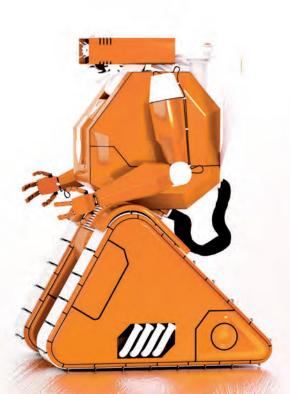




# **OWNING THE FUTURE OF WORK**







#### **About GfK Verein**

"Let the voice of the consumer be heard." This idea was the original vision when the GfK Verein was established in 1934 and still guides it today. Consequently, the purpose of the Verein since its inception has been the advancement of market research. Today, the GfK Verein is a respected market research think tank acknowledged both by those in scientific circles and those engaged in practical application. It is also the majority shareholder of GfK SE, a leading market research company head-quartered in Nuremberg, Germany.

Its remit as a not-for-profit organization is to create and share knowledge required for better understanding markets. Thus, the GfK Verein develops new market research methods — frequently in close cooperation with business and scientific organizations — and studies societal trends. As part of its mandate to share market research knowledge, GfK Verein co-operates with universities in several continents to offer academic programs that help develop the next generation of market researchers to meet the future needs of business.

#### About the St. Gallen Symposium

The St. Gallen Symposium is a student-run global forum that has been creating healthy debates on relevant topics for nearly 50 years – between generations, disciplines and cultures. The 48<sup>th</sup> St. Gallen Symposium will be held at the University of St. Gallen in Switzerland, one of the world's leading business schools. In the past, global luminaries such as Xavier Bettel, Prime Minister of Luxembourg, Professor Niall Ferguson, Harvard University, Christine Lagarde, International Monetary Fund (IMF), Jack Ma, Alibaba Group, Anders Fogh Rasmussen, NATO, Stephen Sackur, BBC Television Centre, and Tidjane Thiam, Credit Suisse Group AG, have contributed to the "St. Gallen debates."

The Leaders of Tomorrow are a carefully selected, global community of the most promising young talents. Each year, 200 academics, politicians, entrepreneurs and professionals around 30 years or younger are invited to challenge, debate, and inspire at the symposium. By questioning the status quo and representing the voices of the next generation, the Leaders of Tomorrow are at the very heart of the St. Gallen Symposium, making the conference a unique experience. Leaders of Tomorrow qualify either through our global essay competition aimed at graduate students, or they attend based on their professional or academic merit through a strict hand-selection process. After the symposium, they join our Leaders of Tomorrow Alumni Community counting over 2000 members worldwide.

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Please cite this publication as:Buder, F. & Neus, A. (2018): Global Perspectives Barometer 2018 – Voices of the Leaders of Tomorrow: Owning the Future of Work. GfK Verein & St. Gallen Symposium. | Cover picture: © iStock: Petmal

| ntroduction   | 2  |
|---|----|
| Key Insights from the Leaders of Tomorrow (LoT)                                 | 3  |
| echnology and humans in the future world of work – AI-enabled management        | 4  |
| Dwning the future world of work – building the skillset for an automated future | 14 |
| he future of work – the search for meaning and purpose                          | 21 |
| Recruitment of the Leaders of Tomorrow – Wave 2018                              | 29 |
| References  | 33 |

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# OWNING THE FUTURE OF WORK

The implications of Artificial Intelligence (AI) and automation for the future of work are being hotly debated by technologists, economists, politicians, and philosophers alike. AI now threatens employees whose jobs had previously seemed impossible to automate: from financial analysts and lawyers to journalists. Whether or not we all lose our jobs to robots: global mobility, social and demographic changes as well as new ecosystems and ways of life will probably lead to new roles and career models in the future.

While the world of work is changing, a new generation is taking responsibility in a "changing of the guard", the "Digital Natives". Individuals grown up during the age of digital technology and who seem to use it naturally, as an integral part of their everyday lives (Prensky 2001). Especially the first generation of Digital Natives, the so-called Millennials or Generation Y (people born between 1980 and 2000), is currently experiencing a particularly high degree of attention. People from this age cohort make more than 60% of the world population and will soon be the biggest group at work, accounting for over 75% of the global working population by 2025 (Deloitte 2014). Seeing these numbers alone, it becomes clear that the Digital Natives are not a small group of outliers anymore they are already the mainstream.

This study gives a voice to a specially selected group of Digital Natives, some of the future's top talent: the "Leaders of Tomorrow". 1,400 "Leaders of Tomorrow" from more than 90 countries followed this year's invitation of the St. Gallen Symposium to share their future career plans, their expectations towards potential employers and their view on the future role of human skills and Artificial Intelligence in the management sector.

This report analyses and aggregates the "Voices of the Leaders of Tomorrow" and discusses the results to illustrate possible implications that today's executives should watch out for. It provides unique insights into the minds of a very special group of young top talent.

Our aim is to foster a fruitful discourse and we are looking forward to a constructive dialogue about the issues at hand both during and after the 48th St. Gallen Symposium.

GfK Verein & St. Gallen Symposium

# KEY INSIGHTS FROM THE LEADERS OF TOMORROW (LOT)

# An optimistic view of the future of work, robots and all

The LoT are mostly optimistic (89%) for their future careers, 53% are even "excited" about their future careers, seeing "a world of possibility". They believe that technologies like AI have a positive impact on their careers. The LoT mostly agree that technology will in total create more opportunities, new industries, new jobs, and more economic growth.



## LoT are ready to collaborate with AI in management.

Up to 98% of the LoT would use the help of AI in management tasks, at least as a supporting assistant. Most of the LoT would even use AI for aspects of people management (staffing and delegation), to evaluate decisions taken by humans and in management tasks with strategic implications (setting strategic goals).



This would make the skill to deal with AI a necessity even for the C-suite, not only for the lower ranks of management. The LoT seem to see AI as a chance to get rid of supporting tasks and administrative work, for example in the preparation of decisions, while judgement is left to humans. Companies need to keep up with the development of AI, otherwise they may soon have a hard time explaining to their young talent why they must carry out administrative and routine tasks that in the eyes of digital natives should be done by smart machines.

# Creative problem-solving and technology skills supersede traditional management virtues

According to the LoT, creativity, critical thinking and the ability to build networks with peers for mutual support are the most important skills for making good business decisions in the future, in addition to key technology skills. From the LoT's perspective, the current generation of leaders (mostly 40-60 years old) needs to improve these skills urgently to stay relevant tomorrow, while



of new technologies on businesses

skills that are traditionally seen as the foundation for successful management like the ability to draw on long time experience and domain expertise are of way lower importance for the LoT. This may pose a source of conflict in organizations building hierarchies upon these skills. Forty percent of the LoT also feel the current generation of leaders lacks the ability to properly plan tech investments for the future, because current leaders do not understand how technology really works and behaves, and operate on wrong, "toxic" assumptions about tech impact. A call to action for companies, to give more tech savvy digital natives the authority to challenge the organisation's assumptions, and a voice in key tech decisions.

#### The LoT primarily look for intrinsic motivation at work, in new ways

Even though they want a job with a reasonable salary level, the LoT seem to intend to measure their career success primarily by meaningful and challenging work content. And they are ready to move globally for jobs, making the "War for Talent" a global competition that probably cannot be won by just adjusting the incentive package. Pursuing a fulfilling professional life, the LoT do not aspire to traditional top-executive careers. Only 17% say they want to become top-level executives,



41%

of the LoT with 2 or more years of management experience want to be known for being innovative entrepreneurs in the future

while careers as experts (38%) and entrepreneurs (29%) are way more popular. Among those already having some years of management experience under their belt even 41% dream of being entrepreneurs. Companies need to rethink their recruiting and management tools to also attract leadership talent with non-traditional ideas about a successful career or who look for entrepreneurial experience: Make purposeful work the new status symbol for your top talent.

# TECHNOLOGY AND HUMANS IN THE FUTURE WORLD OF WORK – AI-ENABLED MANAGEMENT

"I've come up with a set of rules that describe our reactions to technologies:

1. Anything that is in the world when you're born is normal and ordinary and is just a natural part of the way the world works.

2. Anything that's invented between when you're fifteen and thirty-five is new and exciting and revolutionary and you can probably get a career in it.

> 3. Anything invented after you're thirty-five is against the natural order of things." Douglas Adams

According to the Encyclopedia Britannica, Artificial Intelligence (AI) is "the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience."

