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Good News

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The Good

News

The Newspaper That Only Reports Good News

QUOTE



*"Pessimism
never won
any battle."*

Dwight D. Eisenhower

POLITICS



Greece after the crisis.
"The worst is behind us," says
Prime Minister Alexis Tsipras (July 24, 2017).

NUTRITION

United Nations Millennium Development Goal 1C

The number of people who are permanently undernourished has dropped by 216 million to 795 million people since 1990, and from 23.3 percent to 12.9 percent of the world population in the process. Source: UN



ECONOMY

1,590,000 Millionaires

Growing prosperity in China:

1.59 million people in China are now millionaires. By 2021, the number will rise by 73 percent.

ECONOMY

Philanthropy "is reshaping the development landscape like never before," according to the OECD. Private donors gave 22.7 billion dollars in the years 2013–15, with 11.6 billion coming from the Bill and Melinda Gates Foundation alone. The largest recipient countries were:

1. India, 2. Nigeria, 3. Mexico,
4. Ethiopia, 5. South Africa

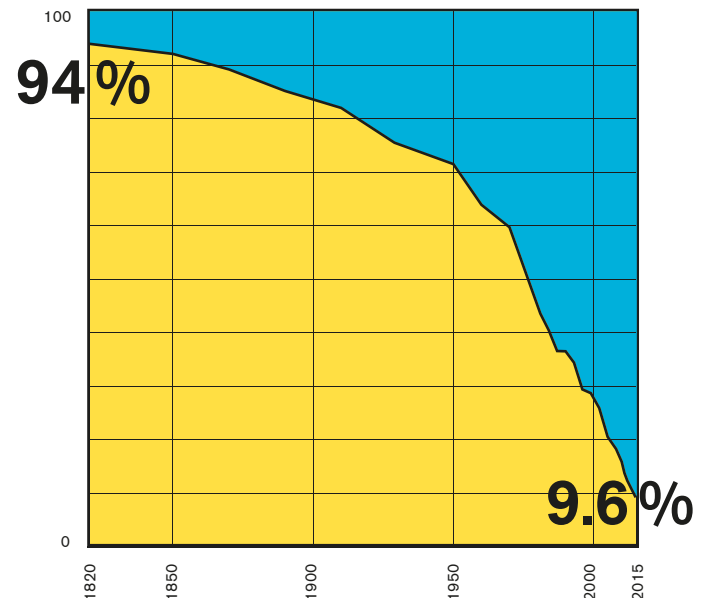
Source: OECD

STATISTICS

● Extreme Poverty

In 1820, 94 out of 100 people lived in extreme poverty. In 2015, that figure was 10 people.

Source: Our World in Data/Max Roser



Source: Credit Suisse Global Wealth Report 2016

STATISTICS

● Democracy

1%

In **1820**, one percent of the world's population lived under democratic conditions.

56%

In **2015**, that figure was 56 percent, with just 44 percent still living in undemocratic systems.

● Vaccines

Until **1960**, there were almost no vaccines against the following deadly diseases:

diphtheria
whooping cough
tetanus

In **2015**, 86 percent of the world's population had been vaccinated against these diseases.



Source: Our World in Data/Max Roser

MEN & WOMEN

Time-consuming manual labor: American housewife, circa 1900.



Equal Rights

In 1900, **women** in the USA averaged **42.5 hours** of housework per week; in 2000, the average was **27.9 hours**.

In 1900, **men** in the USA averaged **4.0 hours** of housework per week; in 2000, the average was **16.3 hours**.

Source: Valerie A. Ramey, Neville Francis (2009)

INTELLIGENCE

Researchers have found IQ increases amounting to an average of 0.28 IQ points per year over a period of more than 100 years (1909–2013), a total increase of just under 30 points.

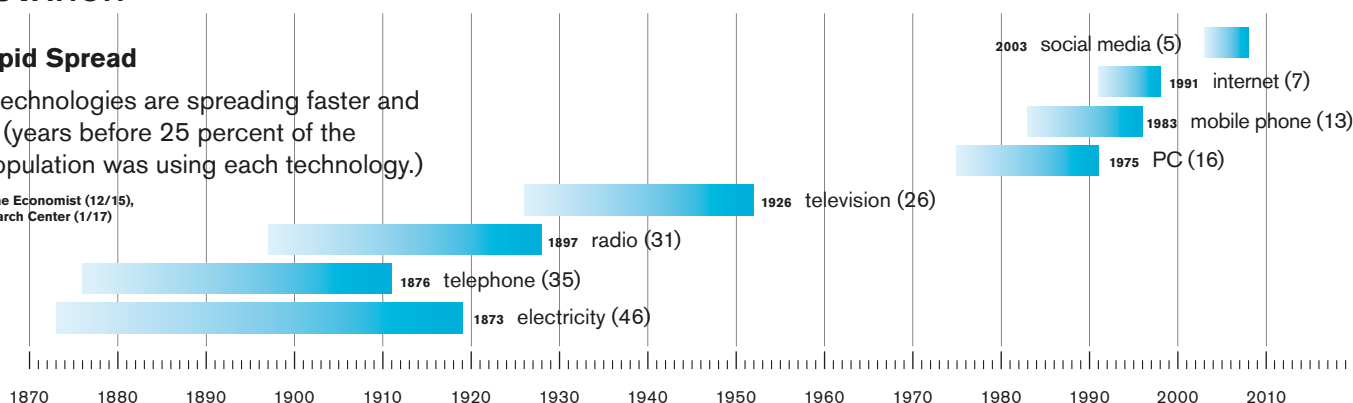
Source: Jakob Pietschnig, Martin Voracek

INNOVATION

● Rapid Spread

New technologies are spreading faster and faster (years before 25 percent of the US population was using each technology.)

Source: The Economist (12/15), Pew Research Center (1/17)



Photos: Dmitrii Kotin / Alamy Stock Photo; ullstein bild

More Pandas, Amur Tigers and White Storks

Global life expectancy significantly increased during the past century, particularly in developing countries:

**1900 =
31 years**

**1950 =
48 years**

**2015 =
71.4 years**

Source: WHO

It's no secret that many animal species are endangered; tuna stocks, for example, are dwindling worldwide. Happily, other species are thriving. According to a WWF report, the population of the **Amur tiger**, the largest big cat on Earth, has recovered. A recent census involving 2,000 specialists in the wilderness of Russia's Far East found 510 tigers, 60 more than the last count in 2005. The rising numbers are a very good sign, indicating an intact environment, the WWF noted. The WWF "mascot," the **giant panda**, is no longer on the International Union for Conservation of Nature (IUCN) Red List of endangered species (though it is still considered vulnerable). One major reason is the reforestation of bamboo jungles in China.

The population of the **oriental white stork** in the city of Toyooka, Japan, is on the rise. In 1971, the last known wild bird died as the city expanded into its habitat. With six young birds donated from Russia, biologists began to reintroduce the species. Today, about 100 of the large birds are living in the wild. As Eberhard Brandes of WWF Germany told *Natur*, a German environmental magazine, "The extinction of many species is not an inevitable fate. It is in our hands."



**The panda is
no longer threatened
with extinction.**

RETAILING

In 1750, a banana cost as much as a riding horse and was considered a luxury product.

Source: Nicholas Boyle / NZZ

Journalists Take a Constructive Approach

People view the world situation too negatively because the media rely too much on “bad news” – that’s according to a current theory (see also page 12). But there are movements to counter this. On Impact Journalism Day, 50 leading newspapers from around the world publish a special edition dedicated to concrete and inspiring solutions to global issues. (Switzerland is well represented, with the Tages-Anzeiger, la Regione, 24 heures, the Geneva Tribune, and Schweizer Fernsehen, the first television station to participate.)

The internet features a variety of media outlets that report only

The media rely on “bad news.”

good news, such as nur-positive-nachrichten.de or Tom Tastisch of Germany on YouTube. Positive.news is a global journalists’ cooperative launched in 1993

that also issues a print magazine, as does positivenewsus.org. Thebetterindia.com reports good news in and from India; noticiaspositivas.org targets a Spanish-speaking public; and dailygood.org is an American college project that has been online since 1998. The not-so-good news: None of these media projects seems to actually reach a large audience.

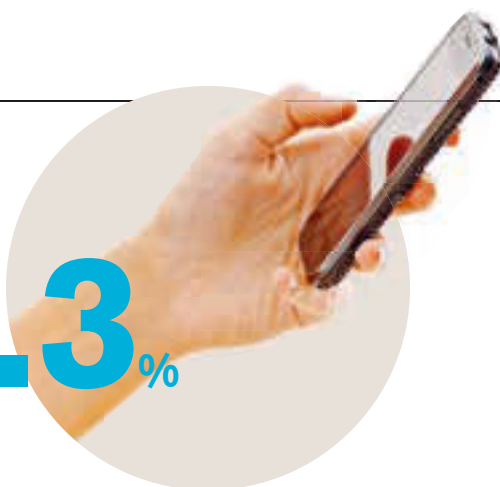
COMMUNICATION

+42.3%

Smartphone

In 2009, 237 million people owned a smartphone – by 2016, the number had risen to 2.8 billion (annual growth: 42.3 percent).

Source: Morgan Stanley Research



Macroeconomist
John Maynard Keynes
(1883–1946).

The Trend of Things

“I would predict that the standard of life in progressive countries one hundred years hence will be between four and eight times as high as it is today. There would be nothing surprising in this even in the light of our present knowledge. It would not be foolish to contemplate the possibility of a far greater progress still.”

This quotation is from John Maynard Keynes, one of the leading economists of the 20th century, in an essay entitled “Economic Possibilities for our Grandchildren,” which he wrote in 1928 and presented as a lecture in various locations in England during the next two years. The essay was published in October 1930 – with the global economy already mired in the Great Depression. Keynes described this essay as “the true interpretation of the trend of things.”

Source: John Maynard Keynes, “Economic Possibilities for our Grandchildren (1930),” in *Essays in Persuasion* (New York: Harcourt Brace, 1932).

Ebola

"Today the World Health Organization declares the end of the most recent outbreak of Ebola virus disease in Liberia and says all known chains of transmission have been stopped in West Africa," announced Dr. Rick Brennan, WHO director of emergency response and humanitarian management, in January 2016. Also, according to WHO, development of an Ebola vaccine is well advanced and demonstrates very good test results, with "nearly 100 percent" efficacy.

Source:
Die Welt, WHO

"A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty."

Winston Churchill 1

"You only live once, but if you do it right, once is enough."

Mae West 2

"I believe any success in life is made by going into an area with a blind, furious optimism."

Sylvester Stallone 3

6.5

billion

Where will global growth originate in the next three years? The global economy is expected to grow by 6.5 billion US dollars during that time. Where?

35%	in China
18%	in the USA
9%	in India
8%	in the eurozone

Source: IMF and World Bank



CULTURAL HISTORY



Like!

In the age of Facebook, the thumbs-up fist is a sign of approval and an important currency in the marketplace of social media self-representation. The idea that “thumbs-up” can be traced to the Roman gladiator fights, where spectators could signal that the defeated gladiator’s life should be spared, is probably a misunderstanding. Historians suspect that the thumb represented the sword, and holding it up meant that the gladiator should be killed. In contrast, the thumb tucked into the fist meant “sheath your sword.” In early medieval England, archers held their thumbs up to indicate that they were ready for battle.

In any case, “thumbs up” seems to be a gesture with a fairly martial background: During World War II, American pilots used it to show the ground crew that they were “ready to go.” In many parts of the world today, the gesture is positive, signifying “well done!” or “okay.” However, in many Arab countries it is an obscene gesticulation that visitors should avoid. And in Afghanistan, Australia and Nigeria, it is a vulgar insult.

In short, this seemingly positive gesture has a fairly checkered past.



The most popular cola in India is called Thums Up – with no explanation for the missing “b.”

MEDICINE

Years it took
for medical
knowledge
to double.

1950

=

**50
years**

1980

=

**7
years**

2010

=

**3.5
years**

Based on a
count
of scientific
articles.

Source:
Peter Densen

LIFE

When the Colors Appeared
Chris Stepp, 66, of Florida, was born colorblind. For his birthday, his family gave him a pair of glasses that enhance color perception. When he put them on,

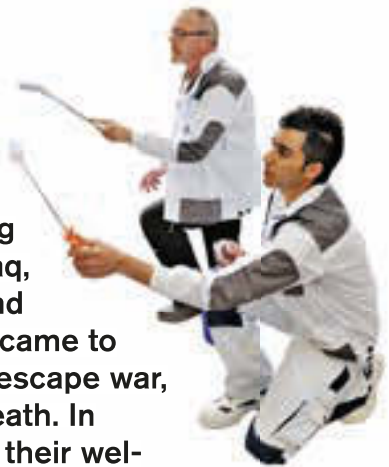
he was deeply moved.



There are countless versions of this story on YouTube, receiving millions of views, and each one triggering tears (of joy).

Refugees Beautify Elementary School

Twenty young men from Iraq, Syria, Iran and Afghanistan came to Germany to escape war, terror and death. In gratitude for their welcome, they volunteered to renovate a school in Berlin-Heiligensee.



Monkeys Offer First Aid

Chilean tourist Maykool Acuña, 25, lost his way in the rainforest at Medidi National Park in Bolivia. When rescuers found him nine days later, he told them that he owed his survival to the monkeys who brought him fruit and led him to water.



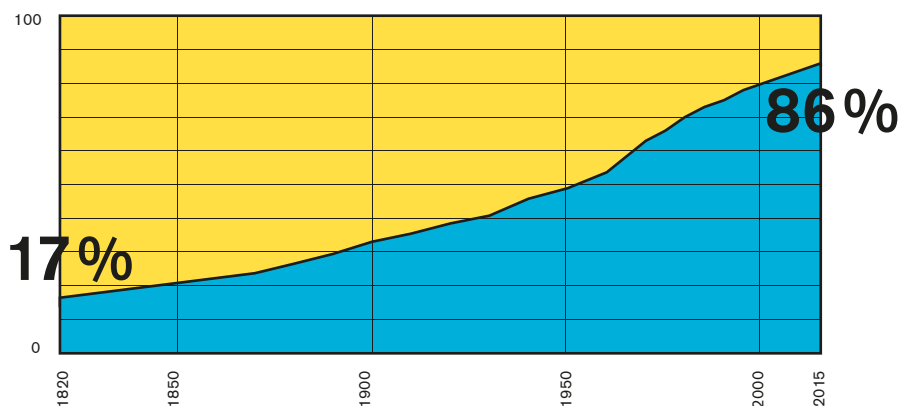
Sources: nur-positive-nachrichten.de;
Berliner Zeitung; National Geographic

Photos: Winslow Productions / Tetra
Images / Alamy Stock Photo;
Thomas Uhlemann

STATISTIC

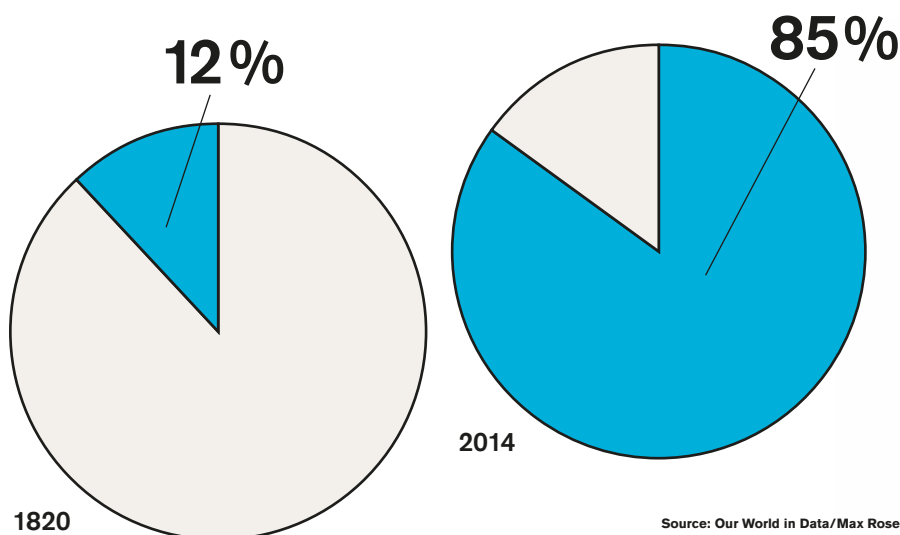
● Education

In 1820, just 17 percent of people had at least an elementary school education, while 83 percent had none at all. In 2015, worldwide 86 percent had at least a basic education, while 14 percent had none at all.



● Literacy

In 1820, just 12 percent of people could read. In 2014, that figure was 85 percent, while 15 percent could not read.



