Tingle Makers, Open for Business", *The New York Times*, 15 February 2018, https://www.nytimes. com/2018/02/15/nyregion/tingling-sensation-of-asmr-stimulation.html
- 35 Marks, A., "The Tingle Makers, Open for Business", *The New York Times*, 15 February 2018, https://www.nytimes. com/2018/02/15/nyregion/tingling-sensation-of-asmr-stimulation.html

- 36 Lee, E. L. & B. Watkins, "YouTube vloggers' influence on consumer luxury brand perceptions and intentions", Journal of Business Research, Volume 69, Issue 12, December 2016, https://www.sciencedirect.com/science/article/abs/pii/ S0148296316304222
- 37 Jenny, S.E., R.D. Manning, M.C. Keiper & T.W. Olrich, "Virtual(ly) athletes: Where eSports fit within the definition of 'Sport'", Quest, 69(1), 2017, pp. 1-18.
- 38 Newzoo, 2016 Global esports market report, 2016, https://cdn2.hubspot.net/hubfs/700740/Reports/NEWZOO\_Free\_2016\_ Esports\_Market\_Report.pdf
- 39 Nielsen, "The esports playbook: maximizing investment through understanding the fans", 10 March 2017, https://www. nielsen.com/us/en/insights/reports/2017/the-esports-playbook-maximizing-investment-through-understanding-the-fans. html
- 40 https://twitchtracker.com/statistics
- 41 Hernandez, P., "The Twitch streamers who spend years broadcasting to no one", *The Verge*, 16 July 2018, https://www. theverge.com/2018/7/16/17569520/twitch-streamers-zero-viewers-motivation-community
- 42 The ESA, "Press Release: US Video Game Industry Revenue Reaches \$36 Billion in 2017", 18 January 2018, http://www. theesa.com/article/us-video-game-industry-revenue-reaches-36-billion-2017/
- 43 Wijman, T., "Mobile Revenues Account for More Than 50% of the Global Games Market as It Reaches \$137.9 Billion in 2018", Newzoo, 30 April 2018, https://newzoo.com/insights/articles/global-games-market-reaches-137-9-billion-in-2018-mobilegames-take-half/
- 44 Pizzo, A., B. Baker, N. Sangwon & D.C. Funk, "eSport vs Sport: A Comparison of Spectator Motives", September 2017, https:// www.researchgate.net/publication/321850348\_eSport\_vs\_Sport\_A\_Comparison\_of\_Spectator\_Motives?enrichId=rgreqef3e0981aa50ad687c88ec6ab029e0cd-XXX&enrichSource=Y292ZXJQYWdlOzMyMTg1MDM0ODtBUzo2NDUxMTI3OTEw NTIyODhAMTUzMDgxODI4Mzc1Ng%3D%3D&el=1\_x\_3&\_esc=publicationCoverPdf
- 45 Hsu, T., "Video Game Addiction Tries to Move From Basement to Doctor's Office", *The New York Times*, 17 June 2018, https://www.nytimes.com/2018/06/17/business/video-game-addiction.html
- 46 World Health Organisation, "Gaming behaviour", September 2018, http://www.who.int/substance\_abuse/activities/ gaming\_disorders/en/
- 47 The American industry association for the gaming industry is critical of this proposal: "Just like fanatical sports fans and consumers of all kinds of entertainment, gamers are passionate", writes the industry association ESA in the statement. Although there is no official diagnosis yet, the American Psychiatric Association has recognized game addiction as a mental disorder since 2013.
- 48 Influencer Marketing Hub, "Top 20 Esports Influencers You Should Know in 2018", https://influencermarketinghub.com/ top-20-esports-influencers-2018/
- 49 World Health Organisation, "Gaming disorder", September 2018, http://www.who.int/features/qa/gaming-disorder/en/
- 50 Rubin, P., "Fortnite's Marshmello concert is the future of the metaverse", *Wired*, 5 February 2019, https://www.wired.com/ story/fortnite-marshmello-concert-vr-ar-multiverse/
- 51 The Organisation for Economic Co-operation and Development, "Society at a glance 2016", 2016, https://read.oecd-ilibrary. org/social-issues-migration-health/society-at-a-glance-2016\_9789264261488-en#page129
- 52 The Organisation for Economic Co-operation and Development, "Society at a glance 2016", 2016, https://read.oecd-ilibrary. org/social-issues-migration-health/society-at-a-glance-2016\_9789264261488-en#page129
- 53 Office for national statistics, "Measuring National Well-being: Quality of Life in the UK, 2018", 2018, https://www.ons.gov. uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/qualityoflifeintheuk2018
- 54 Helliwell, J., R. Layard & J. Sachs, "World Happiness Report 2015", The Earth Institute Columbia University, 2015, https:// s3.amazonaws.com/happiness-report/2015/WHR15\_Sep15.pdf
- 55 Yet there has been no increase in mental health problems in the last four years. According to the researchers this is because young people have become even more positive about their relationship with their parents and they are less bullied at school. Source: Stevens, G. et al., "Gezondheid en welzijn van jongeren in Nederland", *HBSC*, 2017, https://www.scp.nl/ dsresource?objectid=fec73150-40c4-4957-b4a2-4ab8c82b3e22&type=pdf&&
- 56 Twenge, J. M., "Why So Many People Are Stressed and Depressed", *Psychology Today*, 2 October 2014, https://www. psychologytoday.com/us/blog/our-changing-culture/201410/why-so-many-people-are-stressed-and-depressed
- 57 https://en.wikipedia.org/wiki/Impostor\_syndrome
- 58 Twenge, J. M., G. N. Campbell & W. Keith, "Decreases in psychological well-being among American adolescents after 2012 and links to screen time during the rise of smartphone technology", *Emotion*, Volume 18(6), September 2018, pp. 765-780, http://psycnet.apa.org/doiLanding?doi=10.1037%2Femo0000403
- 59 Deloitte, "UK public are 'glued to smartphones' as device adoption reaches new heights", 20 September 2017, https:// www2.deloitte.com/uk/en/pages/press-releases/articles/uk-public-glued-to-smartphones.html
- 60 RSHP, #StatusOfMind: Social media and young people's mental health and wellbeing. The British Royal Society for Public Health interviewed 1479 young people aged 14-24 to score the five most popular social media based on 14 health factors such as sleep, self-image, loneliness and togetherness. Only YouTube reaches a positive final score by the skin of its teeth.
- 61 Schurgin O'Keeffe, G. & K. Clarke-Pearson, "Clinical Report: The Impact of Social Media on Children, Adolescents, and Families", American Academy of Pediatrics, 2011, http://ohioaap.org/wp-content/uploads/2015/07/Pediatrics-2011-OKeeffe-800-4.pdf
- 62 Symantec, "Onderzoek: schermtijd verleidelijker voor kinderen dan snoep", *Emerce*, 24 October 2018, https://www.emerce. nl/wire/onderzoek-schermtijd-verleidelijker-kinderen-snoep
- 63 Nemecek, D., "Cigna U.S. Loneliness index", *Multivu*, May 2018, https://www.multivu.com/players/English/8294451-cignaus-loneliness-survey/docs/IndexReport\_1524069371598-173525450.pdf