Al is a key technology in the ongoing "fourth industrial revolution" and it is said to fundamentally change the world of work. While prior technological revolutions primarily disrupted so called "blue collar" and service jobs, it is expected that automation and AI will also have a disruptive impact on management. Managers from the front-line up to the level of management boards will have to adapt to a world where humans and AI are increasingly collaborating and will have to learn how to manage their AI resources.

The Leaders of Tomorrow are a very special subgroup of the Digital Natives. Understanding this group is of particular interest for many people, as the future leaders will shape companies, work, leadership, decision making - and ultimately society - according to their ideas, values, dreams, and concerns.

What are they expecting of their future careers and how AI and automation are going to affect them? What is their state of mind regarding AI in management and how would they use this technology in the future?



Question :

"Technological careers will be definitely changed by AI, as a Software Engineer, in the near future where code will generate code. With this perspective it is relevant to focus on creativity and UX, because these will be the valuable competences."

> Camila, 26, Brazilian CTO and Founder of Mastertech

# An optimistic view of the future of work, robots and all

The Leaders of Tomorrow are mostly optimistic (89%) for their future careers, 53% of the respondents even answered to be excited about their future careers, seeing "a world of possibility" (Exhibit 1). They expect new career opportunities and a better work life through technology. For the Leaders of Tomorrow automation and AI are not a reason to fear the future. Only around 11% of them confessed that they are worried about how automation and AI might affect them in the future. In contrast, 87% of the Leaders of Tomorrow are either confident or even excited about the impact of automation and AI on their future. While this result is not surprising for this outstanding group of young talent, it contrasts with results of other studies seeing AI and automation as a source of growing anxiety for workers, especially those with less education (Deloitte 2017, PWC 2017).

The Leaders of Tomorrow are also generally optimistic that technological innovations like AI and automation will create more opportunities, new industries and jobs and more economic growth (Exhibit 2). A majority of 84% of the interviewed top talent thinks that AI bears more opportunities than risks for our civilization. Most of the interviewed Leaders of Tomorrow also tend to believe that technological innovations will create new jobs and even entire new industries and will lead to increased economic growth.

However, they also agree (69%) that this development may come at the price of higher inequality in societies, and may affect certain people in a negative way. While it promises new opportunities especially for highly skilled talent like them, it may be a source of disruption for less skilled workers.



Question 1

"I think that, without doubt, AI is already starting to be part of the world of communications, demonstrating the many possibilities it can have. The crisis that journalism is facing today lies precisely in reflecting on how we adapt to these new changes, how we prepare to communicate better with the use of AI and, above all, what our role will be when it comes to give the news."

Tais, 30, Argentine Director and co-founder of Conexión Coral, Environmental journalist

Exhibit :

#### Leaders of Tomorrow are optimistic about their future careers



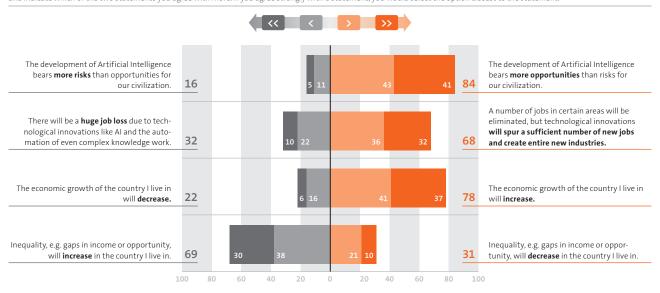
Numbers are percentages of cases  $\mid$  n  $\leq$  6 "No answer"

 $n=1,400; \\ \text{``Leaders of Tomorrow-Wave 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \odot \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 201$ 

vhihit 1

# Leaders of Tomorrow believe in the positive power of technology – but also see its downsides

Question: How do you think technological innovations (such as Artificial Intelligence) will shape the future of work in the next 15 years? Please read each pair of statements below and indicate which of the two statements you agree with more. If you agree strongly with a statement, you would select the option closest to the statement.



Numbers are percentages of cases | n ≤ 8 "No answer"

n = 1,400; "Leaders of Tomorrow – Wave 2018" | @ GfK Verein & St. Gallen Symposium: Global Perspectives Barometer 2018



Question 2

"Findings that are made by AI are always based on the underlying data. No algorithm will be able to consider missing facts or detect wrong information. They neither regard ethical standards. Algorithms conclude what happens but will never disclose a reason. This opens room for misuse and misinterpretations."

Aron, 28, Austrian Intrapreneur, offensity by A1 Telekom



Question 2

"I'm only worried that because of political issues the development and implementation of AI and robotics in daily life will be slowed down. I don't think we should be scared of this revolution. Of course AI will change the way we work, jobs might change and disappear, but we need to adapt and change our view on human labour. We need to keep learning and evolving to apply for new jobs."

Stijn, 22, Dutch Entrepreneur



Ouestion 2

"Overall, I'm quite optimistic about the future of work with AI, but one thing I worry about is the actual value I can contribute to society. If 75% of the work I do today can be replaced by AI engines and robots, I will have much more free time that I can use to create new impact. I think about the skills and knowledge that will be needed in this type of world."

Lisa, 29, Japanese Agri-tech entrepreneur



Question 2

"Machines are already forming new models to derive inferences that cannot be explained by human reverse engineering. This means that these intelligent systems "see" more across the spectrum of data available to them and draw correlations we don't. My concern is that it will become far more difficult to assign accountability even when these systems work for you."

Pranav, 28, Indian Founding Partner, 3one4 Capital



Question .

"Having lived in Least Developed Countries for the past 8 years, my biggest concern is that an innovation, as thrilling as AI will not only be a tool to grow, but also another factor that will widen the gap between the More Advanced Countries and the Rest of the World. In a country like Haiti, only a small percentage of the population has access to AI, ie, the know-how to use it appropriately."

Laure, 29, French-American Social Entrepreneur

# Leaders of Tomorrow are ready to collaborate with Al in management

To get their view on the automation of management work, we asked the Leaders of Tomorrow in our study what extent of automation of typical management tasks they would consider beneficial for an organization in 15 years from now. The given degrees of automation through AI ranged from no automation ("Human task - AI should not be involved in this kind of activity") to fully automated management with AI being "an actor, autonomously acting according to its analysis and predictions. Humans get reports of actions taken" (Box 1).

Up to 98% of the interviewed Leaders of Tomorrow would use AI in management, at least as an assistant. The preferred degree of automation depends on the specific management task. The most popular configuration is using Al as an assistant or as an advisor, supporting a human manager who is in control of decision making and carries out actions. Between 50% and 79% of the Leaders of Tomorrow would use AI in these roles, depending on the task at hand (Exhibit 3). It can be assumed, that the Leaders of Tomorrow are ready to collaborate with Al in management. The high percentage of Al-users for delegating the right task to the right people and for strategic planning and goal setting indicates that they would even use AI for aspects of people management and in management tasks with strategic implications. In that case, dealing with AI would be a necessity even for the C-suite, not only for the lower ranks of management.

Box 1

## Degrees of automation

The automation of management tasks is no 'all or nothing approach'. Al can fill a variety of roles in management between the extremes of fully manual (human) work and full automation of tasks. Authors from Accenture's Institute for High Performance (Fuchs et al. 2016, Kolbjørnsrud et al. 2016) identified three roles of Al in management with varying degrees of autonomy and proactivity: assistant, advisor and actor. The authors assume, that businesses will adopt Al systems in management in a stepwise fashion, following the development of Al. While Al assistants are already relatively common, Al-based advisors are the next step to follow.

- Assistant: In the role of an assistant, AI is fulfilling supporting tasks (e.g. taking notes, scheduling, and reporting) initiated and controlled by a human. This function of AI is already a regular part of organizations and everyday life. The voice assistants of Google, Apple, and Amazon, for instance, help people manage to schedule meetings, plan trips and access information.
- Advisor: As an advisor, Al provides support in more complex situations. It can ask and answer questions or even prepare scenarios and simulations for decisions. All is generating recommendations; the resulting actions are decided by a human. IBM's Watson platform with the ability for instance to give medical diagnosis or the robot-advisors for financial investment are first applications of this role of Al.
- Actor: As an actor, AI is autonomously acting according to its analysis and predictions. It can make decisions, without any direct human control. Humans only get reports of actions taken. An example for the development of AI actors are self-driving cars.

We used these roles, complemented by something we called "human task" (AI is completely excluded from this kind of activity. The human acts and decides on his own.) to measure the Leaders of Tomorrow's readiness for the collaboration with AI in management; their current state of mind regarding AI.