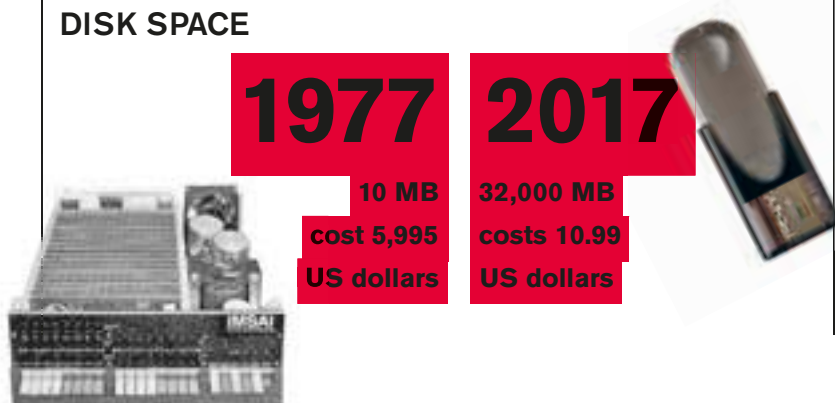
Source: Our World in Data/Max Roser

GAMING

Play and Win

Researchers at the University of Wisconsin–Madison found that Pokémon Go players are more likely to be positive, friendly and physically active.

DISK SPACE



MUSIC

Boom

The American music industry grew by 11 percent last year, after 16 years of 4 percent annual decline.

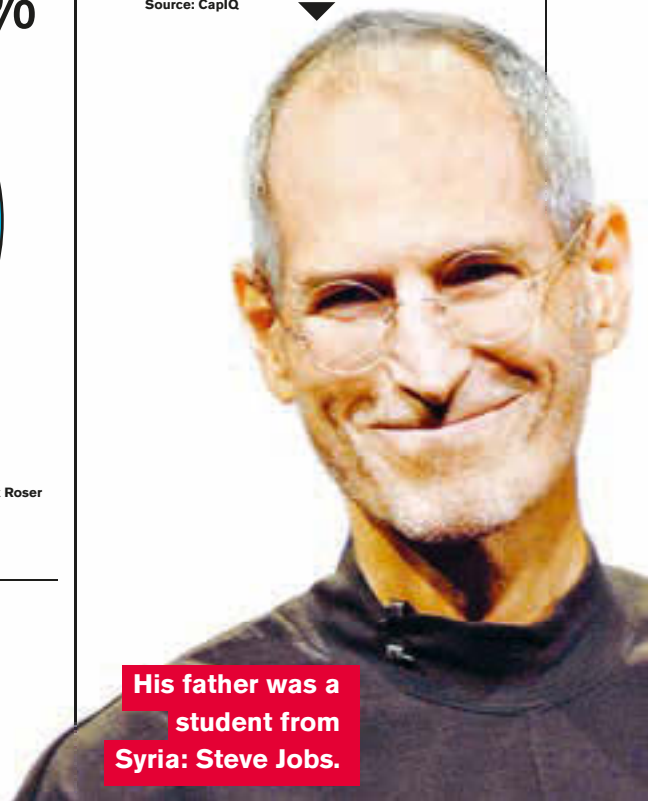
Source: Wired 12/16

PEOPLE

Innovative Immigrants

About 60 percent of the most valuable tech companies in the United States, including Apple, Alphabet, Amazon and Facebook, were founded by first- or second-generation Americans.

Source: CapIQ



INTERNET

In 2000, **415 million** people had access to the internet.

In 2016, the total was **3,424 million** people. Annual growth rate: 13.22 percent.

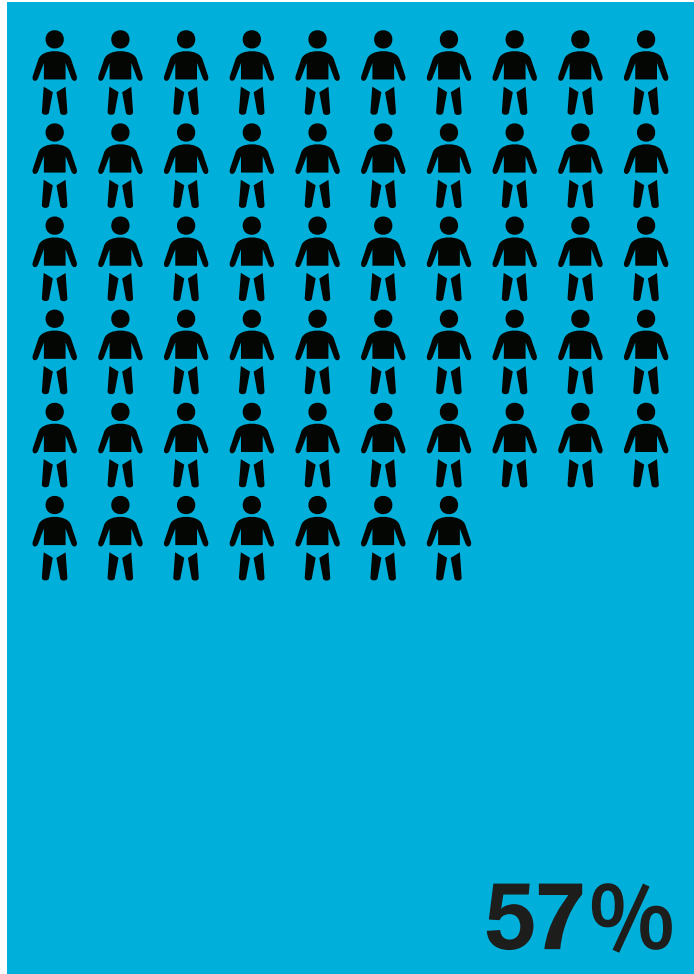
Source: internetlivestats.com

STATISTIC

● Child survival rate

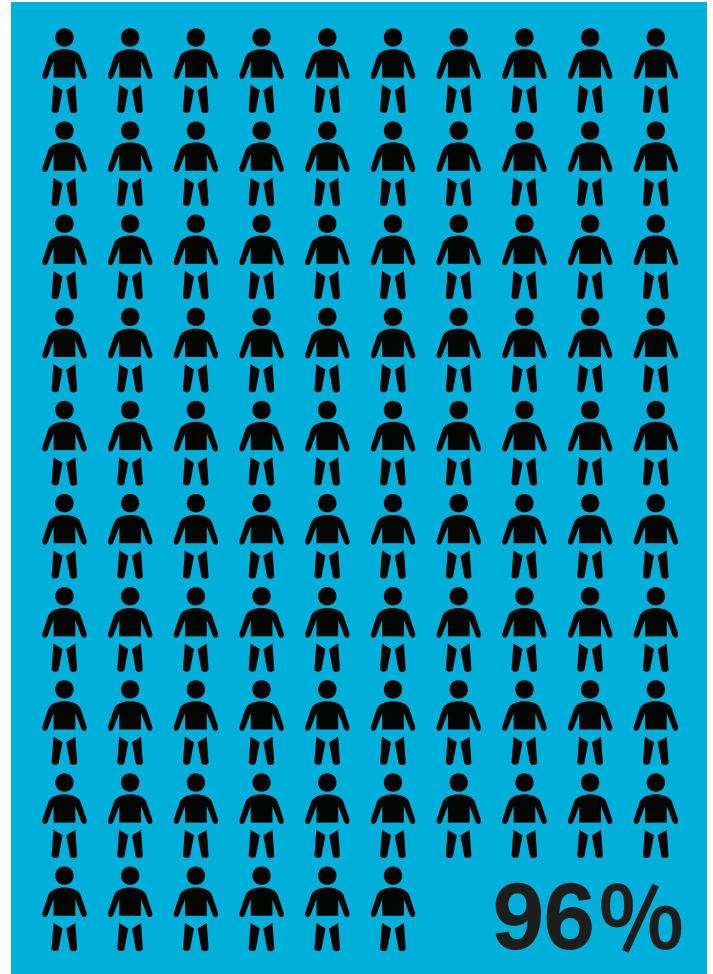
In 1820, only 57 percent of children lived to be five years old.
Today, more than 96 percent do so.

1820



2015

Source: Our World in Data / Max Roser



AUTOMOTIVE



1982

Length (m): 3.6

Empty weight (kg): 740

HP (basic model): 45

Fuel consumption (l/100 km): 7.5

Price (basic model, €): 6,774

*= 11,577, adjusted for
purchasing power)



2012

4

1,130

70

5.5

11,825

In February 1983, the basic model Opel Corsa 1.0 S with 45 horsepower cost 13,250 German marks, equivalent to the purchasing power of 11,577 euros today. This year's basic Corsa model starts at 11,825 euros, only slightly more than the first model in the eighties.

Source: Focus

CULTURE

Museum Boom

In 2005, there were about 2,300 museums in China; by 2015, the number had grown to 4,510. Likewise in Switzerland, visitor numbers have risen by nearly 30 percent (2006 to 2014), as have those for the three largest museums in London (2004 to 2016). The Louvre in Paris, the world's most visited museum, expects to see 30 percent growth in visitor numbers by 2025.

Source: Statista, Swiss Museums Association, Association of Leading Visitor Attractions, arnet



Contributors to this issue:

1 – Nannette Hechler-Fayd'herbe

The Head of Investment Strategy & Research at Credit Suisse defends the reputation of millennials. A mother of two, Hechler-Fayd'herbe points out that this generation, which accounts for 30 percent of the world's population, is engaged, independent and open to new technologies. *Page 16*

2 – Frederic Spohr

As the Southeast Asia and India correspondent for the business newspaper Handelsblatt, Spohr has paid frequent visits to Vietnam, a country of 93 million people. In this issue, he describes the country's rapid rise. "Every time I visit Vietnam, I need to reorient myself," he says. "Not long ago, there was a rice field where a high-rise building stands today." *Page 26*

3 – Jason Michael Lang

The industry publication Complex has named Lang one of the world's 25 best travel photographers. Accompanying Spohr to Vietnam, he was fascinated by the contrast between tradition and modernity. *Page 26*

4 – Erwin Wurm

Born in Austria in 1954, Wurm is one of nine artists we asked to explore the topic of "Life is Beautiful" for this issue. Wurm, whose work is currently on display at the Venice Art Biennale's Austrian Pavilion, is among the most successful contemporary artists. He is known for his playful, "bloated" sculptures, as well as for his works that are drawn from everyday life and show people in surprising contexts. *Page 52*

Cover photo: Mohd Rasfan/AFP

Are You Interested in Good News?

This issue of Bulletin begins with a newspaper you won't find at your local newsstand: Good News. It has two purposes.

First, we want to highlight the fact that the world is doing remarkably well, contrary to widespread opinion. In 1820, 94 out of 100 people were living in poverty, whereas only 10 percent of the world's population was poor in 2015. Whether we look at literacy, education, vaccinations, equal rights or access to the internet, the trend is positive. Things are improving.

Second, Good News will let you test yourself: Would you buy a newspaper filled with good news? The reasons why people prefer to consume bad news are described in the article on page 12.

Despite those preferences, in this issue of Bulletin we want to share some positive stories. We report from Vietnam, which has made rapid progress in a short period of time (page 26); we profile a successful fintech start-up in Nigeria (page 25); and we meet Urs Hölzle, the eighth employee to join Google and the man the Swiss broadcasting company Schweizer Fernsehen has called "the most important Swiss transplant in Silicon Valley" (page 44).

Not everything happening in the world is good. International terrorism has increased dramatically since the year 2000. Nearly 800 million people have too little to eat. In many places, inequality and corruption are worsening. The Earth is getting warmer. Every day we hear about what is going wrong – and we, too, will continue to report on these challenges. But this issue reflects the spirit of Holocaust survivor Hannah Pick-Goslar (see page 62), who said, "Thank God, I'm able to laugh. There are enough people who are constantly whining."

Happy reading!
Your editorial team

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The native of Liestal was the eighth employee to join Google. He talks about the blessings of progress.

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Portfolio: nine artists and their perspectives on optimism.

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Hannah Pick-Goslar on her childhood friend Anne Frank and human kindness in the concentration camps.



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Test: How Full Is Your Glass?



Modern-day magician's apprentices:
software that composes music.
Page 18.

GREATEST CRASH in
WALL STREET History

DAILY MAIL, 25.10.1929

EIN BLITZ-
SCHLAG

NZZ, 18.6.2017

La crociera
della morte

LA REPUBBLICA, 14.1.2012

Die Welt in Angst!

BILD, 12.11.2001

hay 20.000 nuevos

UN TRAGICCO
BILANCIO

IL GAZZETTINO, 3.11.1998

Drama auf Zürisee
Franz (20)

Massive icebergs
off Antarctic glacier

L'ÉQUIPE,
14.11.2015

L'Horreur

ATTACK on
DEMOCRACY

DAILY MIRROR,
23.3.2017

Schweiz
Vot

BLICK, 26.8.2005

VENGEANCE
AT LAST!

NEW YORK POST,
2.5.2011

Tensions

de
violence

L'ESPRESSO, 4.8.2008

Yearning for Good News

And why we still enjoy bad news more.

By Urs Willmann

When what you wish for and reality are at odds, it is almost always because reality doesn't measure up. It simply doesn't give you what you want. Your company isn't paying out bonuses, the weather is still gray and wet, your favorite team is stuck in the second division.

But sometimes the problem is what you're wishing for. Media scholars have conducted survey after survey, asking this question: What do people want from the media? For decades, responses have been astonishingly uniform. Whether newspaper readers or television viewers, they all want more positive reporting and more upbeat stories. In a Forsa survey, half of respondents said that TV news in Germany is too negative, and 80 percent that they would like journalists to show more solutions rather than reporting on everything that is wrong with the world. "There seems to be a real longing for positive news," says Hamburg-based media scholar Thomas Hestermann.

Positive News? No One Wants to Hear It

This has triggered a debate about "positive journalism" and "constructive journalism" – which would focus on the positive rather than the negative. After all, proponents say, the world isn't as bad as the media would have us believe. In the news, it's all about wars, storms, the melting of the polar ice caps, overpopulation and financial crises. In fact, however, things are getting better all over the world. Nearly everywhere, poverty is declining. Life expectancy is increasing, fewer children are dying and the global literacy rate is at a record high.

But no one wants to hear about that. While we may say, at least in surveys, that we want to know about geographical and social success stories, when it comes to the news we actually prefer just the opposite. Journalists have a cynical saying: "Bad news is good news." Consumers seem to agree. For as long as circulation numbers and ratings have been recorded, they have been a factor in shaping the news. Every day, you can go to Focus Online to see

which stories have been clicked on most often over the previous 24 hours. What you will find contradicts the idea that readers want positive stories, as surveys would seem to show. Take, for example, the news of July 3 of this year: The top ten stories included reports on 18 deaths on the A9 highway, the conflict in the South China Sea, Erdogan's right-wing thugs, a car that smashed into a bridge, and a Great Dane that nearly killed a woman. Upbeat reports from Wimbledon and about an RTL anchor who, as an experiment, intentionally gained 75 kilos, attracted far less attention.

The Appeal of the Unusual

People also prefer to pass on bad news. Facebook, Twitter and the rest have made the latest tidbits of information much more widely available. We learn of terrorist attacks more quickly than in the past – and the news comes at us from all sides. Greater frequency has made things more hectic – but it hasn't increased variety. The worst news is spread most efficiently, including through the new media.

Journalists see themselves as seismographs, recording all the things that are going wrong. It is in the nature of their job to want to report on disruptions of the normal order rather than on >

efforts to rebuild, for example after a war or natural disaster. News that says “everything is fine” is generally no news at all. A negative report, on the other hand, is an “attention factor of the first order,” says Vinzenz Wyss, a professor of media studies in Winterthur. In this respect, journalists are no different from anyone else. Just like the rest of us, they talk about things that deviate from the norm. “Those tend to be rather negative, such as stories about abuse of power, threats, damage and so forth,” says Wyss. The fact that the sun comes up every morning, he says, isn’t a very fruitful topic of conversation.

His Hamburg colleague Thomas Hestermann agrees: “We’re interested in the unusual, not the ordinary. The pilot who crashes his plane makes headlines, not the one who lands safely.”

This is expressed in the term *negativity bias*, which explains the tendency people have to pay more attention to negative phenomena. Even at a similar level of intensity and emotional impact, negative events have a much greater effect on us, psychologically, than do neutral or positive events. This may help to explain the findings of a survey conducted by researchers at Sweden’s Gapminder Foundation. Three years ago, their “Ignorance Test” revealed that a clear majority of people in the West are ignorant of how quickly

Endogenous Drugs

The bad news we see on the nightly newscasts today has much the same effect as the signs of danger our long-ago ancestors saw in the wilderness. The wars somewhere in the world, the epidemics that may be on the march, the harmful chemicals in cucumbers and eggs – these are the things that cause us alarm. But recognizing that the news can warn us of danger doesn’t explain why we prefer bad news. It is drugs – endogenous drugs – that produce this effect.