- 64 The medicine proposed by Twenge is simple: put the phone aside more often and start talking again. For example, it appears that children who go to summer camp without a mobile phone for five days score higher on recognition of emotions in photos and videos.
- 65 Dieleman, A., "Een nieuwe blik op jongeren". In: J. Hermes, P. Naber & A. Dieleman (ed.), *Leefwereld van jongeren* (pp. 17-43). Bussum: Coutinho, 2012.
- 66 Nethercutt, Z., "The Instagram generation", 16 July 2018, https://zandercutt.com/2018/07/16/the-cosmetic-class/
- 67 Nethercutt, Z., "The end of authenticity", *Medium*, 16 October 2018, https://medium.com/s/buy-yourself/the-end-ofauthenticity-bd858bc3b413
- 68 Suwajanakorn, S. et al., "Synthesizing Obama: Learning Lip Sync from Audio", University of Washington, 2017, https://grail. cs.washington.edu/projects/AudioToObama/siggraph17\_obama.pdf
- 69 Onsetfacilities, "Real-time Compositing Demo / UE4 On-Set Facilities / test 1", YouTube, 6 January 2018, https://www. youtube.com/watch?v=5gZWna6RnCA
- 70 Strange, A., "I Met Magic Leap's Al Assistant Mica & Saw the Future of Augmented Reality", *Next Reality*, 10 December 2018, https://magic-leap.reality.news/news/met-magic-leaps-ai-assistant-mica-saw-future-augmented-reality-0188478/
- 71 Hamilton, I., "Magic Leap's Mica AI Is Like A 21st Century Rorschach Test", *UploadVR*, 12 October 2018, https://uploadvr. com/magic-leap-mica-ai/
- 72 McFarland, M., "Magic Leap's new AI assistant looks alarmingly human", CNN, 12 October 2018, https://edition.cnn. com/2018/10/12/tech/magic-leap-ai-assistant/index.html
- 73 Grubb, J., "Google Duplex: A.I. Assistant Calls Local Businesses To Make Appointments", YouTube, 8 May 2018, https://www. youtube.com/watch?v=D5VN56jQMWM&t=51
- 74 Read, M., "How Much of the Internet Is Fake? Turns Out, a Lot of It, Actually", *New York Magazine*, 26 December 2018, http:// nymag.com/intelligencer/2018/12/how-much-of-the-internet-is-fake.html
- 75 Besides fans there are also critics of the appearance of Shudu Gram. *The New Yorker* summarized these views in their article "Shudu Gram is a white man's digital projection of real-life black womanhood", https://www.newyorker.com/culture/ culture-desk/shudu-gram-is-a-white-mans-digital-projection-of-real-life-black-womanhood
- 76 Europese Commissie, "EU voert de strijd op tegen fakenews", Europese Commissie, 5 December 2018, https://ec.europa. eu/netherlands/news/eu-voert-de-strijd-op-tegen-fakenews\_nl
- 77 See https://eeas.europa.eu/headquarters/headquarters-homepage/54866/action-plan-against-disinformation\_en
- 78 ASA, *An Influencer's Guide to making clear that ads are ads*, 2018, https://www.asa.org.uk/uploads/assets/ uploaded/3af39c72-76e1-4a59-b2b47e81a034cd1d.pdf
- 79 Rigoni, B. & B. Nelson, "Few Millennials Are Engaged at Work", Gallup, 30 August 2016, http://www.gallup.com/ businessjournal/195209/few-millennials-engaged-work.aspx