Ouestion 1

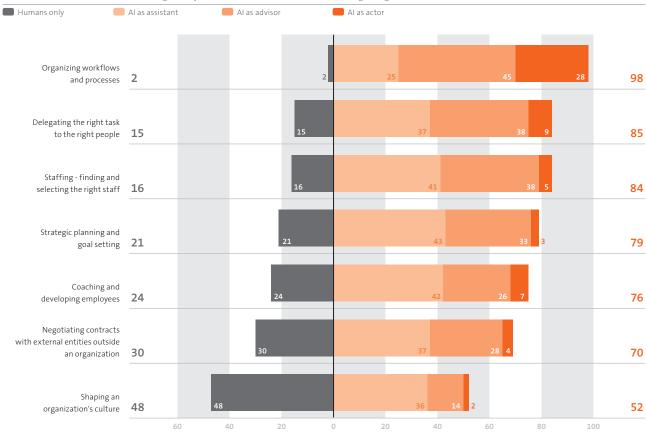
"Yes: in short term AI will influence my job due to the automation of menial tasks and processes, such as project account keeping & basic customer service. In 5 to 10 years it will have a substantial impact on how I will perform value added activities such as new customer identification, prospecting and even strategic decision making. I expect to use artificial systems to approach managerial tasks with a data intensive approach."

Christian, 30, Italian / American Project Manager

Evhihit 3

# Leaders of Tomorrow are ready to collaborate with AI in management

Question: Looking at typical management activities, which extent of automation through Artificial Intelligence (AI) would be beneficial for an organization in 15 years from now? Please indicate the extent of automation using AI that you consider beneficial for each of the following management activities.



Numbers are percentages of cases | n  $\leq$  10 "No answer"

However, most of the respondents prefer human managers to be in control. In this configuration, the judgement is left to human managers. Handing over decisions completely to an AI seems to be harder to imagine for the Leaders of Tomorrow: only very few respondents consider AI in the form of an autonomous actor as beneficial for an organization, at least in 15 years from now. For almost all tasks, the share of those, who would fully automate it, is below 10%.

A surprising exception from this rule is "organizing workflows and processes". This task seems to be the one with the highest potential for automation from the Leaders of Tomorrow's point of view, 98% would use AI at least as an assistant. While most of them would prefer that humans decide about actions supported by or based on the recommendations of an AI, more than a fourth of them indicated that they would even consider delegating this task to an AI actor as beneficial. This is interesting, as it touches upon process and workflow design, a task considered so specialized, it is often performed by highly paid consulting firms. Do the Leaders of Tomorrow believe, that companies in the future solve such problems themselves - enabled by AI?



Question 1

"I am a chemical engineer working with hardware development and infection control - traditionally human realms that have already been positively impacted by software-based systems like 3D printing, computational simulations, and manufacturing documentation. These are now being enhanced with AI/ML, the possibilities include removing rote aspects like data transfer across computational platforms or manual manufacturing interfaces: This means I can focus more on the creative and exciting design elements of my work."

Nisha, 28, Indian Co-founder at Biomoneta Research



Question

"I believe AI will have a significant impact on my career and the way I work from now on. As a former business consultant and an agri-tech entrepreneur, I try to ask myself: 'Do I really have to carry out this task by myself?', 'How can this be automated?', 'How should I utilize my time?'. One example would be the simple research about competitors businesses."

Lisa, 29, Japanese Agri-tech entrepreneur

# Al prepares decisions, humans decide

Taking decisions is at the core of a manager's responsibilities. How open-minded are the Leaders of Tomorrow for the automation of "big", risky managerial decisions?

We asked the Leaders of Tomorrow to imagine themselves in the role of a manager who is responsible for a department in a large organization, 15 years in the future. For the case of a risky decision with a big impact on the market, for example a decision about the development of a potentially disruptive new product with high costs involved and a high risk of failure, they had to indicate the extent of automation they would consider beneficial. For a detailed view on how the Leaders of Tomorrow would use AI in management decision-making, we used a model of a decision-making process with seven steps (see Box 2), of which five (steps 2-5 and 7) needed to be rated regarding the preferred degree of automation.

Consistent with their view on the use of Al in typical management tasks, most of the Leaders of Tomorrow stated that the use of AI as assistant or advisor is beneficial for decision-making. From their point of view, a higher degree of automation is especially beneficial for the preparation of a decision: gathering of information, building alternative decision options and analysing them to prepare the final decision-making. In contrast to that, taking the final decision is more often considered a task for humans: 47% of the respondents think that taking the final decision is a task for humans only, while 28% would use AI as a mere assistant that fulfils supporting tasks under human control (Exhibit 4).

Perhaps surprising, many Leaders of Tomorrow would delegate the evaluation of decisions to a large extent to an AI, either as an advisor (40%) or even as an autonomous actor (15%). This could ultimately mean, that an AI is checking if a human decision maker was right. The question arises, who would really be the boss in that case, who would lead whom?

Box :

## Model of decision-making process

- 1
- **Step 1 Identifying the need for a decision:** Realizing that a decision must be made, either because of an occurring problem or an opportunity. In this step the nature of the decision at hand must be defined.



**Step 2 – Gathering of relevant information:** Searching, collecting and analyzing of pertinent information.



**Step 3 – Identifying decision alternatives:** Identifying several possible paths of action and listing of possible and desirable alternatives.



Step 4 – Analyzing and weighing of decision alternatives: Drawing on information to imagine what it would be like if each of the alternatives from Step 3 was carried out to the end. Evaluation whether the need identified in Step 1 would be helped or solved through the use of each alternative. Prioritizing of alternatives based on expected outcome, cost, risk and values.



**Step 5 – Choosing among decision alternatives:** After having weighed all the evidence, one selects the alternative or a combination of alternatives which seems to suit best the decision at hand.



- Step 6 Implementation of chosen action: Taking action to implement the alternative chosen in Step 5.
- 7
  - **Step 7 Evaluation of decision outcome:** Experiencing the results of the decision and evaluating whether or not and to what extent it has "solved" the need identified in Step 1.

Based on the works of Brown (2007), Elmansy (2015), Guo (2008), Janis & Mann (1977)



Question 4

"I believe the scenario of AI taking decisions and giving orders is already here. The board of Deep Knowledge Ventures, a Hong Kong company, includes a datamining algorithm, VITAL, that has an equal vote as the human members. Smart device users are subtly taking orders from AI every day, like when to leave to make it to an appointment. The consequences are numerous and necessitate much debate on the cost-benefit of yielding this power."

Nisha, 28, Indian Co-founder at Biomoneta Research



Question

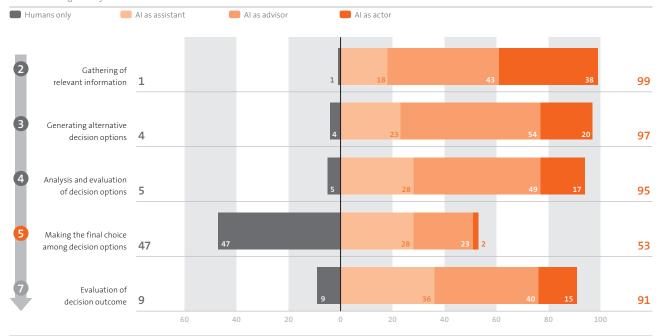
"Al could certainly develop into a smarter technology that guides human behaviour or even gives orders. A technology that can certainly be smart enough to understand a workplace and undertake the role of a manager or a supervisor. This would then translate into a marked change in how businesses are run. It might lead to less human interfaces, allowing expansion of B2B communication."

Surbhi, 26, Indian National General Secretary, NSUI

Exhibit 4

# Leaders of Tomorrow would use AI especially for preparation of business decisions

Question: Imagine, in 15 years from now, you are the manager who is responsible for a department in a large organization. You must make a risky decision with a big impact on the market, e. g. a decision about the development of a potentially disruptive new product with high costs involved and a high risk of failure. Looking at the following steps of the decision process, which extent of automation through Artificial Intelligence (AI) would be beneficial? For each step of the decision process, please indicate the extent of automation using AI that you consider beneficial.