There is a reward center in our brains. Through hormones, it creates a sense of well-being, rewarding us when we have accomplished something that benefits us. Animals, too, are rewarded with pleasant sensations when they succeed in ensuring their survival – vultures receive such a reward when they find an ample supply of carrion, as do storks when they have finished building a sturdy nest. When a rabbit finds a secure hiding place, safe from an eagle’s clutches, it experiences a biochemical reward.

These effects are most intense at the point when the fear subsides. Fear serves to help us avoid danger. We all know the



Karachi hijab

Influence en M

and profoundly the state of the world is improving. Half of the respondents believed that extreme poverty had doubled worldwide in recent years. In fact, it has declined by one-half since 1990 – but only 30 percent of Germans and a mere 7 percent of Americans are aware of that fact. It may be that our preference for bad news leads us to form a more negative picture of reality.

But what has led to this *negativity bias* and our fascination with bad news? The answer lies in evolution. Danger provokes the most powerful response. The sight of spiders and snakes triggers a reflex in most people – a rapid and vigorous response before we even have time to think. Areas of the brain like the amygdala are involved when our body reacts before our intellect tells it to do so. Unthinking, instinctive responses saved the lives of millions of our prehistoric ancestors. If they had first stopped to analyze the snake, the lion or the scorpion and place it in the category of a “danger,” they would never have been able to pass on their genes to the modern world.

sense of euphoria that comes after we have overcome a dangerous situation or survived profound emotional turmoil. These moments are so pleasurable that they account for society’s “adrenaline junkies,” people who expose themselves to risks because they enjoy the hormonal rush that follows when the danger is past. According to cardiologist Barbara Natterson-Horowitz, a professor at the UCLA Medical School, gaining access to the drugs in our brains can be extremely motivating. All that is necessary to release these substances, for humans as well as for animals, is to behave in a certain way. Long before the modern era of roller coasters and bungee jumping, people reveled in the thrills that come with fear. From the earliest times, there has been a fascination with a sense of impending doom. For the ancient Romans it was the thrill of the arena; during the Middle Ages, knife-throwers created a hormone-fueled sense of excitement. Today, we tune in to TV shows like “CSI: Crime Scene Investigation” not because we think it our duty to help solve a murder, but because we are drawn to “bad news” about the acts of human monsters.

Since security measures have minimized danger in the real world, we turn to fiction to satisfy our eagerness for excitement. Jonathan Gottschall, an American literary scholar, proposes an intriguing thought experiment: “Imagine you find a magical device that allows you to enter an alternate universe as an invisible observer. Before entering, you know you will witness brutal, scarring things: the rapes and murders of women and children, bodies tortured, defiled and dismembered. Seemingly decent men will reveal themselves as evil Nazis and sick maniacs. Watching, you will grow angry, tense and scared – your heart will pound, your breath will quicken and you will break out in sweat.”

Then Gottschall asks the obvious question: “Do you want to use your magical device? If you answer, ‘Not a chance!’ then you’d be wrong.” Gottschall reveals that the fictional scenario he’s describing is from Stieg Larsson’s thriller “The Girl with the Dragon Tattoo.” And the magical device is a novel. The most popular

him in a negative light. Harvard University’s Shorenstein Center has calculated that 98 percent of the time, the tone of ARD’s coverage of the first 100 days of Trump’s presidency has been negative. The American media have hardly treated him more favorably. Coverage by CNN, which Trump blasts on Twitter as “fake news,” was negative 93 percent of the time. Following closely behind were the New York Times and the Washington Post (91 percent negative).

The figures reveal that we are getting what we want. News reports reliably provide excitement, as they describe events that deviate in a negative way from the norm. It’s pointless to criticize this penchant for the negative. And it is naive to expect, or want, the media to reflect reality. Instead of complaining that the media present a distorted view of reality, we should be pleased. Fortu-



works of literature deal with evil. One in four novels revolves around crime. And more than a third of the time Germans spend watching movies or series on TV is devoted to crime stories. In 2012, all of the 10 most-watched programs were episodes of the crime series “Tatort.”

“Fear pays off”

Psychiatrist Borwin Bandelow believes that all this is rooted in the primitive fear system, which simply cannot distinguish between a genuine threat and a television program: “It really thinks that something terrible is happening.” The heart beats faster; viewers may start trembling. Ultimately, however, this kind of fear has a stimulating effect. Bandelow compares watching a crime show to riding a roller coaster – first there is terror, then euphoria. “The fear pays off, at least by 9:45 p.m. when the perpetrator has been captured.”

All of this suggests that we should be pleased with the current American president. Obama gave us eight years of boring news, but that era is finally over. Donald Trump has achieved an impressive negative approval rating. On Germany’s broadcasting station ARD, nearly every report concerning Trump has shown

nately, the real world is not as entertainingly horrible as it appears in the media, the movies and crime novels. It is a relatively calm and pleasant place – a place where we can recover from the excitement of what we experience in the media. □

Urs Willmann is a science reporter for the newspaper Die Zeit.

A Bad Reputation

Millennials have a reputation for being self-absorbed and not very interested in the world around them. But this view is wrong: People aged 20 to 37 could help to create a better future.

By Nannette Hechler-Fayd'herbe



The “dumbest generation” (as the title of one book refers to them) is incredibly entrepreneurial. Pictured: Millennials at work in a cafe in New York (where there is free WiFi).

In a cover story, Time magazine dubbed them the “Me Me Me” Generation; other magazines and blogs call them “Generation Y Bother” and a book about them is called “The Dumbest Generation.”

According to the United Nations, Generation Y, also known as millennials, now makes up nearly 30 percent of the world’s population, but it does not have the best reputation. Undeservedly so. A look at the data and facts concerning today’s 20- to 37-year-olds points to an optimistic future.

For example, Credit Suisse also views millennials as one of five global supertrends (see text to the right). The core of these trends is formed by demographic, socio-economic and political developments as well as technological and scientific progress*.

But now to the main question: What distinguishes millennials?

Sustainability Is Important

According to the WEF’s annual Global Shapers survey, climate change and global warming are among millennials’ main concerns. They are currently the generation most focused on sustainability. Studies by Nielsen and Deloitte show that they are willing to spend more on products and services if these are produced sustainably. Because of their numbers (almost 2 billion people), millennials will have a major impact on the success of companies based on the products they choose to purchase. Many studies also show that this generation is very interested in impact investing, i.e. investments that seek social and environmental benefits in addition to financial returns.

Their alleged self-centeredness also has a positive side: Many millennials want to do things for themselves. In the Credit Suisse Youth Barometer 2016**, 16- to 25-year-olds were asked to name their preferred employer, and many said that they wanted to be self-employed. In other surveys, they favored careers as social entrepreneurs and working for foundations or for social investment funds.

Unlike their parents, the members of Generation Y have no fear of technology – they grew up after the digital revolution. Most have never experienced life without the internet or smartphones. Online consumption is normal. Few in the

Youth Barometer 2016 say that they want to be offline. The survey also reveals that although “digital” has no borders and it is used interchangeably with “global,” there are enormous differences among millennials in different countries when it comes to the use of digital devices and apps. Furthermore, most young people are well aware of who is responsible for their online protection: the individual him- or herself, is the top answer in the Youth Barometer.

Together Separately

Millennials are price-conscious because many of them completed their education during the financial crisis and there are fewer resources available to them than to previous generations. In the Youth Baro-

The Future Looks Good

Even among those who are in a relationship, many live separately in single-person apartments, as Credit Suisse’s study “Swiss Real Estate Market 2017” shows (see Bulletin 2/2017). But not everything is new and different for this generation: Many millennials dream of owning their own home in the long term.

The positive conclusion is that this generation is facing the future with confidence. 59 percent of young Swiss people in last year’s Credit Suisse Youth Barometer believe the future looks good! □

The Credit Suisse supertrends*

- 1 Angry Societies – *Multipolar World*
- 2 Infrastructure – *Closing the Gap*
- 3 Technology at the Service of Humans
- 4 Silver Economy – *Investing for Population Aging*
- 5 Millennials’ Values

meter, 33 percent say that financial obligations are a large or very large burden in their lives. Accordingly, a large number of them continue living at home with their parents for a long time. However, they would like to have money to fulfill their wishes and make lifestyle decisions. Experiences are fundamentally important to them.

The housing needs of millennials differ from those of previous generations. Single-person households, for example, are a symbol of the needs and values of millennials and are becoming increasingly widespread. Living in a single-person household is, in many cases, no longer simply a phase between the (late) stage when children move out of their parents’ house and when they start their own family, but rather a conscious decision in an increasingly individualistic society.

Dr. Nannette Hechler-Fayd’herbe is Global Head of Investment Strategy and Research at Credit Suisse.

* More information about the supertrends can be found at: credit-suisse.com/thematicinvestment

** The Credit Suisse Youth Barometer 2016 is available at: credit-suisse.com/jugend-barometer or credit-suisse.com/research

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A glimpse into the future: What humans can expect from technology in the next few years.

By Steffan Heuer (text) and Pieter Van Eenog (illustrations)

By Steffan Heuer (text) and Pieter Van Eenoge (illustrations)



MOBILITY

From A to Zzzzzzzzzzzzzzzz

We hold on to the hope that we will be able to beam ourselves from point A to point B in the not-so-distant future. At least in the lab, it is already possible to teleport tiny pieces of information. Other revolutionary transportation options are already available or will be introduced soon, including robotic drones and remotely operated aircraft. At various sites around the world – including in Switzerland – two companies are planning or building the tracks for the Hyperloop, the ultrasonic dispatch system for people and freight. There are even plans to develop the universe, at least as far as Mars, by private space travel companies like SpaceX and Blue Origin, with the help of inexpensive miniature satellites.

ENERGY AND THE ENVIRONMENT **Zero Marginal Cost**

Abundance is (practically) no longer a dream. On very sunny and windy days, power companies from California to Texas are already giving their customers electricity for free. Anyone with solar panels on their roof and a storage device installed in their house becomes self-sufficient with the addition of battery-powered cars and electric bicycles. In his book “The Zero Marginal Cost Society,” US author Jeremy Rifkin describes the scenario of an intelligent network of renewable energy. The free flow of data and analytics using big data tools will radically alter agriculture, too, reducing the use of chemicals and virtually eliminating famine. Real-time bits located at every furrow and attached to every perennial crop plant will be just as important as plants engineered at the computer.



FINANCES

The Big Chain

What if every car sale, every real estate deal, every spare part and every work of art sold at auction could be permanently and indelibly linked to its previous history, allowing every buyer to be certain of the piece's origin? Software companies and banks are working at full steam on such an incorruptible, global ledger system, and a number of pilot projects have been launched. Blockchain has the potential to breathe intelligence into all types of transactions. Contracts, for instance, become "smart contracts" which recognize the moment that a party has fulfilled their end of the deal. Biometrics also lends some security to finance, because smartphones, ATMs and even check-in and security at the airport can respond to the face or the voice of a customer.

HEALTH

Programming the Body

Genetic engineering was yesterday's news. The next generation of biologists and doctors aims to conquer hereditary diseases and even cancer using a technology called CRISPR. This allows the genes contained within a cell – even in the germ lines – to be precisely reprogrammed just like the code in a computer game. It even makes designer babies feasible. Biotech innovations like CRISPR inspire experts to dream of life expectancies extending beyond 100 years. More and more, knowing your own genetic profile, monitoring your every step and taking the corresponding preventative measures will become an affordable mass phenomenon. Two atlases are currently being developed to support this trend – one encompassing all microorganisms (microbiomes) and the other all of the approximately 37 trillion cells in the human body.

Steffan Heuer is a technology journalist and a US correspondent for the business magazine "brand eins." He lives in San Francisco.

PRODUCTION AND TRADE

Decentralized and Digital

The rise of automation is unstoppable, and long wait times are a thing of the past. At Taiwanese contract manufacturer Foxconn, there are entire manufacturing halls operating completely without staff – making China the largest growth market for robots. But human knowledge is still in demand. In many warehouses and factories, friendly "cobots," such as those that go by the name of Baxter and Fetch, work side by side with people, supporting them and learning from them. Machines print any item imaginable at the touch of a button by turning digital instructions into 3D objects, from machine parts to tailor-made prosthetics. Printing can be done anywhere at any time, making it possible to get complex replacement parts to even the most remote parts of the world and deliver them quickly using autonomous trucks, drones or compact PackRobots.

ARTIFICIAL INTELLIGENCE

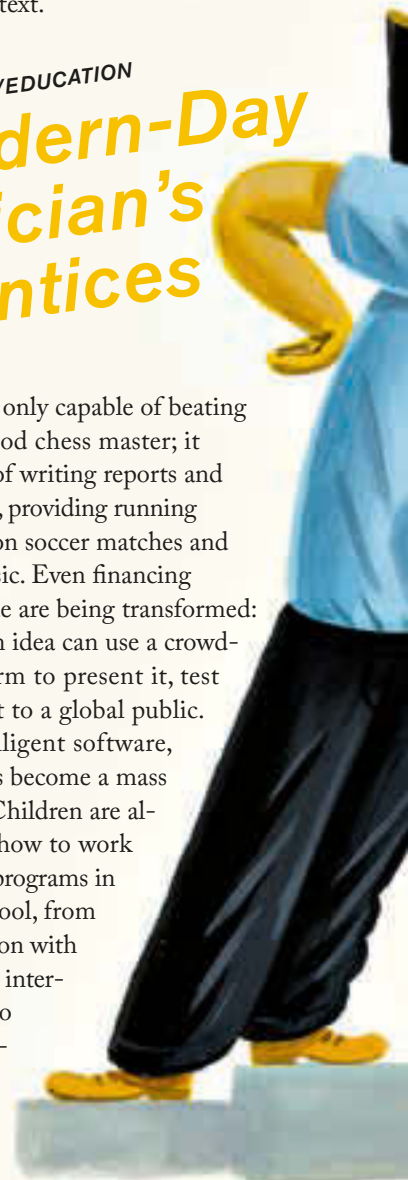
Seeing and Understanding

Machines are learning to listen better, to engage in thought processes and to act on our behalf. Deep learning allows software to understand conversation, to simultaneously translate into any language and to independently recognize faces and objects. Chatbots and virtual assistants like Alexa and Siri have become invisible parts of our environment, whether in our home, at our workplace or even in the smallest wearable devices. With the help of voice controls and augmented reality (AR), even a screwdriver can come to life. The next step further is already being tested in the laboratory: Thought control using sensors that read brain waves and software that transforms the sound waves on our skin into machine-readable text.

ART/CULTURE/EDUCATION

Modern-Day Magician's Apprentices

Software is not only capable of beating a flesh-and-blood chess master; it is also capable of writing reports and works of fiction, providing running commentaries on soccer matches and composing music. Even financing and the art trade are being transformed: Anyone with an idea can use a crowdfunding platform to present it, test it and market it to a global public. Thanks to intelligent software, sponsorship has become a mass phenomenon. Children are already learning how to work with advanced programs in elementary school, from playful interaction with modules for the internet of things, to gene manipulation aimed at creating new life forms.







“I want fair, social capitalism.”

The young economist Falko Paetzold is fighting for a more equitable, healthier and more environmentally friendly world. His aim is to encourage private investors, particularly those with assets in excess of 50 million dollars, to invest sustainably.

By Daniel Ammann and Simon Brunner (interview) and Christian Grund (photo)

Mr. Paetzold, how is the world doing these days?

Better than 20 or 50 years ago, in many ways. But as a society, we are facing what are perhaps our biggest challenges, and we have to be honest in recognizing them in order to implement solutions. I am referring to the ongoing climate change, the lack of global health care, water shortages, slavery and poverty. At the same time we have extremely fascinating and marketable solutions for these challenges, from renewable energy sources and more efficient energy utilization to massive scalable health solutions and fair supply chains. These solutions can be very exciting for investors – and for all of humanity.

You intend to address these global challenges with the wealthiest individuals in the world. Why?

The distribution of global wealth has developed with extreme disparity ever since the seventies – everyone is aware of this. But just how extreme that disparity is, that might still be surprising. Around 100 trillion Swiss francs – over half of global wealth – is held by significantly fewer than one percent of the population. Imagine what could be achieved if this one percent were to invest its capital in such a way as to combat poverty or climate change at the same time.

Should the ultra-wealthy invest their money in foundations like Bill Gates does?