### Image credits

#### p. 4: Sogeti

p. 5: Sogeti

p. 6 (top): Charles, James (2018). [Screenshot from video]. Retrieved from https://www.youtube.com/channel/UCucot-Zp428OwkyRm2I7v2Q

p. 6 (middle): J House Vlogs (2018). [Screenshot from video]. Retrieved from https://www.youtube.com/channel/ UCyjhyJoPHcQRxPLnWPjOecg

p. 6 (bottom): McGregor, Robert (2018). *Magic Leap introduces MICA : Al Avatar* [Screenshot from video]. Retrieved from https://www.youtube.com/watch?v=8-oHdR\_-l6o

p. 9: Jenofi, Daniel (2018). [Photo]. Retrieved from https://500px.com/photo/270396265/catharsis-by-daniel-jenofi?ctx\_page=1&from=user&user\_id=7979707

p. 11: Foa, R., Y. Mounk & R. Inglehart (2016). [Graph]. 'The Danger of Deconsolidation'. *Journal of Democracy*, Volume 27, Number 3. Retrieved from http://www.journalofdemocracy.org/sites/default/files/Foa%26Mounk-27-3.pdf

p. 12: Verch, Marco (2018). [Image]. Retrieved from https://www.flickr.com/photos/30478819@N08/43406909450 p. 13 (top): Sogeti

p. 13 (bottom): (1) Matthew G. [Photo]. Retrieved from https://www.flickr.com/photos/streetmatt/; (2) [Photo]. Retrieved from https://www.psychologytoday.com/us/blog/close-encounters/201501/are-selfies-sign-narcissism-and-psychopathy?amp=; (3) Pickersgill, E. (2015). *Removed* [Photo]. Retrieved from https://www.ericpickersgill.com/Removed)