Numbers are percentages of cases | n  $\leq$  19 "No answer"

 $n=1,400; \\ \text{``Leaders of Tomorrow-Wave 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{\o} \ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \ | \ \\ \text{GfK Ve$ 

# Management challenge: creating value in an automated future

It may be assumed, that the Leaders of Tomorrow see AI in management primarily as a chance to get rid of supporting tasks and administrative work, for example in the preparation of decisions. Most of them would use AI even in complex management tasks and to evaluate decisions taken by a human manager. In that case, AI would pose a challenge for managers' power and skills. Managers need to answer the question of what value they can add in such automated processes to remain relevant. They may need to focus on new skills, as much of their experience and expertise may be challenged by an AI that can easily analyse tons of data and is expected to be less biased by personal preferences and politics. AI may even change the whole idea of management: From managers managing people to managers managing AI – a development that would force managers to learn completely new skills. Completely new questions for management would arise: What are leadership models for mixed teams of humans and AI? How would managers deal with an AI that keeps disagreeing with them, who would be responsible for a decision in such a case?

Answering these questions is most likely a learning process and companies are well advised to start preparing for such an automated future of management now. They need to rethink the training of employees who will have to deal with Al. The next chapter in our report shows the Leaders of Tomorrow's ideas regarding which skills will be most relevant in the future. For them, aside from understanding technology, creative problem solving and critical thinking will make a difference in the future.

Companies also need to constantly stay up-to-date with technological development, check possible applications and give their employees access to this technology where it makes sense. Otherwise they may soon have a hard time explaining to their young talent why they must carry out administrative and routine tasks that in the eyes of digital natives should be done by smart machines.



Question 5

"In the upcoming years AI will become an assistive or consulting tool to help people make decisions. Although routine jobs, which do not involve a lot of social or creative skills, might be replaced by AI, humans will stay in the lead and make the final decisions in the near future. Yet, in the further future, when AI will be further developed and more accepted, the transition to AI as decision maker might happen."

Stijn, 22, Dutch Entrepreneur



Question 5

"I believe it would be possible for an AI, in a near future, to take decisions on its own and to give orders to humans. However, my hope is that humans will always remain the sole decision-makers at the top of any given system. I see AI as a way to support human efforts, not a tool made to overcome them. I believe innovation comes from creativity and instinct, two aspects which remain profoundly human."

Laure, 29, French-American Social Entrepreneur

# OWNING THE FUTURE WORLD OF WORK — BUILDING THE SKILLSET FOR AN AUTOMATED FUTURE

"The best way to predict the future is to create it." – Peter Drucker

The workplace of the future will probably be completely different from what it is today. Humans will collaborate with evolving Artificial Intelligence systems. Technological innovations might even create completely new industries or new jobs that do not exist so far and require completly new skill sets.

Of course, we do not assume that the Leaders of Tomorrow already know the future of work and the job profiles of tomorrow — but learning about this special group's ideas and expectations is a good indicator as they are probably one of the forces shaping the future.

# Creative problem-solving and technology skills supersede traditional management virtues

To get an idea which skills the Leaders of Tomorrow consider most essential for making good business decisions 15 years in the future, we asked them to choose the top three skills from list of 10, with the option to add other skills if the list was incomplete in their opinion (Exhibit 5).

The Leaders of Tomorrow selected skills that may help them to deal with flux and unpredictability in digital markets; environments that are characterized by rapid and nonlinear changes. Creativity, critical thinking and the ability to build networks with peers for mutual support lead their list of most essential skills for making good business decisions in the future (Exhibit 5).

These skills are also connected to human judgement or interaction and relatively hard to replace through AI, at least for now. The next generation of AI systems is expected to first focus on taking over administrative work tasks while studies assume that judgement work will be a domain for humans (Davenport et al. 2015, Kolbjørnsrud et al. 2016, McKinsey Global Institute 2017).



Question 6

"I believe the essential skills for making good business decisions will remain the same as they have always been: curiosity, the ability to challenge established belief systems as well as learning from unavoidable mistakes. These skills, or lack thereof, will however be channelled and amplified through new technological means."

Jakob, 29, German Investment Associate

# Is your company's talent management promoting yesterday's skillset?

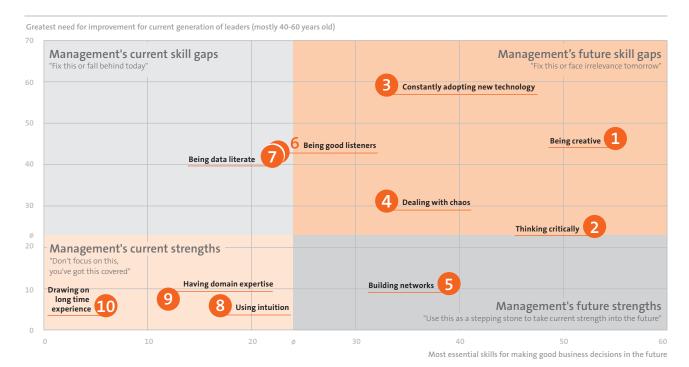
Those skills with the least votes, are skills that are traditionally seen as the basis for successful management: the ability to draw on long time experience, domain expertise and intuition, the ability to rely on "gut feeling" (Exhibit 5).

This could turn out to be a problem for companies that traditionally built their hierarchies upon these skills. It seems unlikely that top talent like the Leaders of Tomorrow will accept hierarchical power based on long time experience, gained by doing the same job for a longer time than other people. Or that they accept expertise, based on the idea that knowledge can be gained once during an intensive phase of education and will keep its value for a lifetime. For the Leaders of Tomorrow, being ready for the future seems to mean being ready for taking decisions in digital markets, characterized by fast paced disruptive innovations and perpetual change.

If the Leaders of Tomorrow's forecast about the future importance of skills is somewhat right, companies may also get a way more pressing problem. The skillset by which they decide promotion and power inside the company may lead to exactly promoting the wrong people. Those that are the most suitable to maintain the status quo and play it safe while they are lacking the skills to successfully steer the company towards the future.

Exhibit 5

### Creative problem-solving and technology skills supersede traditional management virtues



- 1 Being creative: Ability to use creativity methods to come up with unusual, out-of-the-box ideas or solutions for a given topic or situation.
- 2 Thinking critically: Ability to use logic and sound reasoning to critically exam one's own thinking, identify biases, and question hidden assumptions or premises.
- 3 Constantly adopting new technology: Ability to understand technology enough to keep abreast of and anticipate emerging issues, and constantly learn about new tools and incorporate them into daily use.
- Qualing with chaos: Ability to act even in case of uncertainty, incomplete or conflicting information, shifting circumstances, and novel problems without existing practices or rules.
- 3 Building networks: Ability to reach out to other people to exchange ideas and skills by having a large network of productive relationships that facilitate mutual support.
- 6 Being good listeners: Ability to listen with the intent of understanding, not just to interject with one's own view, especially in case of diverging or critical opinions.
- Being data literate: Ability to manage a deluge of data, and extract the useful bits from the noise to reveal insights by using analytic tools.
- 8 Using intuition: Ability to rely on 'gut feeling' when thinking about possible courses of action and making decisions.
- 9 Having domain expertise: Having special knowledge or skills in a particular topic area.
- 10 Drawing on long time experience: Having a lot of experience from working in a specific field or occupation for a long period of time.

Numbers are percentages of cases | n  $\leq$  4 "No Answer"

# Focus on management's future skill gaps

We used the same list of skills as before and asked the Leaders of Tomorrow to select those three skills where the current generation of leaders has the greatest need for improvement. The most important skills in this ranking were the ability to constantly adopt new technologies, creativity, and, both on rank 3, data literacy and the ability to listen well (Exhibit 5). It can be assumed that the Leaders of Tomorrow refer especially to the ability to listen to their generation in this case, as they assume that they know more about the digital world than their predecessor (Buder et. al 2015).

It can be assumed, that the Leaders of Tomorrow would probably advice the current generation of leaders to focus their learning efforts on the skills in the upper right quadrant in Exhibit 5: management's future skill gaps. The skills in this quadrant are seen by the Leaders of Tomorrow as essential for making good business decisions in the future and at the same time they see a great need for improvement for the current generation of leaders. In addition to the ability to constantly adopt new technologies this quadrant includes skills for creative problems solving and judgement. Skills that seem to be necessary to deal with unpredictability but also with an automated future of management, where humans must collaborate with Al. Having these skills would enable managers to concentrate on judgement while they are assisted by smart machines, the favourite configuration of the Leaders of Tomorrow.



Question 6

"I think there are two skills that will be fundamental. 1) Make strategic and intelligent use of new technologies, from social networks to the incorporation of Al. 2) Think about each action of our work in pursuit of sustainable development. We have an Agenda of Objectives proposed by the United Nations for 2030 and everyone can (and must) contribute to achieve it."