No, we cannot reach the huge investment volume required merely through philanthropy and charity. I am talking about sustainable investment as the wide

spectrum of investments available today that have a *business case*, investments that generate returns both for the investor and for society. You can invest in companies that will use that capital to actively develop solutions to the challenges we face – and that are financially worthwhile. You can give preference to companies that uphold ethical, social and ecological standards. You can support shareholder groups who push these standards through at companies that are not meeting them

very wealthy investors generally have a long-term investment horizon because their aim is to save their wealth for the next generation. Furthermore, portfolios that will succeed in the future promise better returns. No one wants to invest in tomorrow's losers. In addition, psychology has long shown that people want to achieve harmony between their ideals and their actions. We even see this principle in action for purchases, like the growth in healthy and organic food. Many

No one wants to invest in tomorrow's losers.

yet. There are solutions for all kinds of investors. In this way, it could certainly also make sense to invest in dubious companies, working as an investor on improving them – we cannot be intellectually lazy. We need to be honest in our search for solutions and effective levers.

Are the very wealthy interested in this topic?

Very! Nine out of ten UHNWIs [editor's note: *Ultra High Net Worth Individuals*, the term for people with assets worth more than 50 million dollars] indicate that they are interested in sustainable investment opportunities. But only one out of ten is actually investing that way. There is immense potential there – and not only in terms of capital. Through their own companies, their vote as shareholders, their position in society and their relationships – these people have invaluable influence on other decision-makers and on policy.

Were you surprised to discover this openness to socially and environmentally responsible investment?

No. But I am often just so happy to witness the moment when the spark catches, that aha moment. As investors, why shouldn't we consider these fundamental issues like climate change, water scarcity or global health problems? That only makes sense when working with a very short-term horizon. This philosophy is seen more frequently among salaried employees and management. In contrast,

people have just not yet realized that their wealth is very influential – and when it comes to UHNWIs, that lever is massive.

You opened the Center for Sustainable Finance and Private Wealth at the University of Zurich in July. What are its objectives?

First of all, we want to reach the point where UHNWIs are effectively integrating the issue of sustainability into the management of their wealth. Our goal in the longer term: Private assets should become a key factor in sustainable development. I want to lay the groundwork for a social and fair capitalism.

Do you see differences between the younger and older generations in terms of their investment behavior?

Older people tend to see this as two issues. On one hand, I generate returns, however possible. On the other hand, I give money to good causes, regardless of whether there might be market-based solutions. Younger UHNWIs can often see that this approach doesn't make sense – why create a problem that has to be “donated away”? They want to integrate sustainability from the beginning – for better returns and because it makes sense on a humanitarian and a societal level. The 20- to 40-year-old investors, also known as the millennial investors, have grown up knowing that there is climate change and social injustice. We are focusing heavily on this next generation. >

Falko Paetzold, 34, opened the Center for Sustainable Finance and Private Wealth at the University of Zurich in July (www.csf.uzh.ch). The seed money of 3.5 million Swiss francs was provided by wealthy private individuals. Paetzold also co-manages a training program for sustainable investment at Harvard University. After completing his doctoral studies in finance, he worked at Bank Vontobel and founded the international sustainability network GreenBuzz.

At Harvard, you hold courses in sustainable investing for wealthy families. Who is in your classroom?

We have held the course three times now, each time with around 25 participants, all of them 20- to 45-year-old members of UHNW families from around the world. Participants can discuss their concerns and family conflicts openly and honestly. How can you talk to an uncle who holds a great deal of influence within the family and who doesn't believe in climate change? Should I include my cousins as co-investors? It is essential that we create a protected environment for discussions like these. That is also why I cannot mention any participant names.

Where do the participants come from?

Members of well-known major industrialist families from Switzerland took part. Our classes are very heterogeneous. A Brazilian family of investors meets the German pharmaceutical dynasty; the Swedish shipping family meets the Korean insurance clan or the Chinese family from the automotive industry. There was even someone from a Middle Eastern royal family, and after that, we were invited to hold a workshop on sustainable investments directly for the family.

Sustainable funds comprise only a small percentage of the entire investment market. Is that because of their reputation of earning a B- in performance?

That preconception is still around even though it has long been disproven.

Improving the World

Sustainable investment is a term used to describe investment processes that take environmental aspects, social issues and good management into account in addition to traditional financial information. Sustainable investing is trending. In 2016, around 23 trillion dollars were invested sustainably worldwide (+25 percent compared to 2014). In Switzerland, it was 266.3 billion Swiss francs (+39 percent compared to 2015).

Sustainable products and services
at Credit Suisse:

www.credit-suisse.com/sustainableproducts

Scientific research has shown that sustainability pays off not only idealistically but also materially.

Why isn't more being invested?

Has anyone at your bank ever asked you if you want to invest sustainably? Or if you want to invest un-sustainably? That's what I mean. Client advisors tend to keep this information from you – not because they think it isn't good, but simply because they lack the expertise.

What should asset managers do?

Address the topic internally. Inform the clients, who then in turn ask their client advisors. Also, offer innovative, new and smaller funds. Train the client advisors. In terms of the financial sector in general, the retail area is still poorly represented. Results of a study of test purchases showed that practically all retail client advisors held information on sustainable investments back from their clients. But I would like to highlight the fact that

**Sustainability
pays off not only
idealistically but
also materially.**

Credit Suisse is making good progress in this area. If it wanted to, it could take on a pioneering role in the future.

In another analysis, you reached the conclusion that when sustainable investments are a topic of discussion with clients, the banks profit. How so?

The bank benefits in different ways. When it comes to the topic of sustainability, active consultation makes a big difference. Otherwise, clients these days have the choice of using robo-advisors or exchange traded funds (ETFs). The important thing is to make the customers feel that they are being taken seriously and that the consultation adds value. Content is the way to achieve that. Advisors who talk to clients about their personal values are also creating an emotional and intellectual

connection with them. In doing so, they are achieving greater understanding of their clients. Research also indicates that clients who are well informed about the sustainability of their portfolio can take a longer-term view and react with less volatility – and their investment deposits will not diminish as rapidly.

Do you see sustainable investments as an opportunity for the Swiss financial center?

Yes, immensely so. Sustainability could be the new competitive advantage for Switzerland as a financial center. There is a natural link, too. Switzerland and "Swissness" stand for high quality, stability, innovation and durability. Investing sustainably is built on the same values.

How sustainably do you live yourself?

In terms of investing, I concentrate on sustainable funds and start-ups in the *sustainable finance* area. I fly too much for my work. At least I compensate for the miles flown, usually by double; that is easy and effective. I eat very little meat and only what has been produced sustainably. I share my car and usually ride a bicycle. I would like to add one more thing: My choice of career is no accident. I think it is important to be involved, both personally and professionally. Even when it comes to the average income, Switzerland is in the upper percentile in a global comparison. The absolute majority of the world's population has practically no influence on whether the shift to sustainable development succeeds or fails – but we do. We are extremely privileged and, therefore, we have a responsibility. And also, the change that needs to happen will bring with it enormous opportunities that we can turn into realities. □

Madame Flora and the Catfish

The fintech start-up Lidya is helping Nigeria's SMEs build a credit score and access financing quickly, helping these enterprises grow.

By David Schnapp



"An example for others": investment officer Muneeb Ahmed and fish merchant Flora Edojah.

Despite her small stature, Madame Flora Edojah is a force to be reckoned with. A 53-year-old catfish merchant, she is the epitome of a businesswoman. Her stand at Ijesha Market in Lagos, the capital of Nigeria, has been a mainstay of the local fish trade for decades. The catfish is the most popular fish here, and for the hundreds of women who sell it, Madame Flora is a symbol of success.

With the heart and soul of an entrepreneur, Flora is building a mini-empire. And now "Lidya" enters the picture. Lidya offers a digital platform to facilitate access to financing. The company is supported by Accion Venture Lab – the world's leading seed-stage investor in fintech for the underserved (see box). The name Lidya comes from an ancient Greek kingdom that was located in Western Anatolia. Lidyans are credited with introducing the world's first ever gold and silver coins, which revolutionized the way the goods are traded.

In May 2017, Lidya entered into an agreement with Triton Aqua Africa, a Nigerian supplier of catfish, frozen fish and chickens. Lidya issues fast loans to distributors who buy these products, based on their previous purchases. When Lidya was looking for a borrower in southeastern Nigeria, there was one person Triton Aqua Africa could wholeheartedly recommend: Flora Edojah. Originally from Nigeria's oil-rich Delta State, she moved to Lagos in 1986 and began to sell small quantities of catfish. When Nigeria's economy started experiencing a boom at the turn of the century, demand for catfish rose. Madame

Flora saw the potential for working with larger customers like supermarkets and hotels. Because of challenges associated with obtaining loans from Nigerian banks, however, it was virtually impossible for her to enter the large-scale market. "There's too much stress involved with it," says Flora Edojah, now a successful fish merchant. "Lidya makes it very simple for me."

Solid Basis for Business

According to the development bank IFC, which is a member of the World Bank Group, Nigeria and its more than nine million SMEs need another 30 billion US dollars in loans from traditional banking institutions. In 2016, the financial services provider Lidya began to close this gap, allowing small and medium-sized enterprises to submit applications for loans of between 500 and 50,000 dollars using their mobile phones. Lidya uses dozens of data points to evaluate their creditworthiness within 24 hours, then pays out the loans immediately. Muneeb Ahmed, an investment officer at Lidya, also helped Madame Flora open a bank account and obtain a bank verification number to establish and boost her credit rating.

"Madame Flora is an example for others," says Ahmed, pointing out that Lidya's work is not just about issuing loans, but also about putting businesses on a secure footing. Flora Edojah uses these loans to purchase catfish. She no longer keeps her earnings under her mattress, but in a bank account. Now she is in a position to do business with major players, such as supermarkets and hotels. □

Accion Venture Lab

Credit Suisse supports Accion Venture Lab, the seed-stage investment initiative of global nonprofit and financial inclusion pioneer Accion, as part of its Microfinance Capacity Building Initiative. Venture Lab provides seed capital and support for innovative start-ups that are increasing access to, improving the quality of, and reducing the cost of financial services for the underserved at scale.

www.credit-suisse.com/microfinance
www.accion.org/venturelab


15 Years of Impact Investment and Microfinance at Credit Suisse

- 2003 Establishment of responsAbility, a specialized asset manager that develops financial products and services tailored to the needs of people at the bottom of the wealth pyramid. Today Credit Suisse itself manages over 3.3 billion dollars in assets in the fields of microfinance and impact investment; nearly 5,000 clients have invested in these products.
- 2008 Launch of the Microfinance Capacity Building Initiative, which builds capacity and promotes innovation in the microfinance industry. Credit Suisse supports partner organizations such as Accion (see article at left), FINCA, Opportunity International, Swisscontact and Women's World Banking.
- 2016 Training for over 4,000 local employees of microfinance institutions. More than 380,000 people have gained access to new or improved products and services.
- 2017 Presentations at events held around the world, outlining current projects and future goals for impact investment and marking the 15th anniversary of this area at Credit Suisse.

Vietnam has been experiencing an impressive economic upswing for 30 years. A young generation of entrepreneurs wants to write the next chapter in the country's success story – and celebrate the market economy in the process.

By Frederic Spohr (author) and Jason Michael Lang (photos)



A close-up, shallow depth-of-field photograph of a hand holding a silver cross. The hand is in sharp focus on the left side of the frame, while the background, which appears to be a crowd of people, is heavily blurred. The lighting is soft and natural, creating a contemplative and spiritual atmosphere.

The Great Ascent

G

“Get Rich or Die Tryin’” is one of the most successful rap albums of all time. The recording artist is US musician 50 Cent. His fellow Vietnamese rapper Wowy is still trying – just like his country.

Wowy is standing at a rooftop bar in the economic metropolis Ho Chi Minh City. He sips from a bottle of beer and looks around. The women are wearing elegant dresses and pull sparkling smartphones out of their purses for an occasional selfie. The city lights are twinkling in the distance. No matter where you look up here on the 26th floor, every view looks like it’s straight out of a commercial.

The musician in his white suit and black undershirt has already come a long way. As a child he sometimes went to bed hungry, says the 29-year-old. Today he’s drinking beer on a rooftop terrace and his old Mercedes is parked downstairs in the parking garage, 150 meters below. But Wowy has even bigger plans. “The view is nice from up here,” he says. “Someday when I’m really rich, I’m going



Like a commercial: The skyline of Ho Chi Minh City.

“Communism
or capitalism, it
doesn’t matter.
You need to make
sure that you
manage to get by.”

Wowy, rapper

to buy a condo like this.” His fashion label, Black Lotus, will be launching soon.

Fame Doesn’t Fill Your Belly

No doubt about it, things are looking up in Vietnam. According to the World Bank, its economy is expected to grow by around 6.3 percent this year – faster than most of the other countries in the booming region. It’s nothing new for Vietnam, whose economy has been growing by an average of 6.2 percent every year since 2000 (see Fig. 1). Back in 1989, the annual per capita income was below 100 dollars. Today it is over 2,000 dollars. More than seven million scooters travel the streets of Ho

Chi Minh City. In 2011, there were only two million.

The World Bank calls Vietnam’s rise a “development policy success story.” This story began in 1986, when Vietnam’s Communist Party had to admit that its radical planned economy had failed. The Americans had been driven out for a decade, but the economy was in the basement. The pride of having beaten a world power couldn’t fill the population’s bellies.

With the Doi Moi reforms, Vietnam implemented measures similar to those its huge neighbor China had taken a few years prior. First the Communist Party gave farmers more freedoms and allowed people to start businesses. Then the country increasingly opened up to international investors. “Socialist-oriented market economy” is the name the leadership has given its system. The government continues to play a major role, but is also enabling the market – a development model that is also called the “Beijing Consensus.” It is considered an alternative plan to previous concepts from the World Bank and International Monetary Fund. Their “Washington Consensus” often overwhelmed emerging markets by opening up the economy too brutally.

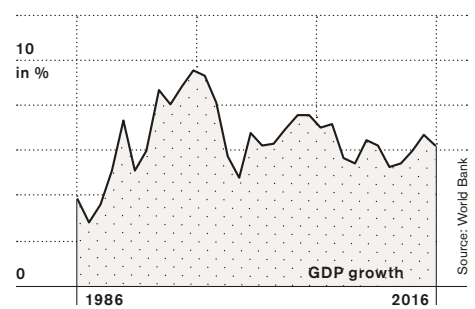
But Vietnam is growing to trust more heavily in the market. The government is currently signing one free trade agreement after another: A deal has already been agreed upon with the EU, and negotiations are still under way with Switzerland. The government is also participating in several regional free trade zones such >

95 percent of the population supports opening up the country.
Pictured: Starbucks coffee shop in Ho Chi Minh City.



Fig. 1 Faster than most

The gross domestic product has been growing on average by 6.2 percent every year since 2000.



as the RCEP. Vietnamese people welcome the liberalization of their economy. According to a Pew survey, 95 percent of the population supports the market economy system. That's a higher number than any other country in the world. The tension between socialism and the liberal market economy shapes life in Vietnam. People stand in line in front of Ho Chi Minh's mausoleum in Hanoi – and also outside of Starbucks. In fact, they're so excited that they take selfies in front of the coffee shop.

The Market Rebel

Thuy Dam, 56, experienced the system changeover personally – and took advantage of it. Before she became President of Fulbright University Vietnam, she was one of the country's most well-known managers in the finance industry. Her past jobs include CEO of ANZ Bank for the Mekong region. From her glass office in a Ho Chi Minh city landmark, the Bitexco Financial Tower, she can look out over the hustle and bustle of the metropolis. Construction cranes dominate the skyline in the distance, building completely new neighborhoods.

From up here, she can watch her country's ascent on a daily basis. It's a sharp contrast to her childhood, when she had to get up at three in the morning to get food stamps. As a little girl in December 1972, she experienced Operation Linebacker II, also known as the Christmas Bombings, firsthand. From twenty kilometers away, she had to watch as hun-

dreds of American tactical bombers laid waste to Hanoi.

But Thuy Dam (in Vietnam, the family name comes first) embodies a characteristic common to many Vietnamese: iron discipline. Thuy studied by the light of oil lamps, going on to study English and then snag a coveted position at the Ministry of Economy in 1986. Her career began at the same time the country started opening up. She was responsible for patents and licenses at the ministry – and suddenly companies like Citibank and Coca-Cola started registering their trademarks. “That's when we knew that something was happening,” she says.

“When Coca-Cola
registered, we
knew that something
was happening.”

Thuy Dam, president of
Fulbright University Vietnam





“Development policy success story” (World Bank): More than seven million scooters travel the streets of Ho Chi Minh City. In 2011, there were only two million.

With four colleagues from the ministry, Thuy opened Vietnam’s first corporate consulting firm on a small side street in Hanoi, specializing in market entry for foreign companies. A family lived in the back half of the building, while Thuy and her colleagues typed up letters on typewriters that they sent out into the wide world. The Vietnamese woman continued to learn ambitiously. While she decried Vietnam’s bureaucracy for the men in suits from the West, she had them bring her books. Thuy also used her contacts at the Ministry of Public Security to get her hands on confiscated works. She learned what a market economy is – and was enthusiastic.