p. 14 (top): Pugh, G. (2018). John Lydon. [Photo]. Retrieved from https://www.telegraph.co.uk/music/artists/john-lydon-interview-robin-williams-influence/

p. 14 (bottom): Freakingnews.com. *Punk Trump*. [Edited photo]. Retrieved from http://www.freakingnews.com/pictures/134500/ Punk-Trump-134930.jpg

p. 16 (top): Inglehart, R.F. (2018). [Graph]. *Cultural Evolution: People's Motivations are Changing, and Reshaping the World.* p. 16 (bottom): Inglehart, R.F. (2018). 'The Rise of Trump and the Xenophobic Populist Parties: The Silent Revolution in Reverse' [Screenshot from video]. 14 September 2018. Retrieved from https://www.youtube.com/watch?v=3YWI15T-gul&feature=youtu.be p. 17 (left): Skidmore, Gag (2017). *Steve Bannon* [Photo]. Retrieved from https://en.wikipedia.org/wiki/Steve\_Bannon#/media/ File:Steve\_Bannon\_by\_Gage\_Skidmore.jpg

p. 17 (top): Charlton, Erik (2008). *Will Al run again?*. [Photo]. Retrieved from https://en.wikipedia.org/wiki/File:Al\_Gore\_-\_Ohhh,\_you\_ aren%27t\_going\_to\_get\_me\_on\_this\_one.jpg#/media/File:Al\_Gore\_-\_Ohhh,\_you\_aren%27t\_going\_to\_get\_me\_on\_this\_one.jpg p. 19 (top): Veterans day. [Photo]. Retrieved from http://css.history.com/topics/holidays/history-of-veterans-day/pictures/veterans-day/elderly-war-veteran-in-front-line-during-veteran-ceremony

p. 19 (middle): [Photo]. Retrieved from https://allthatsinteresting.com/a-brief-history-of-hippies

p. 19 (bottom): Hogan, D.C. & New York Times (2017). [Photo]. Retrieved from https://www.bostonglobe.com/news/ world/2017/11/28/trump-paid-nearly-settle-suit-undocumented-workers-hired/6njzzpR6VlnCWUNI4WDyfO/story.html p. 22 (top left): Schotpoort, Nina (2018). [Screenshot from video]. Retrieved from https://www.youtube.com/channel/ UC4BZYeKYzKDmhGfeELVnS4Q

p. 22 (bottom left): Ryan ToysReview (2018). [Screenshot from video]. Retrieved from https://www.youtube.com/channel/ UC4BZYeKYzKDmhGfeELVnS4Q

p. 22 (right): Quenisha Qiana (2018). [Photo]. Retrieved from https://www.instagram.com/quenisha.qiana/

p. 23 (left): iStock. [Photo]. Retrieved from https://www.istockphoto.com/nl/foto/winter-selfie-gm542926388-97289463

p. 23 (right): iStock. [Photo]. Retrieved from https://www.istockphoto.com/nl/foto/shes-just-the-girl-nextdoor-gm467551141-34483496

p. 24: Desjardins, J. (2018). [Graph]. 'What Happens in an Internet Minute in 2018?' *Visual Capitalist*, 14 May 2018. Retrieved from https://www.visualcapitalist.com/internet-minute-2018/

p. 25: The Economist (2016). [Graph]. 'Celebrities' endorsement earnings on social media', 17 October 2016. Retrieved from https://www.economist.com/graphic-detail/2016/10/17/celebrities-endorsement-earnings-on-social-media

p. 26 (top left): Kjellberg, Felix [Pewdiepie] (2018). [Screenshot from video]. Retrieved from https://www.youtube.com/user/ PewDiePie

p. 26 (top middle): Hayu. [Photo]. Retrieved from https://en.wikipedia.org/wiki/Kylie\_Jenner#/media/File:Kylie\_Jenner2\_ (cropped).png

p. 26 (top right): Graham, Ashley. [Foto]. Retrieved from https://en.wikipedia.org/wiki/Kim\_Kardashian#/media/File:Kim\_ Kardashian\_2018\_5.png