Tais, 30, Argentine Director and co-founder of Conexión Coral, Environmental journalist



Question 6

"Human beings keep evolving and adapting themselves. Business ethics, human values and emotions should be considered while making any business decision align with a clear vision. Frequent market research and required adaptability is the most essential skill. A blend of technology and understanding of human demands will help sustain a business in future."

Surbhi, 26, Indian National General Secretary, NSUI

## Let your digital talent go scout for new technology and direct investments

Being able to use the latest technology well is a core issue for the Leaders of Tomorrow. They do not only see this skill as the one with the greatest need for improvement but they also named the adoption of new technologies most often when we asked them in an open question to name the greatest challenge for the current generation of business leaders in terms of preparing for the future world of work (Exhibit 6).

The second greatest challenge from the Leaders of Tomorrow's point of view is a mindset change, accepting and dealing with continuous change. The interviewed top talent thinks that the current generation of leaders needs to overcome previous routines and patterns of thinking to embrace new ideas and methods. We see this as an indication, that the Leaders of Tomorrow regard experience from the pre-digital era not as an asset, but as a burden that one must get rid of to be successful in the future.

Planning investments in future technologies is a potential source of conflict between the generations inside companies. Their top talent assume that older managers, who direct investments, are not able to understand the impact of technology correctly. Companies are well advised to give digital natives a voice in key tech decisions. Otherwise, they risk losing their digital talent towards companies that are more advanced regarding the use of technology.

Exhibit 6

# Leaders of Tomorrow see keeping pace with technological change as the greatest challenge for the current generation of leaders

Question: What do you think is the greatest challenge for the current generation of business leaders (mostly 40-60 years old) in terms of preparing for the future world of work? Please give a brief description of the biggest challenge for the current generation of leaders (max. 350 characters).

# Keeping pace with technological change

24%

Leaders of today have to keep up with ever-accelerating technological advances and innovations. They have to respond quickly to innovations and need to incorporate them in their businesses if it makes sense. Therefore, they have to discard risk-averse behaviours.

#### Quotes:

"According to me, the biggest challenge for them is to adapt to the latest technologies and integrate them with their existing business and infrastructure to provide better solutions to the present problems as well as problems that may sprout in the future."

"They are in danger of being left behind by a tidal wave of short living, incessant technological innovations. Very soon they will be obsolete when they should have been looking forward to the pinnacle of their careers."

# Accepting and dealing with continuous change

21%

Leaders of today need to be open towards upcoming changes and need to be able to adapt quickly to changing environments. They need to overcome previous routines and patterns of thinking, embrace new ideas and methods. Furthermore, they must be open to reskilling and lifelong learning.

#### Quotes:

"Overcoming their fear and ignorance against the upcoming changes."

"Accepting change"

"Not relying on experiences from the past."

# Preparing the organization's staff for the future & managing "new generations"



Leaders of today need to prepare their staff for the future. Retraining of employees is a crucial task for businesses in order to stay competitive. Ensuring an effective Al-human interaction in work is considered to be very important in order to ensure job security. Besides retraining, the selection of the right staff with appropriate skills is essential. Current leaders should also aim at introducing and preparing their successors to the challenge of leadership and ensuring that their organization stays attractive for younger generations. This requires an understanding of their aspirations and priorities towards work, as well as mentorship and coaching.

#### Ouotes:

"Current leaders are not spending time or contributing to develop people or subordinates as future leaders. General commitment towards coaching has declined. Current leaders spend most time in maintaining their current position. This is added by the fact that most corporate leaders are appointed for a 3-5 yr period only to achieve all KPIs."

"The biggest challenge our current generation of leaders will face - when it comes to the future of work and AI in general - is ensuring their existing staff are as prepared as possible when it comes to leveraging AI in the coming years."



Ouestion 6

"Be tolerant to uncertainty. In times of exponential change rates, the world is in flux. It will not be possible to move a feet being sure about everything. Even because you will see huge changes from one day to another."

> Camila, 26, Brazilian CTO and Founder of Mastertech



Ouestion 6

"To make good decisions you should have a clear vision of what you want and how you see the world. Making business decisions requires too many social and creative skills to fully leave it up to Al. Knowing how to make use of the combination of human and Al advisors will be the right skill to make good decisions."

Stijn, 22, Dutch Entrepreneur



Question 2

"Innovation is the only way to get better. Usually, they replicate the same pattern for business processes and rarely want to experiment with new ideas or products. They only do what works for them. Developing new ideas and concepts enriches the companies."

> Rigoberto, 30, Mexican Plastic and Reconstructive Surgery/ Medical Director McKay



Ouestion 7

"The ability to embrace change and learn new things, especially from younger generations. We live in a fast-paced world and many senior leaders are too proud or rigid to accept this. Many times they think they know best and they want to continue to do things like they used to do, even though the working environment around the world has changed dramatically in the last decade or more."

Michaela, 29, Slovakian CEO of Spacemanic & Chair of SOSA

# "Toxic" assumptions about technology may lead to innovation blindness

Business decisions are taken based on assumptions about customer wants and needs, unique value propositions, core competencies, competitor behaviour etc. Many of those assumptions appear so "certain", they are hardly ever questioned. However, as we have seen in history, some of them might be very wrong. Such wrong assumptions are "toxic" for businesses deciding about investments in future business models and value propositions. Examples for toxic assumptions are the idea that one needs to own hotel rooms to become the largest accommodation provider in the world (hello AlrBnB!), or that readers prefer to buy books in a physical bookstore (hello Amazon!), or that consumers value the image quality of pictures

so much that they happily buy photographic film and wait days to have their photos developed (hello 5-megapixel digital camera!).

To know more about the mindsets that the Leaders of Tomorrow regard as necessary to be successful in the future, we asked them in an open question, to name those assumptions about the use of technology and the future of work (held by the current generation of leaders) that they consider most "toxic". The top talent in our study think that the current generation of leaders acts and decides about the future of businesses based on wrong, toxic assumptions about technologies (Exhibit 7). Either by underestimating the impact of new technologies on the industry, or by having a too pessimistic view on technology, or by overestimating the capabilities of certain technologies (40% in sum).

Exhibit 7

## Leaders of Tomorrow think that "toxic" assumptions about technology impacts are most dangerous

Question: Business models are built on assumptions about customer wants and needs, unique value propositions, core competencies, market mechanisms etc. Many of those assumptions are hardly ever questioned. But as we have seen in history, some of them might be wrong. Such potentially wrong assumptions are called "toxic assumptions". What is the most dangerous toxic assumption held by people from the current generation of managers (mostly 40-60 years old)? Please focus on assumptions about the use of technology and the future of work. Please reproduce the wrong, toxic assumption first, and then briefly state who holds that assumption.

# Underestimation of the impact of new technologies



Leaders of today don't fully grasp the possible impacts of technological advances such as AI, or blockchain. Moreover, they don't realize the urgency in dealing with those topics. They are mistakenly considered as not having an impact on the industry. Leaders of today especially cannot (or do not want to) understand that AI can potentially replace not only unskilled work but also knowledge work.

#### Quoted toxic assumptions:

"AI and machine learning are fads and will fade away with time."

"Al can never think on its own, so humans will always be their boss"

"Cryptocurrency and blockchains will never take off and challenge the financial industry. People will find it too risky and governments won't allow it."

# Too pessimistic view on new technologies



Leaders of today only consider the negative implications of new technologies while they neglect possible positive (side-)effects. Especially, they fear that technology might put humans altogether out of work and even perceive technological advances as the beginning of an apocalyptic scenario.

#### Quoted toxic assumptions:

"Al and new age technology will lead to job losses and social unrest"

"Al will destroy us"

"Al will soon replace the majority of jobs thus driving all costs lower and increasing profit margins - when most people are out of jobs, the economy won't go anywhere, and more importantly, societal stability suffers."

# Overestimation of new technologies



Leaders of today perceive technological advances such as AI as a universal remedy for all problems. The main misconception behind this toxic assumption is that Leaders of Today think that new technologies (such as AI) will lead to ever-increasing business results, and constantly improve our lives, etc. Leaders of today are neglecting any negative outcomes of new technologies (war, destruction, etc.).

#### Quoted toxic assumptions:

"Al and rapidly improving data analytical techniques (e.g. machine learning) will necessarily yield significant improvements in business outcomes, purely due to technological progress."