“I was a market rebel,” she says looking back at that time when she was always testing the boundaries. In 1989, her consulting firm invited the heads of the European stock exchanges to Ho Chi Minh City’s Opera Square for a public discussion on what a Vietnamese trading venue could look like. Thuy blasted the entire area with huge loudspeakers and served as the interpreter for the podium. Public interest was high, and thousands of Vietnamese gathered at the square. “People had never seen anything like it,” recalls the entrepreneur.

It was also something new for the Communist Party in Vietnam. The government shut down Thuy’s consulting firm for

six months. “Perhaps we were a bit too enthusiastic,” she says today. Party officials weren’t too fond of the idea of erecting two giant Coca-Cola bottles in front of Hanoi’s opera house shortly after the Americans lifted the embargo in 1994, either. But because of that she was accepted shortly thereafter into one of the world’s toughest MBA programs – the Wharton School in Philadelphia.

Not Creating Enough Value?

To this day, the party leadership is wrestling with the question of how far the liberalization should go. A five-year plan continues to be enacted that dictates the principles of economic policy. Some prices are regulated and large state-owned enterprises still dominate the economy. “Internally the government is emphasizing its socialist direction,” says Le Dang Doanh, one of Vietnam’s best-known economists. “To the outside world, it communicates that the country is a market economy.”

There is a reason for that, because foreign direct investment is still the elixir of life for the country’s economy (see Fig. 2, page 34). Vietnam attracts companies with lavish subsidies and an army of inexpensive labor. In 2014, the average monthly income was 214 US dollars, according to a study from the International Labor Organization (ILO). That’s around one third less than in



History: There was already a kingdom in the area of modern Vietnam in approximately 1000 BC. Starting in 111 BC, the region came under Chinese control for more than 1000 years. Then followed a period of prosperity and expansion to the south. In the 19th century, France established itself here as a colonial power, followed by Japanese occupation in World War II. In 1954, the land was divided into the socialist North and pro-West South. The Vietnam War lasted from 1955 to 1975, with the North Vietnamese troops ultimately conquering the South. The reunification under communist leadership took place in 1976. Market economy reforms began in 1986.

Population: 93 million

Gross domestic product: 202.6 billion US dollars

Per capita income: 2,185 US dollars

Poverty rate: 13.5 % (2014), 20.7 % (2010)

Life expectancy: 75.8 years

Source: World Bank

China. Technology giants Panasonic, Microsoft and Intel, for example, recently expanded their production significantly. South Korean electronics company Samsung also uses Vietnam as a production location: 40 percent of their mobile devices are assembled in Vietnam.

But this growth model could soon reach its limits, because the country’s own value creation remains low, complain critics. The devices are often only assembled there; the technology and software are imported. “We need to climb further up the value chain,” states Le. Otherwise Vietnam will face the same fate as many emerging nations and remain stuck in the “middle income trap.”

Tradition and modern:
The Bitexco Financial Tower
(left) was the country's
tallest building when it was
completed (2010). The
platform on the 52nd floor is
a helicopter landing pad.
A woman practices cupping
on a man in the street
(right). The treatment comes
from Chinese medicine
and is very popular in
Vietnam.





In the Exhilarating Start-Up Rush

Anyone who walks through the booming economic metropolis of Ho Chi Minh City sees that something is happening. The tech-savvy youth are experimenting – and the metropolis is experiencing a heady start-up rush. Right now one co-working space is opening after another. And it isn't just drawing digital nomads from the West – there are plenty of young Vietnamese entrepreneurs as well.

Some of these have already launched successful companies, for example Dang Hoang Minh, the 33-year-old head of the start-up Foody. His company is a mixture of the restaurant rating app Yelp, the delivery service Foodpanda and the payment service PayPal. “We want to build up a complete system all around food,” says the founder. He has already been able to convince prominent investors, such as the American hedge fund Tiger Global Management, which also holds shares in Airbnb, the community marketplace for accommodations. “We will be profitable in two or three years,” promises Dang.

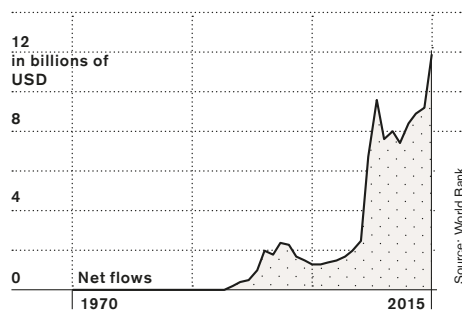
It's lunchtime, and that means stress in Foody's call center. Around 70 of his employees sit behind Dang, taking calls and routing drivers to the right locations. Even though he has more than 500 employees, he continues to handle all the details in the process. He still explains how to best solve problems to the individual phone operators.

Dang doesn't consider himself “too good” for anything, perhaps because he started out at the very bottom. Like many people in Vietnam, his life started out in the middle of a war – in his case, the war against China in the mid-1980s. He spent most of the first months of his life in an underground bunker system in the northern part of the country. After a childhood in humble conditions, he financed his own college education, studying computer science in Australia. “I spent much more time working there than studying,” he says.

After he returned, his mother tried to convince him to work for one of the government-owned companies. For the older generation, that is still the epitome of success. But he wasn't satisfied with the meager wages that beginners were paid there. Instead, he joined a private outsourcing company where he earned many times as much.

Fig. 2 The elixir of life

Foreign direct investment stimulates Vietnam's growth.



“We want to build up a complete system all around food. We will be profitable in two or three years.”

Dang Hoang Minh, entrepreneur

But that still wasn't enough for him. After a few years he and two colleagues launched their own company, Foody.

There is a reason that so many companies are founded in the internet sector. Unlike many other industries, there is no competition here from subsidized state-owned companies. These still dominate a large segment of the economy, but few are as successful as the telephone company Viettel. It belongs to the Vietnamese Army and has conquered many foreign markets, particularly in Africa. By contrast, the other state-owned companies are considered money-burning machines and are often cited as the reason for the stagnant system. “The state-owned companies give many politicians a great deal of power in the economy,” says Le, the economist. “It's also one of the reasons for the high levels of corruption in the country.” Vietnam ranks number 113 out of 176 in Transparency International's Corruption Perceptions Index.

Growing Inequality

The mixture of capitalism and a powerful party elite is turning the country into a tough place. “The general consensus in some areas is that business dealings are a zero-sum game where there is always a winner and a loser,” says Fulbright President Thuy. Perhaps that also has something to do with the country's troubled history, she surmises. The many >



One of the oldest structures in Ho Chi Minh City: Ben Thanh Market, built in 1912.



“History doesn’t matter to us anymore.”

Son Ha, entrepreneur

conflicts over the last few hundred years have burned their way deep into the Vietnamese soul. “Many people here think that business is the sequel to war.”

Capitalism is certainly challenging for Vietnam. Although deregulation has reduced poverty decisively, inequality has been growing rapidly at the same time. Between 1992 and 2012, the average daily consumption of the poorest ten percent increased by about 1.3 US dollars, while the richest 10 percent’s increased by more than 17 US dollars. Nevertheless, Vietnam is considered politically stable. As long as everyone is doing better, hardly anyone questions the conditions in principle. Instead, the Vietnamese try to stay on the more comfortable side of the growing gap between rich and poor. Even the rapper Wowy does not want to engage in political discussions. “Communism or capitalism, it doesn’t matter,” he says. “In the end, there are always people who have other people do their work for them. And you need to make sure that you manage to get by,” he adds.

But the growing individualism also unleashes creative energies. Young entrepreneurs in particular hope that economic success will also help open up the country politically. “What is Vietnam’s identity?” asks Son Ha, a young entrepreneur. “For a long time, it was the war we won, but that’s no longer enough.” Instead, he believes that the new Vietnam needs to define itself through economic strengths – and the entrepreneurial spirit of its citizens.

“People are excited for something new”

Son, 31, is sitting in one of the stylish co-working spaces in Ho Chi Minh City. Next to him, twentysomethings are typing

in their MacBooks and drinking cappuccinos. Outside the window wall lies a swimming pool that is almost never used because everyone prefers to work. “We have an office, but I always like to come here,” says Son. He enjoys the freedom. After working for several years as an investment banker, he started his own business, Mitssy, an online marketplace for furnishings in 2012.

He is profiting from his generation’s desire for self-actualization. He doesn’t have problems finding well-qualified people – even though Mitssy pays programmers around 20 percent less than foreign companies do. When his company slid into a crisis in 2015, he wasn’t able to pay his employees



for four months. They stuck with him anyway. “People are excited about building something new,” he says.

His goal is also to support the Vietnamese economy. Mitssy obtains all of its furnishings from domestic producers. Most of them still produce their products only for Western retail groups. “We’re circumventing these middlemen, then the money stays in Vietnam,” states Son. The local producers who work with Mitssy are all privately owned companies. He also negotiated with state-owned companies, but they were too inflexible in the end. “When you do something right in these companies, no one finds out,” says Son. “If something goes wrong, everybody knows.” There it still matters who has the best connections, he says, noting that pictures of Ho Chi Minh still hang in the offices.

“History doesn’t matter to us anymore,” he says. “My friends’ role models are

Steve Jobs and Mark Zuckerberg.” His favorite book is “The Fountainhead” by libertarian author Ayn Rand. At the end of the book the hero of the story, Howard Roark, explains his worldview. It is a reckoning with collectivism and a love song to the free market. “This book,” says the young entrepreneur, “is my Bible.” □

Frederic Spohr covers Southeast Asia and India for Handelsblatt magazine and is a freelance journalist. In addition, Spohr co-founded the portal 8mrd.com, which focuses on the rise of emerging nations. He lives in Bangkok.

Jason Michael Lang is an award-winning travel photographer and photojournalist specializing in Asia. He works for Monocle, Condé Nast Traveler, GQ and many others.



The swimming pool behind this co-working space is rarely used because people prefer to work.

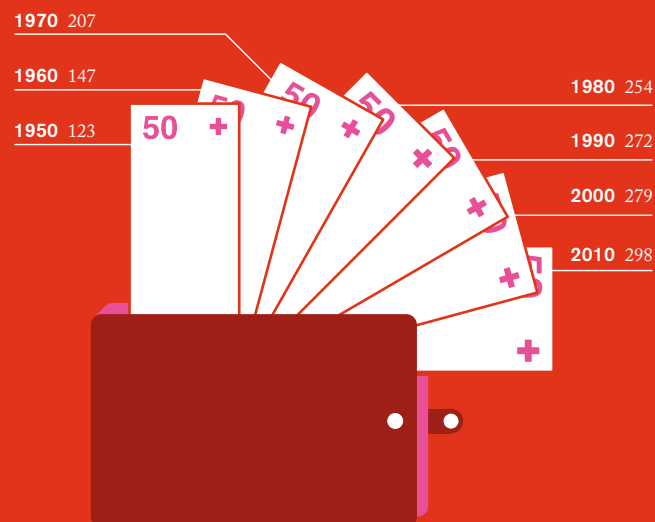
From Farmer to Millionaire

Life in Switzerland 100 years ago was hard. Wages were low, the work week was long, opportunities for advancement practically nonexistent. The economic upswing of a nation in six graphics.

By Lamosca (infographics)

Tripling What's in Their Wallets

Real wages, index (1939 = 100)



The decades with the highest wage increases were the 1960s and 1970s. After a period of little growth in the 1990s, wages have risen again despite the financial crisis.

Source: Swiss wage index/BFS

The Richest in the World?

Wealth per adult, in USD 1,000

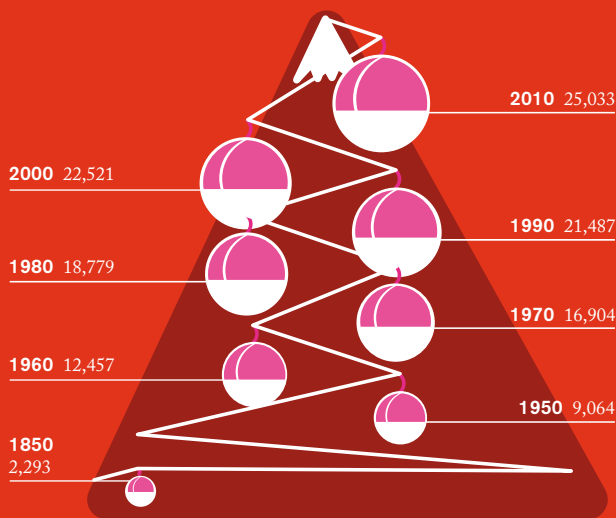


Of the countries surveyed, Swiss citizens possess the greatest wealth by far. They are ten times wealthier than the global average.

Source: Global Wealth Report 2016/Credit Suisse

Exploding Economic Performance

Gross domestic product per capita, in Geary-Khamis dollars

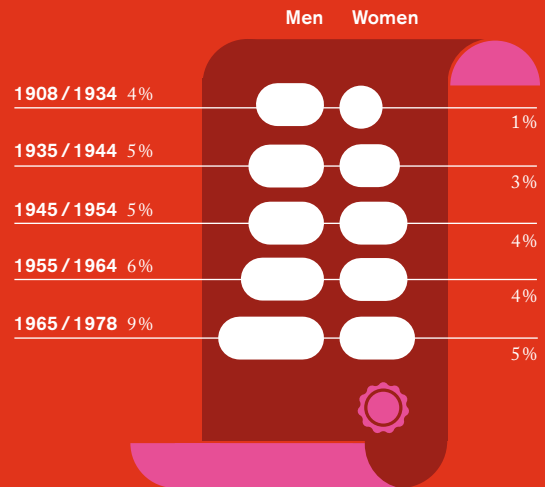


The GDP per capita rose by nearly 7,000 dollars between 1850 and 1950. After that, it took less than 20 more years for similar growth to be recorded.

Source: Maddison Project

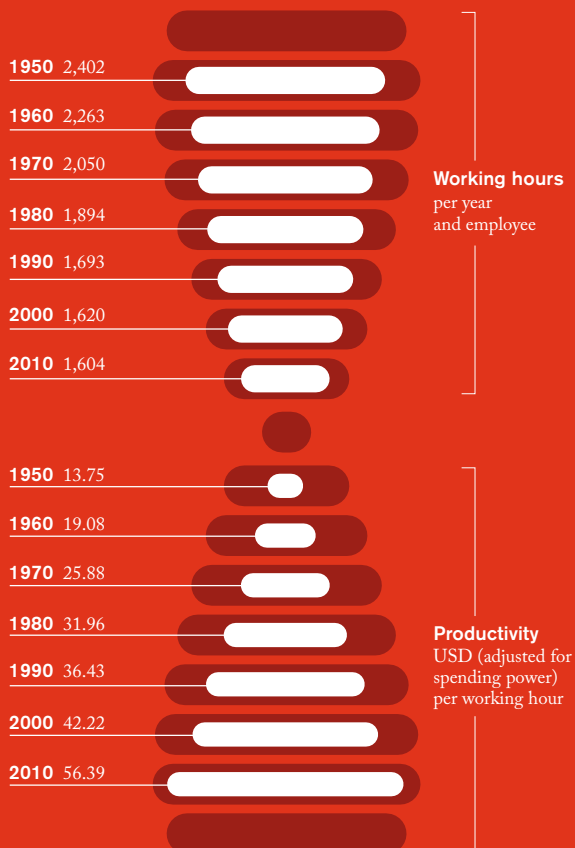
Education for Many

Access to higher education for the working class by year, in %



Even now, only 9 percent of working-class men and 5 percent of working-class women study at a university (upper middle class: 39 percent and 29 percent), but this is many times more than in their grandparents' day. Source: Julie Falcon

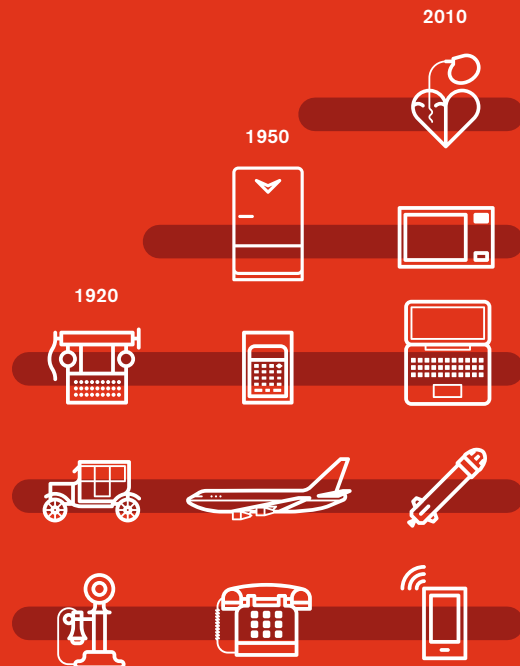
Work Less, Produce More



Annual working hours decreased by nearly 800 hours between 1950 and 2010. This was only possible because productivity increased massively at the same time.