p. 27: [Screenshots from videos]. Retrieved from https://www.youtube.com/results?search\_query=mukbang p. 29 (top): Meijering, Isabel (2018). [Screenshot from video]. Retrieved from https://www.youtube.com/channel/ UCGfbWCJjPwcAlBNkHT3gQ6w

p. 29 (bottom): Hur, Jackie. [Image]. Retrieved from https://asmruniversity.com/origin-theory-of-asmr/ p. 30: YY.com

p. 32: Wijman, T. (2018). [Graph]. 'Mobile Revenues Account for More Than 50% of the Global Games Market as It Reaches \$137.9 Billion in 2018'. *Newzoo*, 30 April 2018. Retrieved from https://newzoo.com/insights/articles/global-games-market-reaches-137-9billion-in-2018-mobile-games-take-half/

p. 33: Marshmello. [Screenshot from video]. Retrieved from https://www.youtube.com/watch?v=NBsCzN-jfvA

p. 34: Helliwell, J., R. Layard & J. Sachs (2015). [Graph]. 'World Happiness Report 2015', The Earth Institute Columbia University. Retrieved from https://s3.amazonaws.com/happiness-report/2015/WHR15\_Sep15.pdf

p. 35: Kahneman, D., A.B. Krueger, D. Schkade, N. Schwarz & A. Stone (2004). [Table]. 'Toward National Well-Being Accounts', *AEA Papers and Proceedings*. Retrieved from http://harris.princeton.edu/faculty/krueger/Toward%20Well-Being.pdf

p. 37: Twenge, J.M. (2017). [Graphs]. *iGen – Why today's super-connect kids are growing up less rebellious, more tolerant, less happy – and completely unprepared for adulthood.* New York: Atria Books.

p. 39 (top): Suwajanakorn, S., S.M M. Seitz & I. Kemelmacher-Shlizerman (2018). *Output Obama Video* [Image]. Retrieved from https://grail.cs.washington.edu/projects/AudioToObama/siggraph17\_obama.pdf

p. 39 (middle): Onsetfacilities.com. [Screenshot from video]. Retrieved from https://www.youtube.com/channel/ UCLHeoUnjgvv8XY0Sw2xoBNQ

p. 39 (bottom): Yamato, Ami. [Screenshot from video]. Retrieved from https://www.youtube.com/user/yamatoami p. 40 (top): McGregor, Robert (2018). *Magic Leap introduces MICA : AI Avatar*. [Screenshot from video]. Retrieved from https:// www.youtube.com/watch?v=8-oHdR\_-l6o

p. 40 (bottom): Sogeti

p. 41: (1) Shudu Gram. [Image]. Retrieved from https://www.instagram.com/shudu.gram; (2) Hatsune Miku. [Image]. Retrieved from https://www.youtube.com/watch?v=O17f3lB7BFY; (3) Noonoouri. [Image]. Retrieved from https://www.instagram.com/ noonoouri; (4) Lil Miquela. [Image]. Retrieved from https://www.instagram.com/lilmiquela

p. 42: (1) Daniel Kalt, UBS. [Image]. Retrieved from https://www.ubs.com/magazines/innovation/en/into-the-future/2018/ exploring-digital-human-assistants.html; (2) Nadia FaceMe. [Screenshot from video]. Retrieved from https://www.youtube.com/ watch?v=adEWVL4PIjw; (3) Xinhua. [Image]. Retrieved from http://www.xinhuanet.com/english/2018-11/08/c\_137591813. htm; (4) McGregor, Robert (2018). *Magic Leap introduces MICA : Al Avatar*. [Screenshot from video]. Retrieved from https://www. youtube.com/watch?v=8-oHdR\_-16o

p. 43: [Image]. Retrieved from http://antiaiai.info

p. 44: Retief Uys. Let's fly. [Photo]. Retrieved from https://500px.com/photo/270361949/let-s-fly-by-retief-uys?ctx\_

page=1&from=user&user\_id=24876945

p. 46: Nike. [Photo]. Kaepernick's Nike ad.

p. 47: Pine, B.J. & J.H. Gilmore. The Progression of Economy Value. [Graph]. Harvard Business Press.



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