"Al will solve all problems"



Question 7

"From my past experience of working with the mentioned generation, one skill I'd like to ask them is the ability to see the potential in the younger generation. I'd like them to recognize that the advice and recommendations they give today may no longer be applicable to today's society and the upcoming generation. I've felt that some of the managers in this generation are hindering the success of the young talent for sure."

Lisa, 29, Japanese Agri-tech entrepreneur It can be assumed, that the Leaders of Tomorrow feel the current generation of leaders lacks the ability to properly plan tech investments for the future. From the top talent's perspective, the older generation does not understand how technology really works and behaves. From the Leaders of Tomorrow's point of view, the older generation may show symptoms of what we call "innovation blindness", an inability to recognize the need for action and staying passive in a quickly changing market environment (Neus et al. 2017). In the 2016 Global Perspectives Barometer (Buder et al. 2016), about 800 "Leaders of Tomorrow" cited "innovation blindness" as the most substantial risk for established companies in today's fastpaced markets.

# Check your assumptions to fight innovation blindness

One way to overcome or at least mitigate innovation blindness is to consequently start collecting and challenging assumptions in a company. To catch decision biases due to untested assumptions, the philosopher Daniel Dennett (2013) recommends using the "surely alarm". Whenever someone says - or thinks - "surely this is the case..." one should pay special attention to the claim being made and challenge how "sure" this is. The reverse exercise can be illustrative as well: If you find yourself saying "This technology will never have an impact on our industry!" then you should assume that some start-up is already working on this, because it is a blind spot in the industry.



Ouestion 7

"Too often current managers are not up to date on current or future trends. There is a deeply-rooted resistance to thinking of changing oneself. [...] Taking old business, economic, political, societal and behavioural models as unevolving constants leads to defensive business strategies to maintain status quos — which is a recipe for estranging the younger work force, empowering counter-movements and becoming increasingly irrelevant in a rapidly changing world."

Robert, 29, Finnish Founder, Chief Innovation Officer, Board Member



Question :

"I believe today's managers have, to the most part, remained dependent on human judgement to make their decisions. This has led to terrific and impressive achievements, but also to an overreliance on business hierarchies. While this won't go away immediately, I think the skills needed to break businesses into smaller teams and distribute decision making will be an area of improvement for most managers."

Pranav, 28, Indian Founding Partner, 3one4 Capital

# THE FUTURE OF WORK — THE SEARCH FOR MEANING AND PURPOSE

Working fills a large part of individuals' lives. Over the course of a lifetime, an average person spends 90,000 hours at work (Psychology Today 2011). Where we work and what our profession is, may even define who we are. While technology is about to fundamentally change the way we work, individual career paths are also changing. In addition to traditional careers in banking or large corporations, roles at start-ups, tech giants, and niche consultancies may get more attractive for top talent. When it comes to work models, disruptions in professional careers, frequent job changes and a growing trend of temporary contracts are posing new challenges but also offering new opportunities to the individual.

Is the traditional idea of work as a main provider of purpose in life still valid? How is a changing – or even partially missing – work environment affecting individuals' perceptions of the meaning of work? What motivates the Leaders of Tomorrow and what benefits do they expect to get back from work?

"Work gives you meaning and purpose and life is empty without it" Stephen Hawking



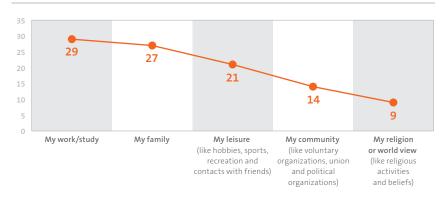
Question 3

"The executive career lost attractivity as it is not fulfilling for many. Today, work is not separated from the rest of one's life. You don't work to have leisure time that makes you happy and fulfilled, but work itself and how it combines with the rest of your life must make you happy and be fulfilling."

Jakob, 26, Austrian Managing Director, Mantigma Exhibit:

# Work and family are the most important areas in Leaders of Tomorrow's lives

Question: How important are the following areas currently in your life? Please assign a total of 100 points, in any combination you desire, to the following five statements. The more a statement expresses your thinking, the more points you should assign to it. For example, for an equal weighting you would distribute 20 points per statement. Please read all the statements before assigning points.



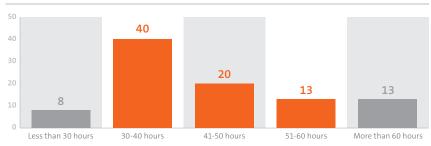
Numbers are averages of points | n = 7 "No answer"

 $n=1,400; \\ \text{``Leaders of Tomorrow-Wave 2018''} \ | \\ \text{ } \\ \text{ } \\ \text{GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \\ \text{ } \\ \text{$ 

#### Exhibit 9

## Most Leaders of Tomorrow are willing to work (at least) full-time

**Question:** Please think about your professional career in the next 15 years: In an ideal world, how many hours would you prefer to devote to your work per week?



Numbers are percentages of cases | n = 80 "No answer"

n = 1,400; "Leaders of Tomorrow – Wave 2018" | © GfK Verein & St. Gallen Symposium: Global Perspectives Barometer 2018

# Work is a core area of life for the Leaders of Tomorrow

The Leaders of Tomorrow would probably agree with Stephen Hawking regarding the importance of work for life – and the need to find meaning and purpose in work.

We asked the Leaders of Tomorrow to assess the importance of work in comparison to other major areas in their lives (family, leisure, community, and religion or world view) by distributing 100 points across these areas. The interviewed top talent from our study see work as the core part of their lives – beside their families. The Leaders of Tomorrow's assigned 29 points to work on average, making it the most important area in their lives. Family follows closely on the second rank. Many Leaders of Tomorrow may see these areas as more or less equally important. Leisure ranks third with at least some distance while religion or world view plays a significantly less important role in most of the Leaders of Tomorrow's lives (Exhibit 8).

The Leaders of Tomorrow also assign a high importance to work in the preferred number of working hours per week - without making unrealistic commitments. Asked about the number of hours they would ideally devote to work, a majority of the Leaders of Tomorrow states a number that indicates a full-time job plus a number of over-hours. On average, respondents would prefer to devote 40 hours (median value) per week to work. About 73% of the surveyed top talent want to work between 30 and 60 hours per week, a number that can be considered as not unusual for high qualified individuals in responsible jobs (Exhibit 9). It can be assumed, that the question for the Leaders of Tomorrow is not so much the number of hours but how and where they spend these work hours.

# Leaders of Tomorrow exchanged their "roots to grow" for "wings to fly"

Work may be important, but it is not everything that counts in life for the Leaders of Tomorrow. This becomes even clearer when we look at what the Leaders of Tomorrow would be ready to sacrifice for a job.

It is no surprise that 86% of them are ready to move even globally for an attractive job offer (Exhibit 10), taking into account that the Leaders of Tomorrow in our study are truly a global group. A comparison of the country of birth with the country of current residence shows a high international mobility: 47% of the interviewed Leaders of Tomorrow are not currently living in the countries they were born in. While they are ready to move globally, only 19% say they are ready to give up their hobbies and passions and even less would give up relationships with friends or go so

far to break up with their current partner for a new job. Perhaps surprising for people from the pre-digital age, it seems that moving globally does not necessarily mean giving up relationships with friends for the respondents in today's hyperconnected world. It can be assumed, that they have international networks and can maintain relationships even over long distances.

For companies trying to attract top talent, this means on the one hand a global talent pool (while still restricted by immigration laws and other external factors). On the other hand, it means that the "War for Talent" is a global competition. The Leaders of Tomorrow are ready to move where they find the best conditions for work and life. As we will see below, companies might be well advised to compete on more dimensions than just via salary levels, benefit packages and management perks to attract and retain the best talent globally.



Ouestion 3

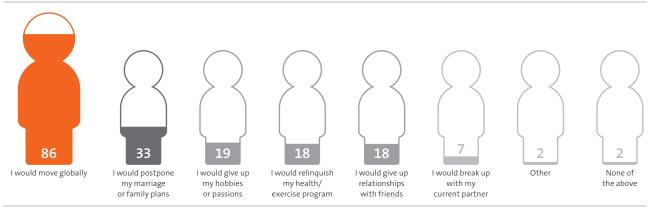
"Our career and profession have become much more important for our identity and how we view our role in society. A top-level executive position does not promise the same degree of personal fulfillment as [...] deeply diving into our field of passion or being creative and entrepreneurial ourselves."