Sources: Michael Siegenthaler (working hours), Penn World Table (productivity)

Getting Better (All the Time)

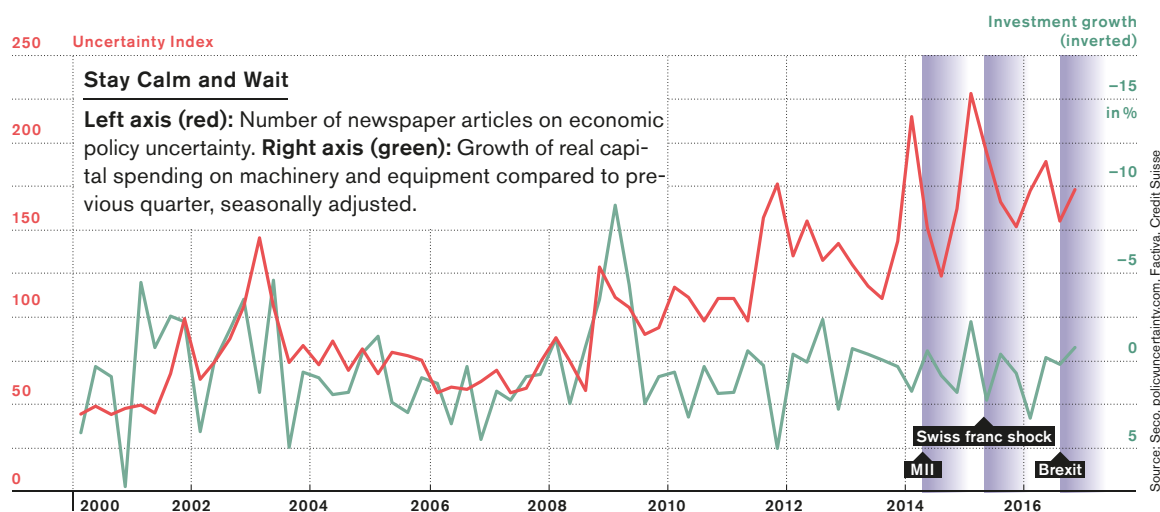


Only by looking back can we really appreciate how much better off we are today. Many of the goods and services that we can buy today were completely unobtainable for any price in 1920 – regardless of how wealthy you were back then. At a rough estimate, approximately 30 percent of all goods and services available today did not even exist in 1920, including **micro-wave ovens, pacemakers, refrigerators** and medical services like **heart bypass surgery**. Cited from Boris Zürcher, SECO

The Professional Calm of the Entrepreneur

The Mass Immigration Initiative, Brexit, the minimum euro exchange rate: Despite all of the bad news, the Swiss economy remains unruffled by the political circus.

By Claude Maurer



Perusing the morning paper can certainly put a damper on your mood. There has been a dramatic uptick in the number of reports covering uncertainties for the Swiss economy. Events such as the acceptance of the Mass Immigration Initiative (MII), the abandonment of the EUR/CHF minimum exchange rate by the Swiss National Bank (SNB) and the Brexit vote in the UK have created quite a stir in the media.

For the most part, the implications are negative. “The economy will slow noticeably, or even slide into a recession, in response to mounting uncertainty,” – such forecasts and similar ones are widespread. And each time, the mood in the executive offices of companies, among financial analysts and even to a lesser extent in private households, does in fact deteriorate as clearly shown by means of sentiment indicators. Ultimately, though, the forecasts have all been revealed as too pessimistic. Except for the decision to abandon the minimum exchange rate, hardly any reac-

tion could be measured in real economic situations.

Indeed, in the recent past there has not been any significant correlation be-

Ultimately, though, the forecasts have all been revealed as too pessimistic.

tween investment growth trends and the Political Uncertainty Index calculated by Credit Suisse (see chart). Following on the studies by policyuncertainty.com, the number of media reports on the topic concerned was counted across the Swiss media landscape.

This does not mean that policy decisions are irrelevant for corporate behaviors. The anticipated reluctance to invest did not

occur only because companies are giving careful consideration to the likelihood that a political decision will be made and what specific impact that would have on their day-to-day business. As long as no concrete and direct change to the economic framework is imminent, companies just wait and see. They certainly may prepare for extreme scenarios, but they do not make premature decisions.

42 Percent See No Need to Take Action

Business surveys provide clear evidence to support this behavior. Only a few months after the MII was accepted, over 75 percent of participants in the Purchasing Manager Survey conducted by Credit Suisse in cooperation with procure.ch considered the possibility of bilateral agreements remaining in effect after February 9, 2017, to be “high or very high.” A survey conducted by the umbrella association Economiesuisse reached the conclusion that 57 percent

of companies had prepared contingency plans but chose first to take a wait and see approach. Another 42 percent saw no direct need to take action.

The situation after the Swiss National Bank abandoned the exchange rate floor was different. According to surveys, companies considered this to be irrevocable; almost no companies assumed that there would be a devaluation of the Swiss franc at any time soon. So the response came quickly: Just four months after the franc appreciated, close to two-thirds of the companies surveyed were buying more in euros than before, pricing strategies were adjusted, jobs were cut.

Populism Has Little Effect

Familiarity with the assessments of economic players is therefore critical to ensuring the quality of forecasts following political decisions. Basing decisions on some vague political uncertainty – such as that which can be measured on the basis of media reports – falls short.

In other words, if a political decision is difficult to make and implement, and also has an open time horizon – which is frequently the case when it comes to populist demands in particular – its impact on the real economy is likely to be minimal, despite the fact that it is dominating the headlines. □

Claude Maurer is an economist at Credit Suisse.

Download: In the second quarter of 2017, Monitor Switzerland covered the topic “Political noise does not impress companies.” The publication is available free of charge online at www.credit-suisse.com/research

More Innovations, Greater Prosperity

Skeptics of technological advancement fear that humans will be replaced by machines. And yet the historical data shows that we have always managed to make tomorrow just a little bit better than today.

By Pascal Bührig and Sara Carnazzi Weber



Are robots taking our jobs? Demonstration before the vote for an unconditional basic income on April 30, 2016, in Zurich.

Those skeptical of progress are reluctant to use terms like automation or robotization. Journalists, politicians and scientists view artificial intelligence and communication between computers in operations as threats to employment levels. The fear that human labor will be completely replaced is nothing new. Nor is a fundamental skepticism of technological progress.

Social theorist and economist Jeremy Rifkin is one well-known representative of this skeptics guild. His 1995 bestseller “The End of Work” foretold the final days of human labor and nothing less than the end of the market economy itself. These types of fears have been long been a central concern, even for capitalism’s most historically prominent critic, Karl Marx. In his hypoth-

esis on the tendency of the profit rate to fall, Marx assumed that by implementing technological advancements, companies were in effect eroding their own foundation. He proposed that the continuing investment in equipment created no surplus value itself but rather mass impoverishment among the growing numbers of unemployed.

But even today and even in Switzerland, the misgivings about technology are growing louder. In step with this economic trend, the Swiss electorate voted on the popular initiative for guaranteed basic income on June 5, 2016. Its initiators considered it Switzerland’s duty to guarantee a minimum income in response to the impending employment insecurity caused by automation. >

When it comes to the theoretical benefits of innovation, however, it is surprising that economists across ideologies fundamentally agree. These benefits are usually considered to be greater wealth for all. Cheaper processes result in a direct savings for manufacturers or consumers, and resources previously needed are freed up for new investments, keeping the cycle going. And because, unlike our needs, only resources are limited, the money saved can be put to good use. The truly good news: A look at the history of the Swiss economy suggests that these hypotheses are closer to reality than those of some pessimists.

The Sum Was Always Positive

Despite all of the allegedly destructive innovations the 20th century brought about, both the labor force and real wages have grown – at an even more rapid rate than the population itself following World War II (see chart). The war, the Great Depression and the oil crisis all resulted in major downturns. A closer look at the data reveals that the respective upheavals drove large migrations from economic sector to economic sector, though evidently they contributed positively to employment momentum overall. For instance, between 1860 and 1960, employment in Switzerland's primary sector fell by almost half, while it more than tripled in the secondary and tertiary sectors.

Analyses of the introduction of the latest technology in production, communication or transport on a historical axis show that radical changes have always created new careers or triggered shifts to new occupations. None of the three previous industrial revolutions led to entire sectors falling victim to machines. Studies show that now, as then, technology automates defined routine tasks. In each case, the human-machine interaction always opened up new economic opportunities, which in turn also had positive impacts on the

from home, shared workspaces) and thanks to advances in how the internet is used. The potential effects are particularly significant on an international level. The availability of global technologies like mobile phones and the internet has laid the groundwork for developing countries to further expand their competitive advantages compared to industrial nations and, in this way, to lift millions out of poverty.

Despite the complexity of humankind, one simple principle still holds

**Wherever resources are available,
they are invested in new projects and they
attract creative energy.**

growth of employment and real wages. With the proviso that then, as now, technology does not threaten all income brackets immediately or equally.

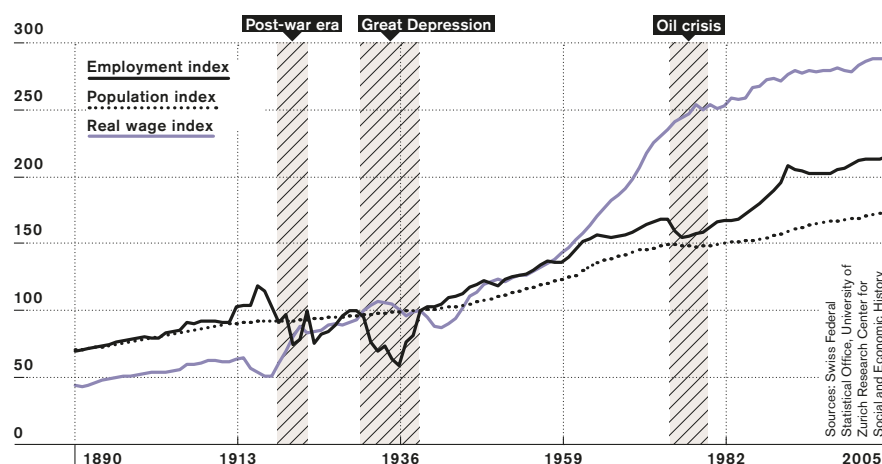
Opportunity for Developing Countries

Healthcare, for instance, tends to be less affected by automation and intelligent systems, although they can significantly improve the quality and efficiency of services in that sector. Moreover, resources like space and transportation can be used more sparingly thanks to the decentralized workplace (part-time work, working

true: Wherever resources are available, they are invested in new projects and they attract creative energy to make tomorrow slightly more comfortable than today. Regardless of how progress manifests itself in the decades to come or to what extent artificial intelligence will take over decision-making processes, humanity's drive to fulfill its ever-growing needs is not likely to be satisfied by a computer program any day soon. □

No Lack of Work

Growth in real wages, number of people employed in Switzerland 1890–2005



Pascal Bührig and Sara Carnazzi Weber

work in Switzerland Sector and Region Analysis
at Credit Suisse.

Our Commitment to Lower Youth Unemployment.

Through the initiative to tackle youth unemployment, Credit Suisse has been committed to improving the opportunities for career starters in Switzerland since 2010. More than 8,800 young adults have already received assistance from our partner organizations and from the bank. Since April 1, 2015, these services have been supported by the legally autonomous "Check Your Chance" association and managed sustainably by the partner organizations.

credit-suisse.com/youthunemployment

A close-up portrait of a man with a full, grey beard and mustache, wearing a light blue button-down shirt. He is looking slightly to the right. The background is a solid, light blue color.

Urs Hölzle



Urs Hölzle Cloud

Urs Hölzle Google

Urs Hölzle Switzerland

What is digitalization doing for the world? What comes next? And why do we fear progress?

Answers from someone who is leading the way: Urs Hölzle, a Swiss transplant in Silicon Valley and the eighth employee to join Google.

By Simon Brunner and Michael Kroboth (interview) and Dan Cermak (photos)

No other Swiss person has had such a strong and immediate effect on the digital revolution as Urs Hölzle, 53, from Liestal. The eighth employee to join Google, Hölzle was described by Business Insider as a “tech guru”; the Swiss broadcasting company Schweizer Fernsehen called him “the most important Swiss transplant in Silicon Valley.”

Hölzle holds a doctorate in computer science and has been a close associate of Google founders Larry Page and Sergey Brin from the company’s earliest days. He began in 1999 to develop the computer infrastructure for the search engine, leading to what are today the most efficient data centers in the world.

But that wasn’t all. In 2013, Hölzle sent out a memo triggering one of the legendary “Urs-Quakes.” In it, he pointed out that he and his team would soon have less time to devote to their colleagues’ problems, since they had to focus on more important things. He explained that they were working to create Google servers for external customers, and that this “cloud” would be more lucrative than the ad business (which, at the time, accounted for 92 percent of the company’s revenues).

Urs Hölzle shows up for our interview in a perfectly pressed shirt and trousers, *a bit at odds with Google’s image*. Somewhat apologetic, the press officer explains that Hölzle is on his way to an important meeting in Berne. But he is still wearing his diamond earring and his trademark red socks. What’s the story behind the red socks? No one at Google seems to remember. Speaking Basel dialect with a touch of an American accent, Urs Hölzle meets with us in Google’s new offices on Europaallee in Zurich. They are located, in a symbolic touch, in what used to be the home of the Swiss postal service.

Mr. Hölzle, when Google went public, future shareholders were promised that the company would improve the lives of as many people as possible. That was in 2004 – have you managed to do so?

We operate seven applications, each of which is used by a billion people every month – including >

Google Search, YouTube and Gmail. That's great, and I hope that they are helpful for users. But in a sense we're still in the beginning stages.

Alphabet, Google's parent company, is now the second most valuable enterprise in the world. And you're saying that you're still in the beginning stages?

Look at the world ten years ago – and think about all of the things we take for granted today that didn't even exist back then: There were no smartphones or Instagram; Gmail was just starting, as were YouTube and Facebook. Netflix was sending out DVDs. Innovations will continue to happen at a rapid pace. In 2027, we will be using things that don't even have a name today.

There was a huge surge in innovation around the turn of the 20th century, but it quickly died down. How do you know that innovation will continue today?

The internet has been around since 1995, and by 2007 we thought it had reached maturity. "Not much is going to change," most people thought. And then came the smartphone! I'm sure that we will see enormous changes over the next 10 years.

What job did you hold during Google's legendary early years?

My first title was "search engine mechanic." That was a time when we were struggling every week to increase our server capacity and computing power. We were growing extremely rapidly.

You called yourself a mechanic?

Things were constantly breaking down, and my colleagues and I had to repair them.

And today it's calmer?

I've been waiting for calm since 1999. Particularly the past two years have been very turbulent. One problem, and something that everyone in Silicon Valley is currently struggling with, is the end of Moore's law. For a long time we could rely on chip speed doubling every 18 months. This is no longer the case. We're lucky if it increases by 20 percent. But that's not enough!

Today's smartphones have more computing power than the first rocket that went to the moon – why do we need even more?

One example would be using speech recognition for devices, which is currently a major trend. This technology is based on artificial intelligence and is capable of learning on its own. But that requires a great deal of power.

Things were constantly breaking down, and my colleagues and I had to repair them.

Many modern devices can recognize speech.

Yes, we achieved a breakthrough about four years ago. Everyone was thrilled. But then we started thinking about the computing power that would be needed if over a billion Android users – the number at that time – took advantage of that feature for just three minutes a day. It would have required doubling the number of our data centers. Those three minutes would have cost us as much as everything else Google does, including YouTube and Gmail. And all that for a feature that wouldn't earn us any money!

You decided to take a different path.

We built new computer chips. I don't want to bore you with technical details, but these chips are like highly sophisticated race cars; they can do one thing amazingly well, but nothing else. Machine learning is 50 times as fast with these chips as with traditional hardware. If you had asked me five years ago whether we would make chips specifically for speech recognition, I would have said no way.

Google has broken new ground in countless areas.

Much of what you do, no one else has ever tried. How does that feel?

Well, it sounds better than it actually is. Often we would prefer to use things that already exist, but in many cases we have had no choice but to invent them ourselves, because an "option B" was simply unavailable.

When you tackle a seemingly impossible task, how can you be sure that it will work out?

>



Urs Hölzle, 53, is one of a very few senior vice presidents at Google. He oversees the American internet company's global infrastructure.

I like this saying: “Those who judge themselves realistically are depressives.” You have to over-estimate your chances somewhat, otherwise you’d never start a new project – it’s a type of defense mechanism. In the United States, people are sometimes too optimistic. Everything is *great* – which isn’t true, of course, but this attitude is helpful for a skeptic from Switzerland like me. I’ve become very good at deluding myself, particularly when it comes to extreme projects.

This constant search for the next big thing must cost enormous sums of money.

Experiments aren’t really that expensive in computer science. Initially all we needed for the speech recognition chip was a three-person team, which developed five different designs that were highly likely to achieve a 20- to 60-fold improvement. Only then did we decide to invest substantial resources in the project.

Self-driving cars and planes, eternal life, solving the energy problem: At Google, the next invention always has to be as revolutionary as the moon landing. Why is that?

Larry Page, Google’s co-founder, once observed that if you attempt something small, you have two problems. If you succeed, it’s *not a big deal* – no one cares. And if you don’t succeed, you’ve truly failed. It’s different with a *moonshot*. If it works out, it was worth it, and that makes up for 10 failed attempts. If it doesn’t succeed, you’ve probably learned something important. And finally: If you try to make a product 10 times better, but succeed “only” in making it twice as good, that’s still a very positive result. But if your goal is to produce a 10-percent improvement and you achieve only two percent – well...

The flip side of the innovation boom is that many people are afraid of losing their jobs. If everything is digitalized and automated with robots, will there still be enough work for all of us?

That worry is real, and understandable. But if we look back on the past 250 years, it is clear that the upheaval we see today is nothing new. In the 19th century, most people were employed in agriculture – and at the end of the 20th century? Three percent? And no one wants to return to strenuous work in the fields. In other words, things have turned out well for the overwhelming majority of people.

The fourth industrial revolution is different. Changes are happening much more quickly.

The revolution we are experiencing today may indeed be more far-reaching and fast-paced than

in the past, but I’m confident that it will bring positive results. There have always been profound changes – innovations in farming, as well as the steam engine, the car, telecommunications and computers – and so far, over the long term, all of them have improved our lives. This time, too, some things will go wrong, but it is virtually impossible to predict what those things will be. The crucial question is this: Are we optimistic or pessimistic?

Is it frustrating when people don’t share your optimism about the future?

Progress has always made the world a bit better, reducing poverty and the number of people dying in wars. Whether we look at the past 50 years or the past 200 or 2,000: Overall, the impact of science and technology has been overwhelmingly positive. Why should that change? Why are we so pessimistic, especially in Europe? When we look at the statistics, pessimism makes no sense. We should be much more optimistic.



Urs Hölzle with his dog, Yoshka, in Mountain View, California, in Google’s early days (2002).

Are you ultimately a utopian?

My attitude is like that of Larry Page. His response to that question was this: “No, the connotations of that word are too negative. I’m simply an optimist. Is that so bad?”

One of the main promises of digitalization is that it would increase productivity. In many Western countries that has not been the case over the past few years.

That’s true, but productivity is difficult to measure. Take smartphones, for example. Let’s say a factory

Progress has always made the world a bit better.

increases production so that it can turn out more and more units every hour. But the retail price is dropping because of competition. Productivity will not increase in terms of dollars earned per employee, but it will if we measure output by the number of phones each employee produces.

Along with their concern about jobs, people tend to be skeptical when it comes to new technologies. Can you understand that?

Absolutely. In every aspect of life, change causes anxiety. Whether we are moving to a new city, taking a new job or having children, we struggle with new things. Perhaps that is a legacy from our prehistoric ancestors; for vulnerable hunters and gatherers, changes had the potential to be very dangerous.

People aren't just imagining these new dangers. Cybercrime is increasing, as is online bullying. Self-driving cars are vulnerable to hacking. The list is long.

Once again, you're right – but we Californians sometimes have the feeling that in Europe, innovation requires obtaining permission. First rules are put in place, and then you're allowed to invent something. But it doesn't work like that. If you're living in a horse-and-buggy era, you can't create rules for cars. Most of the great innovations in human history have involved a certain degree of chance. In the case of penicillin, for example, Alexander Fleming just happened to find it growing in his petri dishes when he returned home from vacation. We mustn't regulate progress to death.

New technologies can spread very rapidly – which means that there are also great risks.

In the case of artificial intelligence, the name itself can be frightening. One of our computers recently defeated the world's top Go player. [Editor's note: Go is a deceptively simple board game that is popular in Asia.] I understand that people have the impression that computers can do anything. To be honest, though, I'm actually surprised at how little they can do. But people don't talk about that very much.

What do you mean?

Computers can identify cancer in an x-ray, but they don't really understand what a zebra is. We are proud that we have made it possible for you to search for “zebra” in your photo collection. To do so, we had to load millions of pictures into our computers. But with algorithms it's possible to modify a relatively small number of pixels in a picture of a zebra so that the computer will think it's a race car. Three-year-olds have a better understanding of the concept of a zebra, and they grasp it more quickly. After you've shown them a picture three times, they know. It's far from clear that a computer will ever reach that level.

With all of the changes taking place, how should young people go about planning their careers?

No matter what the current trends happen to be, the most important thing is to choose something you're interested in, otherwise you'll never be happy. You also have to recognize that you aren't guaranteed a job for life – that era is past. And even if you do remain in one job, as I have for 18 years with Google, you'll always be doing something new.

Your newest project is cloud computing. Back in 2013, you said that it had greater potential for Google than advertising. What makes you so sure?

I'm convinced that in a few years, outsourced IT services will be much more important than a company's own IT. I'm 99.9 percent certain.

What, exactly, do you mean when you talk about the cloud?

It's a world in which computers are either very small, like a smartphone or a simple laptop, or very large, like a data center. There's nothing in between, and in particular no PCs. Performing challenging tasks, like managing a collection of photos or videos, requires connecting the small and the large computers. You do that through the internet. So all of a sudden a small computer is able to do everything that a large one can, and its storage capacity is almost unlimited. Another >

advantage is that a backup copy is created automatically – so losing your phone or laptop isn't disastrous. That's another reason why the cloud is more secure.

It's more secure to store your data externally?

Yes, although many people still believe that the opposite is true. In less than five years it will be the other way around – everyone will know that it poses a significant risk if you store your data only locally, or if a company operates its own server room.

Can you expand on that?

I use one of our Chromebooks, but there are other options as well. With these laptops little is stored locally, and they use very simple software that is updated automatically. When you start the computer, the chip checks to make sure that you are using the original operating system; otherwise you can't continue – so it's nearly impossible to be infected with a virus. You don't need antivirus software, and you don't need a system administrator – the cloud takes care of that. And since the cloud handles a huge number of computers, it can do so much better and more cheaply than an individual company ever could. Sixty percent of American schools require Chromebooks, since they are under huge budgetary pressure. Each laptop costs 300 dollars, and the maintenance costs are zero. Business will follow.

But these cloud computers function only when you have access to the internet.

That's right – internet access is needed to exchange data with the server. But I'd also like to point out that the cloud represents an enormous opportunity from an environmental perspective.

In the cloud, data is constantly being sent back and forth. Are you saying that's energy-efficient?

IT is responsible for two percent of the world's energy consumption, comparable to air traffic. Servers account for most of it. If a company has its own email system, it needs a server – one that is probably somewhat too large and virtually inactive during the night, but that has to stay on all the time. And because email is so important, the company also runs a backup server, which is doing nothing at all 99.9 percent of the time. It's an extremely inefficient system. In the cloud, you share both capacity and backup with all of the other users. Gmail uses 40 times less electricity than running your own email system. So the more the IT sector moves to the cloud, the less power it will use.



"The cloud is a world in which computers are either very small or very large."

Pictured: Google's computing center in Iowa, extending over an area of over 10,000 square meters.

In 2017, Google achieved a challenging goal: using only renewable sources of electricity. This was another one of your projects.

We purchase far more renewable energy than any other company in the world, most of it generated by wind. Fortunately, renewable energy has become much cheaper. In the case of photovoltaics, the price per unit is only 1/150th of what it was in 1970 – a very positive development. I hope that many other companies will follow our example.

Where will Google be in 10 years?

I don't know. We tend to underestimate how much the world is changing and how little we know about what will happen. Ten years ago, we were working in a rather haphazard way on Android, our mobile operating system. The group had to overcome some internal resistance. Today three out of four smartphones run on the Android system. Google would be in a fundamentally different place if we hadn't gone in that direction. What comes next? I have no idea. But one thing is clear: We're only at the beginning. □



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Photo: Julia Maria Ixchop Us De Ventura, FINCA client in Guatemala.

La vita

Sarah Illenberger, illustrator
and designer from Berlin:
“Happy by nature.”



è

Nine artists show
us their visual
interpretations of the phrase
“Life is Beautiful.”

bella





Maurizio Di Iorio,
photographer from Italy:

“This is how I imagine the world,
as the outcome of human genius
and imagination. If you change your
perspective, you can see more and
more positive aspects of what we
understand as the present day.”



Ana Kraš, artist and
photographer from Belgrade:

“These are my friends during a
midday break on a summer
day at the beach in Barcelona.”



Lena Amuat and Zoë Meyer,
artists from Zurich and Berne:
“Où finit l’infini?” (English:
Where does infinity end?).



Martin Parr, photographer
from Bristol (UK):

“This is my wife in the steam
room at the Seaweed Baths in
Enniscrone, Ireland. The old steam
chambers are filled with seaweed
and hot salt water and the jellylike
water leaves your skin very soft.
This bath house has been around
for over a hundred years and
every visit is a real pleasure.”



Martin Parr/Magnum Photos/Agence Focus;
Lena Amuat & Zoë Meyer, Stern, 2009





**Olaf Breuning, multimedia artist
from Schaffhausen,
Switzerland/New York:**

“A lot of my works are about life
itself. I made the ceramic piece
called ‘Animals Look Always Good’
out of a pure joy of living. Some-
times I have to do that so I can
have something to complain about
again afterwards.”

**Walter Pfeiffer,
photographer from Zurich:**

“Where have all the flowers gone?”







Erwin Wurm, *Misconceivable*, 2011, mixed media, 10 x 8 x 3 cm | 4 x 3 1/4 x 1 1/4 in, unique.
Courtesy of Middelheim Museum, Antwerp, Belgium. © 2017, PoLitteris, Photo: Jesse Willems, Zurich

**Erwin Wurm, artist and
photographer from Vienna:**

"Freedom is the only thing that
allows us to levitate and to rise
above the world and endure it."



**Leanne Shapton, author and
artist from New York:**

"A vase with a bouquet of flowers
from the supermarket reminds me
that a small thing – a piece of nature
or beauty – can effect change or
make a hopeless situation seem a
little more bearable."



“I had to survive — for my little sister”

It was in the Bergen-Belsen concentration camp that Hannah Pick-Goslar saw her childhood friend Anne Frank for the very last time. During the darkest hours of the Nazi regime, she experienced persecution and brutality – but also courage and human kindness. We visit a woman who never gave up hope.

By Daniel Ammann (text) and Michal Chelbin (photos)

On June 20, 1943 – a Sunday – what Hannah had so dreaded came to pass. Nearly every night for months, 14-year-old Hannah had checked to make sure that the door was locked. As if that could protect her family.

Early in the morning she heard the sound of fists pounding on the door of her family’s apartment in Amsterdam. “Are there Jews in here?” shouted a man in German, incessantly ringing the doorbell. Hannah knew immediately what it meant. German soldiers, aided by Dutch collaborators, had been carrying out raids for some time, removing Jews from their homes and taking them away. In some cases parents didn’t even have the chance to say goodbye to their children.

The SS officer kept shouting, “Are there Jews in here?” “Yes,” Hannah’s father finally replied, in perfect German, “Jews are living here.”

Hans Goslar, who grew up in Berlin, was German through and through. He had fought in eastern Europe during World War I, earning the Iron Cross. A journalist and economist, he served as chief press officer in the Prussian State Ministry and then as a Ministry advisor. His favorite composer was Ludwig van Beethoven. But after the National Socialists were voted into power, Goslar knew that his beloved Germany had ceased to exist. So he decided in 1933 to emigrate with his wife and their four-year-old daughter, Hannah.

“Unfortunately, my parents chose the wrong destination,” says Hannah Pick-Goslar, shaking her head sadly. “They could have gone to the United States or Palestine rather than to the Netherlands.”

She interrupts her story, admonishing us: “But you’re not eating. Have a cookie. They’re good.” We’re sitting in her living >



Hannah Pick-Goslar, 88,
in front of her house in Jerusalem.

room in a modern section of Jerusalem, tea and home-baked cookies on the table before us. Hannah Pick-Goslar is 88 years old, but has the bearing of a much younger woman. She is wearing a lavender blouse, and as an observant Jew, she has covered her hair with a black hat. Not once does she lose her train of thought during our conversation. The iPad she uses for email is lying on the table. She tells us her story, her eyes revealing a keen intelligence and a sly sense of humor. It is the story of how she survived the genocide perpetrated on Europe's Jews.

Quickly the Best of Friends

"Hanneli Goslar ... is usually shy – outspoken at home, but reserved around other people. But she says what she thinks, and lately I've come to appreciate her a great deal," Anne Frank wrote in her diary on June 15, 1942. In that diary, she describes how the Frank family hid from the Nazis in a secret annex in Amsterdam, before being betrayed and deported to the Auschwitz concentration camp in September 1944. One of the world's most widely read books, it gave a face and voice to the extermination of the Jews.

Hannah and Anne met on their first day of kindergarten and quickly became the best of friends. They loved to play ping pong, and would sometimes play tricks like emptying water onto people walking in the street below. Later on they attended a Montessori school together.

"Anne was a cheeky, smart girl. My mother would always say, God knows everything. But Anne knows better." Hannah Pick-Goslar tells this story with a mischievous smile. She laughs

surprisingly often as our conversation continues. "Thank God, I'm able to laugh," she says. "There are enough people who are constantly whining."

"Jews and dogs are not welcome here"

Hannah and Anne witnessed Nazi Germany's invasion and occupation of Holland in May 1940 – as the first steps were being taken to deprive Jews in Holland and throughout Europe of their rights and property, ultimately leading to their murder. "First the Nazis confiscated our bicycles and radios, and we weren't allowed to use trams or buses," says Hannah Pick-Goslar. Jews were permitted to buy food only between three and five o'clock in the afternoon, and only at Jewish shops. "But it was wartime, and by that hour there was almost nothing left to buy." Signs in the parks read "Jews and dogs are not welcome here."

On that Sunday morning, as the German soldiers came to take them away, Hannah and her family were given only 20 minutes to get ready. She was so frightened that she felt sick.



2



3

1 — Hannah's father, Hans Goslar, fought for Germany in World War I. Goslar was an economist and journalist as well as chief press officer and an advisor in the Prussian State Ministry in Berlin. This photograph was taken in 1930, when he was 41.

2 — Hannah, 12, right, and Anne (Frank), 11, playing outdoors in Amsterdam, 1940.

3 — Hannah, 13, with her little sister, Gabi, in the Goslar family apartment in Amsterdam, 1941.



1

She leaned for support on her father, and together they waited in front of the house, along with her grandparents and her little sister, Gabi, who wasn't yet three years old. A few months earlier, Hannah's mother had died giving birth to a third child. The baby, too, had not survived. Because of the pregnancy, the Goslar family had not gone into hiding while there was still time.

No Idea What Was to Come

Just as the soldiers were about to lead them to a truck, their neighbor, Maya, came running out of her apartment. She had long lived in the same building as the Goslars, and they had become friends.

“Thank God, I’m able to laugh. There are enough people who are constantly whining.”

Although Jews were strictly forbidden to visit Christians, Maya, a Christian, let Hannah and Gabi play in her sandbox. Hans Goslar would watch from a window as the girls played, hoping that no one would see them. “Please, at least let the little one stay with me,” Maya pleaded with the German soldier. “Aren’t you ashamed to help Jews – as a Dutch Christian?” he spat. “I’m a German Christian,” Maya shot back, “and I’m not at all ashamed.”

“She was a very courageous woman, and she wanted to save Gabi. The Nazis killed people for less, you know,” says Hannah Pick-Goslar. After a long silence, she adds, “But unfortunately far too few people had the courage to stand up to the Nazis.”

The Goslar family was transported by truck to a transit camp. Officially, the story was that they were to be taken to eastern Europe for a “work assignment.” And although it was rumored that people were dying there, hardly anyone could truly imagine what was to come. “Who could believe that Germany, the birthplace of Ludwig van Beethoven and Johann Sebastian Bach, Johann Wolfgang von Goethe and Friedrich Schiller, was moving to exterminate an entire people,” Hannah says.