Jonathan, 27, German Advisor to the Director, European Council on Foreign Relations

Exhibit 10

# Leaders of Tomorrow would move even globally for a job

Question: What sacrifices or changes would you be willing to make for your professional career, e. g. for taking a very attractive job offer? Please select all applicable items.



Numbers are percentages of cases | n = 10 "No answer"

# Leaders of Tomorrow look for intrinsic motivation at work

To find out, what motivates the Leaders of Tomorrow at work, we asked them to distribute 100 points on five centrals domains of work: interesting work and personal satisfaction, income, opportunity to serve society, status and prestige and interesting contacts established and maintained at work. It is not very surprising, that none of these domains is completely irrelevant for the respondents. The given domains have shown to be relevant for workers in international studies before. Studies showed, even for developed countries, that earning an income was the most important work outcome for people (Kuchinke et al. 2009; ManpowerGroup 2016).

The Leaders of Tomorrow state to be primarily motivated by intrinsic factors: meaningful and interesting work. For them, the most important motivation is that "working itself is basically interesting and satisfying" (Exhibit 11). In addition, they often claim to see work as a "useful way to serve society". On the one hand, this answer should be interpreted with at least some caution as it is particularly prone to social desirability bias. On the other hand, the Leaders of Tomorrow at the St. Gallen Symposium show a tremendous engagement for non-profits and social enterprises. Not a few of them are founders of social movements and NGOs, proving that they are serious about changing the world. Another important function of work for the Leaders of Tomorrow is the provision of an "income that is needed".



Question 3

"I believe that career aspirations reflect changing social and economic conditions. Executive careers have lost part of their appeal due to reduced job security, less independence and less glamour compared to entrepreneurship. This seems to reflect a general tendency towards a focus on the impact and conditions of work, away from the social status of a position in a hierarchy."

Jakob, 29, German Investment Associate Exhibit 11

# Leaders of Tomorrow look for interesting work – that provides an income

Question: What does working mean to you? We are not only referring to your present situation but we are interested in knowing what beliefs and values you have regarding working in general. Please assign a total of 100 points, in any combination you desire, to the following five statements. The more a statement expresses your thinking, the more points you should assign to it. For example, for an equal weighting you would distribute 20 points per statement. Please read all the statements before assigning points.



Working itself is basically interesting and satisfying to you.

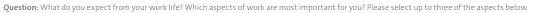
Working provides you with an income that is needed. Working is a useful way for you to serve society. Working permits you to have interesting contacts with other people. Working gives you status and prestige.

Numbers are percentages of cases | n = 7 "No answer"

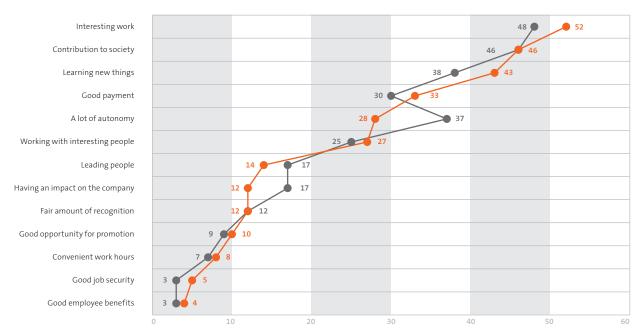
 $n=1,\!400; \text{``Leaders of Tomorrow-Wave 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ @ \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018''} \mid \\ & \text{ GfK Verein \& St. Gallen Symposium: GfK Verein$ 

xhihit 1:

# Leaders of Tomorrow primarily look for intrinsic motivation at work







Numbers are percentages of cases | n= 7 "No answer"

n = 1,400; "Leaders of Tomorrow – Wave 2018" | © GfK Verein & St. Gallen Symposium: Global Perspectives Barometer 2018

To get more detailed information about what the Leaders of Tomorrow expect from their work life — and from an employer — we asked the top talent in our study to choose the three most important expectations they have from a longer list with the option to add other factors if the list was incomplete in their opinion.

In line with the findings above, intrinsic motivations dominate. The Leaders of Tomorrow primarily expect work to be interesting, to involve a chance to contribute to society and opportunities to learn. Beside those more intrinsic motivational factors, a "good payment" is also an important expectation. It is on rank four followed by "a lot of autonomy" and "working with interesting people". In comparison, traditional incentives from HR's toolbox are less im-

portant for the polled top talent: "Good employee benefits" and "job security" received the least votes and landed on the last ranks (Exhibit 12).

The Leaders of Tomorrow in our study seem to expect something like a good "employee experience": the experience of doing something meaningful and challenging, in an environment that rewards them for their big commitment of energy and passion. From the perspective of the classic management literature on extrinsic/intrinsic motivation factors (McGregor, 1960), the Leaders of Tomorrow show support for the "Theory Y" (intrinsic; work is as natural as play or rest; people are self-motivated to work on meaningful tasks) view of rather than the "Theory X" (extrinsic; people inherently dislike work and must be controlled and coerced to perform).

Ouestion 3

"The new professionals want to exploit innovative ideas, take the reins of the future and transcend through their thinking. Taking the traditional executive career path binds you to follow the instructions of others and limits creativity."

Rigoberto, 30, Mexican Plastic and Reconstructive Surgery/ Medical Director McKay

# Is the corporate ladder losing its shine?

The traditional idea of having a successful career usually meant being promoted along management career levels. Career success was primarily defined as increasing power over people or budgets. It seems that the Leaders of Tomorrow are ready to leave this traditional career path and to search for new ways towards a fulfilling professional life.

The Leaders of Tomorrow do not aspire to traditional top-level executive careers. Only a minority of 17% of the respondents would prefer this career path. They prefer jobs fulfilling their passions instead of more traditional ideas of job status and prestige. More than one-third of the participants would prefer to be a well-known expert with deep

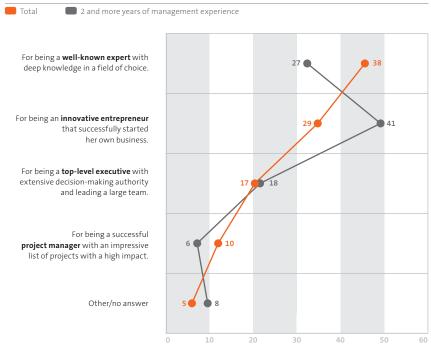
knowledge in their individual field while about 29% want to be known for being innovative entrepreneurs (Exhibit 13).

The career path as entrepreneur is particularly a target for those who already have at least two years of management experience. These are sobering results for many companies that are holding on to the hope that the Leaders of Tomorrow will "come to their senses" as they get older, drop eventual entrepreneurial ambitions, to start following in the footsteps of previous generations by pursuing a company career instead. On the contrary, the results show that more experience is associated with an increase, rather than a decrease, of entrepreneurial ambitions. As a result, companies need to rethink their incentive, retention, career and management toolset. Otherwise they'll risk losing

Exhibit 13

# Leaders of Tomorrow prefer being an expert or an entrepreneur over being a top-level executive

**Question:** When you think about your professional career in the next 15 years, what would you prefer most to be known for?



Numbers are percentages of cases

their experienced leaders and the talent pool of motivated young leaders available to them may be shrinking. Exhibit 12, showing the respondents' expectations towards work, may give some food for thought. Those Leaders of Tomorrow with at least two years of management experience value especially autonomy at work and the chance to have an impact on the company higher than the rest of the interviewed top talent.

Unless companies manage to keep their top talent busy with interesting projects and give them a chance to act entrepreneurially within the company, they might find many of them leaving after putting some years of "on-the-job training" under their belts. In a world where life-long careers and loyalty are becoming the exception, and where personal networks can survive even global distances, companies may find it hard to retain key talent long enough to successfully capitalize on the inevitable initial investment in their hiring, onboarding and training.



Question 3

- "Two different things are behind this general feeling:
- > Many people are still willing to go for an exec career at Google, Amazon, Tesla or any other tech giant. I think the issue is more that traditional economic giants simply have a "employer brand" issue.
- > Entrepreneurship is currently fashionable and people see it as a new way of living they want to have. Plus, it seems (even if wrong) that entrepreneurship is an easier way of making money."

Florent, 30, French CEO / Brigad.co



Question 3

"I think this report shows a negative feeling towards the traditional pathway to an executive career, not the executive career itself: today becoming a top executive is essentially a political endeavour, it often means to climb the corporate ladder by saying the right thing to the right person and being part of the 'winning' team. As is happening with politics and the collapse of political parties, people are fed up with talkers and prefer doers."