One of the places where this was happening was a concentration camp at Bergen-Belsen, in the heart of Germany and less than 50 kilometers from Hanover, where one of the most important

figures of the Enlightenment, the philosopher and mathematician Gottfried Wilhelm Leibniz, had lived and worked. That was where Hannah and her family were taken.

But in their misfortune, they also had a stroke of luck. They were assigned to a special section of the camp. The reason? Hannah's uncle, who had fled to Switzerland in 1938, had managed to obtain passports for them to go to Paraguay. And because Hans Goslar had once held a high position in Prussia, he had been able to put their names on a list for emigration to Palestine. For the Nazis, that made them potentially valuable hostages who >



4

4 — In the concentration camp at Bergen-Belsen, where Hannah Pick-Goslar and her family were imprisoned. The photo, which shows the washing area for female inmates, was taken when British troops liberated the camp on April 15, 1945.

5 — After the war: The Pick-Goslars celebrate Passover at the home of friends. Hannah Pick-Goslar, 31, is third from the left; her husband, Dr. Walter Pinchas Pick, is at the far right. The photo was taken in Jerusalem in 1959.



5

might be exchanged for German prisoners of war.

Conditions were slightly less dire in their section than in other parts of the camp. “Not that it wasn’t bad enough,” says Hannah Pick-Goslar. “Every day people were dying of starvation or typhus, but at Auschwitz we would have been sent immediately to the gas chambers. Here we at least had a chance.”

Disease-carrying fleas and lice were everywhere – in the inmates’ straw pallets, their clothing, their hair. In the night, rats would run around in the barracks. The meager food rations consisted of watery cabbage soup. There was only cold water. “So we used the warm, brown swill that was called coffee to wash our hair.”

At roughly the same time, Anne Frank was living in her hiding place in Amsterdam, writing in her diary. Today what she wrote seems almost eerie. In the night she had dreamed of her friend Hannah:

“I saw her there, dressed in rags, her face thin and worn. ... She wanted to do what was right. Why have I been chosen to live, while she’s probably going to die? ... Hanneli, Hanneli, if only I could take you away.”

A Trace of Humanity in the Camp

Hannah and her little sister, Gabi, were housed separately from their father. After a few days Hannah came down with jaundice. She shivered with fever, so weak that she could no longer even lift her food bowl. She knew, however, that if she went to the infirmary she wouldn’t be able to take care of three-year-old Gabi. Her sister would not survive.

Then, Hannah Pick-Goslar says, “a miracle” happened: A tall woman, introducing herself as Mrs. Abrahams, told Hannah, “You have to go to the infirmary, otherwise you’ll die. Don’t worry, I’ll take care of your sister.” Mrs. Abrahams, who with her five daughters was housed in another barracks, was having difficulty even keeping her own family alive. With a seventh mouth to feed, all of them would be more likely to starve. Still, for the month Hannah spent recovering in the infirmary, the Abrahams family cared for Gabi.

In a concentration camp, of all places, during one of the darkest periods in human history, Hannah experienced not only brutality and cruelty, but also human kindness and a willingness to help. “It’s surely hard to believe that there was anything good in the camps,” she says, “but it’s true. There were always people who helped me. Thank God.” One was a Greek woman, a stranger, who lived in the same barracks. Seeing that Gabi was always hungry

and that her condition was steadily deteriorating, the woman would regularly give her two glasses of her allotment of milk. For a three-year-old, two glasses of milk could be the difference between life and death. “Gabi would have died if she had had only water,” says Hannah Pick-Goslar.

In November 1944, as Germany’s defeat was becoming inevitable, tens of thousands of Jews were transported from Auschwitz to Bergen-Belsen. With the approach of the Red Army, the Nazis were evacuating the extermination camps in the eastern regions to destroy evidence of their crimes. “If the Nazis hadn’t focused on us at the last minute,” says Hannah Pick-Goslar with a touch of sarcasm, “they would have won the war, heaven forbid.”

One of the new arrivals was Anne Frank, who was taken to a part of the camp that was strictly isolated from the rest. After Hannah found out, purely by chance, she initially couldn’t believe it. She had believed that Anne had escaped to Switzerland – that



“You can’t survive without hope,” says Hannah Pick-Goslar, sitting in her living room.

was the story their neighbors in Amsterdam had told in 1942, to protect the Franks as they went into hiding. Hannah and Anne were able to exchange secret messages. Then, one night in February 1945, they managed to meet at the barbed-wire fence that separated them – although such meetings were punishable by death. They were able to talk, but not to see each other, since the fence was stuffed with straw.

“When I spoke with her for the last time, Anne was no longer the cheeky girl I had known in Amsterdam,” says Hannah Pick-Goslar. “She was broken.” In a weak voice, Anne told her about the gas chambers in Auschwitz. She said that her parents were dead and her sister was deathly ill. She was so cold and hungry. With the little she had, Hannah put together a small package and threw it over the fence. She could tell that Anne had lost hope and the will to live. “We cried together,” says Hannah Pick-Goslar. She falls silent. “If only Anne had known that her father was still alive,” she says, her voice faltering. “I think she would have had the strength to survive.” Not long afterward – the precise date is unknown – Anne Frank died of typhus. If she had lived for just a few more weeks she would have been rescued. The British liberated the camp on April 15, 1945.

uncle in Switzerland. Then they emigrated to Palestine, to what is now Israel. Hannah would have liked to study history, but lacking the secondary school degree necessary to enroll in a university, she instead became a nurse, caring for infants.

At the age of 88, Hannah Pick-Goslar still lives independently in her apartment in Jerusalem, with the help of her grandchildren, who stop by every day. She says that “here and now, with my children and grandchildren” is the happiest time of her life. She raised two sons and a daughter. She has 11 grandchildren and 17 great-grandchildren – “and three more are on the way. My big family is my personal revenge against Hitler,” says Hannah Pick-Goslar with a smile. □

“I couldn’t just lie down and say okay, now I’m finished.”

Too Weak to Live

“You also have to be lucky,” says Hannah Pick-Goslar, sitting in her living room in Jerusalem. Weighing only 45 kilograms and suffering from typhus, 16-year-old Hannah and her sister, Gabi, survived the Bergen-Belsen concentration camp. Her father wasn’t so fortunate; his strength exhausted, he died on February 25, 1945. While Mrs. Abrahams lived to see Germany’s surrender, she was too weak to survive. Countless unhappy souls from Bergen-Belsen suffered a similar fate; of the 60,000 people who survived the camp, 15,000 died of malnutrition, weakness and disease – after they had been liberated.

“That’s how it was, what can I say?” says Hannah Pick-Goslar, words she repeats a number of times during our conversation, in an effort to hold back her emotions. She pours us another cup of tea. “I survived because Gabi survived,” she says. “I couldn’t just lie down and say okay, now I’m finished. What would have become of Gabi?” She doesn’t like questions about how she dealt with the ever-present fear of death in the camp, or how, after the war, she managed to come to terms with her experiences. She doesn’t like to talk about feelings, she says. And then she adds, “The entire time I was in the camp, I kept hoping that it would eventually stop. You can’t survive without hope. Otherwise you might just as well commit suicide.”

The Happiest Time in Her Life

And after the war? “Things are easier when you’re young. I went on with my life, got married, had children and built a life in a new, free Palestine. It must have been harder for older people. It haunted them.” After the war, she and Gabi lived for a time with their

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“Failure is an interesting and natural part of learning”

Stanford psychologist Carol Dweck on the mindset towards failure, how to deal with setbacks and the problem with over-praised children.

By Helene Laube (interview) and Takeuma (illustration)

Ms. Dweck, you research how people deal with failures. In countries such as Switzerland, failure is still dealt with very differently than here in Silicon Valley, where “fail early, often and fast” is basically a mantra. Yes, it’s considered a stigma in many places. I’ve spoken to European business audiences over the years and repeatedly was told: “We don’t get a second chance; if we fail we have a black mark against us.” And I keep saying, it has to change.

Why?

The world is changing so quickly. Whole industries and professions are becoming obsolete, so we have to experiment with new ways of doing business. But failure alone is not enough. We have to reward the people who take chances and who learn from their failure. If people are in a better position going forward and are poised to make a real contribution, then that’s something we should appreciate.



Carol Dweck (born 1946 in New York), joined Stanford University’s faculty in 2004 as the Lewis and Virginia Eaton Professor of Psychology. Before that, she taught at Columbia, as well as at Harvard. Dweck is one of the world’s leading researchers in the field of motivation.

Are there, so to speak, good and bad failures?

Correct. Failing isn’t inherently good, even if that is often said around here. And I don’t say that failure per se should be rewarded. It’s not great when people take foolish risks or don’t learn from what has happened. The critical part is how people deal with it and how they learn from it – and that they see failure as this very interesting and natural part of learning.

From a lifetime of research work, you have developed the idea of what you call the “fixed mindset” and the “growth mindset.”

The fixed mindset is the belief that one’s abilities and intelligence were predetermined at birth and can’t be changed or learned. “Growth mindset” is the idea that intelligence and abilities can develop and that effort leads to success.

Can having a growth mindset generally be equated with being an optimist and the fixed mindset with being a pessimist?

No, it’s not just optimist versus pessimist. You can be an optimistic fixed-mindset person. When we measure optimism, we don’t find a difference by mindset necessarily. What we do find is a difference in how people deal with setbacks. So in a fixed mindset you can be very optimistic, but as soon as you start having setbacks, you start getting pessimistic. It’s easier to maintain optimism in a growth mindset.

Do people have either a growth mindset or a fixed mindset?

No, it’s a continuum. You can think: My mathematical skills are fixed, but my artistic skills can be developed – or vice-versa.

It would be wonderful if first of all parents realized that they should encourage their kids to love challenges and perseverance.



Does that mean the human psyche is flexible?

We see it as more dynamic now. We've come to realize that different situations can trigger different mindsets. Someone might generally believe that abilities and talents can be developed but if someone criticizes that person or they fail, it could send them into more of a fixed mindset. They start thinking: Maybe I'm not good enough, maybe I don't have the talent. People have to learn what triggers their fixed mindset, so they recognize when it happens. And then they need to learn how to return to a growth mindset.

How does one do that?

You could give this fixed mindset persona a name and start talking back to the voice in your head. Say something like: "Thank you, I understand, it is really upsetting to be criticized or to stumble, but I really want to move forward with this and to continue to take on challenges."

How does one teach children a growth mindset?

It would be wonderful if first of all parents realized that they should encourage their

kids to love challenges and perseverance. They should encourage them to learn from setbacks and to redesign problems. And schools should not be rewarding the memorization of facts and formulas. Teachers should instead be helping students to grapple with difficult problems, to make these problems manageable and to see different strategies for approaching them. There should be more appreciation of progress and learning – and for the view that we don't know what we are capable of.

What is your view on the self-esteem movement, the modern habit of constant praise to build self-esteem in children?

My work has sometimes been used to say: "Oh, just praise effort" – and that's not what we are saying. We then expect those kids who are rewarded for everything to turn into adults who have drive, ambition and resilience, the logic being that all the rewards and praise build self-esteem and then self-esteem catapults you through life. But it turns out that glossing over failures does not build self-esteem or a growth mindset. In fact, we found that

parents who gloss over failures, who worry that failures will harm their kids, are creating a fixed mindset in their kids.

How come?

Because if a child fails and we don't mention it or if we console it with words like "You can't be good at everything," we are telling them that failure means that they are not good at something, that their ability is limited and that this ability cannot be developed. Instead, when a child succeeds, learns or progresses, tie that to the process they engaged in – whether it was working hard, trying new strategies or sticking to something. They should recognize that certain approaches lead to progress. Just saying "good effort" if they haven't tried or they haven't made progress can backfire.

You have been researching and teaching in Silicon Valley since 2004. Do people here really have a different mindset than people elsewhere?

I quickly noticed that this area is very dynamic and that people want to learn. Even when I first got here, I was really impressed that people from all different fields and departments came to seek me out and learn from me.

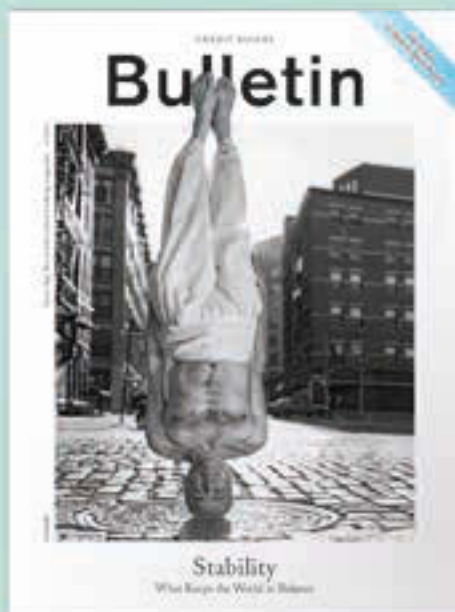
To some Europeans, this constant thriving for a positive mindset appears somewhat alien or even a bit superficial. Can you understand this reaction?

There are probably shallow versions of it. But if you look at Silicon Valley, people really are constantly inventing new things and amazing innovation is coming from this region. To me it's obvious: This excitement about learning and cross-fertilization can bear fruit. □

Helene Laube is a San Francisco-based freelance journalist. She is a founding journalist of the Financial Times Deutschland. From 2000 to 2012, she was the paper's Silicon Valley correspondent.



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Comments

Bulletin "Privacy," 2/2017

Outstanding

Thank you for the outstanding Bulletin – I don't miss a single issue.
Jürgen Dunsch, Wädenswil, former Switzerland correspondent for the newspaper Frankfurter Allgemeine Zeitung

Smart, Sensible

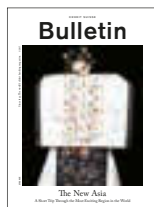
Interview with Hanspeter Thür: smart questions, sensible answers.
Gieri Battaglia, Rorschach

Free of Advertising and Free of Charge

There are only two magazines that I read regularly, poring over every article from cover to cover. Credit Suisse's Bulletin is one of them. It's always very interesting, clearly organized, well put together. Simply top-notch. And it's even free of charge and practically free of advertising.
Beat Schneckenburger, Thayngen

Correction

The last issue erroneously stated that Sophia Genetics used artistic intelligence instead of artificial intelligence. Please accept our apologies for this error.



Comments

Bulletin "The New Asia," 1/2017

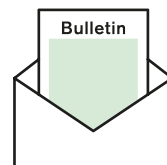
Passing the Time on an 11-Hour Flight

I recently flew to Japan. I very much enjoyed the variety of the topics, the images, the layout and the superb texts in Bulletin during the 11-hour flight between Zurich and Tokyo Narita. I recommended the magazine to all of my friends who live or do business in Asia. I hope that there will continue to be issues of Bulletin dedicated to one region of our multipolar world. These issues are fantastic and enriching!
James Blake Wiener, Ancient History Encyclopedia, Sarasota, USA

Useful for Work

Thank you for the Asia issue. I would also like to take this opportunity to thank you in general for sending this publication. I always read Bulletin with great interest, and it has quite often proven useful to me in my work. For instance, Bulletin appears in the list of references for one of my recent research projects examining the demographic explosion in sub-Saharan Africa and the migration flows toward Europe.
Giovanni Galizzi, Università Cattolica del Sacro Cuore, Piacenza, Italy

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How Full Is Your Glass?



1 According to a survey conducted last year by the British market research company YouGov, which country is most optimistic?

- a — Denmark
- b — China
- c — Thailand

2 Which country is most pessimistic?

- a — Finland
- b — Saudi Arabia
- c — France

3 According to the 2016 Hope Barometer, published by the Swiss Society for Futures Studies, who is more optimistic about the future — women or men?

- a — Women
- b — Men

4 A study by the streaming platform Spotify indicates that more songs are in a minor than in a major key. Is this accurate?

- a — No, more songs are in a major key.
- b — Yes, more songs are in a minor key.

5 According to Credit Suisse's Worry Barometer, what percentage of Swiss people describe their economic situation as good or very good?

- a — 55%
- b — 68%
- c — 75%

6 What is the most-used emoji on Facebook?

- a — 🍌
- b — 🍌
- c — 🍌

7 Coming back to the Worry Barometer: Do the Swiss expect to be doing better or worse in the future?

- a — 92% say the same or better
- b — 62% say the same or worse
- c — 32% say the same or better

8 According to Dictionary.com, which philosopher popularized the term “optimism”?

- a — Aristotle (384–322 BC)
- b — Thomas Hobbes (1588–1679)
- c — Gottfried Wilhelm Leibniz (1646–1716)

9 According to the same source: What was “invented” first, optimism or pessimism?

- a — Optimism
- b — Pessimism

10 Who lives longer, optimists or pessimists? A study conducted in 2015 by University College London looked at that question.

- a — Optimists
- b — Pessimists

Answers: 1b, 2c, 3a, 4a, 5b, 6c, 7a, 8c, 9a, 10a.



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