Christian, 30, Italian / American Project Manager

# Make purposeful work the new status symbol for your top talent

Attracting and retaining top talent is not only a question of adjusting the incentive package. Even large established players could be in danger of losing ground in the "War for Talent" compared to small and more flexible companies because of the more level playing field resulting from an unprecedented transparency in the digital era. In such an environment, small players with more opportunities for the creation of an individual work environment and the promise of real possibilities of change in the world might become more attractive for the Leaders of Tomorrow than big, shiny brands.

Many of the tools that companies today use were designed with an intrinsically lazy "Theory X" employee in mind who is mostly interested in money, power and hierarchical promotions. Bonus plans should convince employees to go the extra mile to get some extra money. Employee promotion plans show a path towards higher management positions as a reward for the most effort. To retain top talent in the future, companies will need to rethink their recruiting and management tools to also attract leadership talent with non-traditional ideas about a successful career or who look for entrepreneurial experience. Why not having a making-a-difference-inthe-world plan, a getting-to-do-interesting-projects plan or a being-recognized-for-my-contribution plan that allows people to get rewarded with purpose not just money?

Entrepreneurship is among the most attractive career goals for the Leaders of Tomorrow, especially for management aspirants, who already have some years of management experience under their belt. One way to retain them could be providing entrepreneurial experiences within the company, so called intrapreneurship. Intrapreneurship allows employees to act like entrepreneurs, for example for the case of the development of an innovative new product or service, but still within the organizational environment. The concept of intrapreneurship and its benefits have already been debated and researched for several decades. It is considered a way to motivate employees, speed up processes and foster innovation in a company (Rule & Irwin, 1988; Antoncic & Hisrich, 2001, Anthony et. al. 2014). Companies like Intel, 3M, Apple and Virgin successfully implemented at least parts of the concept.

Today's disruptive markets, that require faster adoption and the development of even completely new business models from players across all industries, force companies to rethink the way they co-ordinate both their external market-facing decisions and their internal value creating activities. A good starting point towards intrapreneurial activities, from the Leaders of Tomorrows point of view, could be to empower talent by giving authority for taking decisions to the edge of the organization where the necessary information about the market environment reside (Buder et al. 2016).



Question 3

"It is no longer about the personal career of promotion in a company, but the positive impact that we can generate through a job that we enjoy doing. 'Passion' and 'improvement in the world' have been placed above 'money' and 'personal success' in the preferences of the new generations, and that is transforming the way in which business is done and the role that the private sector can take to build a better world."

Tais, 30, Argentine Director and co-founder of Conexión Coral, Environmental journalist

# RECRUITMENT OF "LEADERS OF TOMORROW – WAVE 2018"

The study was targeted at "Leaders of Tomorrow", a carefully selected, global community of the most promising young talent. Each year, 200 academics, politicians, entrepreneurs and professionals around 30 years or younger are invited to challenge, debate, and inspire at the St. Gallen Symposium. By questioning the status quo and representing the voices of the next generation, the Leaders of Tomorrow are at the very heart of the St. Gallen Symposium, making the conference a unique experience. The study was conducted in English, using the online survey platform of GfK SE in February 2018. A total of 1,400 Leaders of Tomorrow participated in the online survey. With an estimated interview time of 15 to 20 minutes the survey demanded an intensive reflection of the issues at hand from the respondents. As an incentive, participants will receive a more detailed analysis of the results than generally available. Participants from the St. Gallen Symposium's Leaders of Tomorrow Community additionally had the chance to win one of three fully paid visits at the 48th St. Gallen Symposium.

## Selection of participants

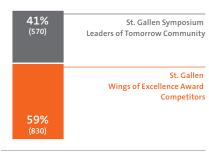
The respondents for the Global Perspective Barometer were selected through the network of the St. Gallen Symposium. Every year since 1989, the St. Gallen Symposium invites students from all fields of studies and corners of the world to share their views on a topic of greater magnitude. During the last 29 years over 28,000 thought-provoking essays from more than 1,000 universities in over 120 countries have been submitted and the symposium was happy to invite the 100 very best contributors of each year's competition to the global forum in Switzerland. Together they form the Leaders of Tomorrow Community (Exhibit 14):

St. Gallen Wings of Excellence Award Competitors: Students from 420 universities who have competed in the "St. Gallen Wings of Excellence Award" were personally invited to take part in the study by the St. Gallen Symposium. This student essay competition has been running for three decades and celebrates this year's 30th anniversary at the St. Gallen Symposium. This year, 1,259 students participated in the competition, demonstrating a high interest in the topic of the 48th St. Gallen Symposium. Of these, 830 followed our invitation to take part in the study.

St. Gallen Symposium's Leaders of Tomorrow Community: The St. Gallen Symposium team selected participants through their worldwide community of young talent who attended past symposia as Leaders of Tomorrow. For the 2018 study, 2,283 members of the St. Gallen Symposium's Leaders of Tomorrow Community have been invited for the study. Of these, 570 took part in it.

Exhibit 14

#### Survey participants: Recruitment



Numbers are percentages of cases

 $n=1,400; "Leaders of Tomorrow - Wave 2018" \mid \\ @ GfK Verein \& St. Gallen Symposium: \\ Global Perspectives Barometer 2018$ 

#### Comments of Leaders of Tomorrow

Since 2010 the St. Gallen Symposium also hand-selects 100 young entrepreneurs, researchers, politicians, and professionals to participate in the St. Gallen Symposium each year. They are picked due to their outstanding achievements and impact in their respective domains. These 100 outstanding Leaders of Tomorrow have been invited to share their opinions in an interview (see Box 3), commenting on some of the issues covered in this year's report. We used a selection of quotes from these interviews to illustrate the results of the study.

# Sampling challenge: finding Leaders of Tomorrow without a time machine

One of the challenges of identifying and recruiting the Leaders of Tomorrow for the Global Perspective Barometer is the

need to identify talented future leadership candidates before their potential is fully realized. In a perfect world, one would use a time machine to travel one generation to the future, identify those who have become outstanding leaders, and go back to interview them today.

Since we cannot know for certain today who will take on relevant positions of leadership and responsibility in 20 years, this survey cannot claim to be "representative" in the traditional sense of population sampling - neither of all future leaders in general, nor of the regions in which participants live. However, we captured a broad and international group of participants that fulfil the "Leaders of Tomorrow" definition. The Leaders of Tomorrow we have recruited to participate in the 2018 wave allow a very interesting and unique snapshot of a carefully selected group of young and qualified individuals from more than 90 countries around the world.

Rov 3

#### Ouestionnaire for interviews with selected Leaders of Tomorrow

How do you think technological innovations such as Artificial Intelligence will shape the future of work in the next 15 years?

- 1. Do you think AI will have an influence on your career and the way you'll work?
- 2. Is there anything you are worried about?

When we asked the Leaders of Tomorrow in our report, what they would prefer the most to be know for in 15 years from now, almost 40% answered "for being a well-known expert with deep knowledge in a field of choice", another 30 percent preferred to be known for "being an innovative entrepreneur that successfully started her own business". On the other hand, less than 20% chose the option "for being a top-level executive with extensive decision-making authority and leading a large team". (FYI: 10% said they want to be known for "being a successful project manager with an impressive list of projects with a high impact").

- 3. Why do you think the executive career, the traditional way for a company career, is not attractive anymore?
- 4. What do you prefer to be known for in the future and why?

#### What do you think will be the role of AI in business in the future?

5. Will AI be an assistant or even an advisor for human decision-makers like you or can you imagine an AI taking decision on its own and giving orders to human co-workers or even subordinates? Please give a short explanation for your answer.

## Please think about the future world of work in about 15 years from now and the skills one would need to be successful.

- 6. What do you think will be the most essential skills for making good business decisions and why?
- 7. At which skills and why do leaders of the current generation of managers (mostly 40-60 years old now) have the greatest need for improvement.

# A truly global sample reflecting a global world

Like in the previous year, most respondents were born between 1986 and 1995 and there are again more male than female participants in the sample (Exhibit 15).

Due to the selection criteria for being included in the Leaders of Tomorrow sample, it is not surprising that the majority of 70% of the interviewed Leaders of Tomorrow are either full-time or part-time students. The sample covers a wide range of areas of study, with students from business and management study programs, the STEM fields (an acronym referring to the academic disciplines of science, technology, engineering and mathematics) and other areas of study, particularly social and political sciences (Exhibit 16).

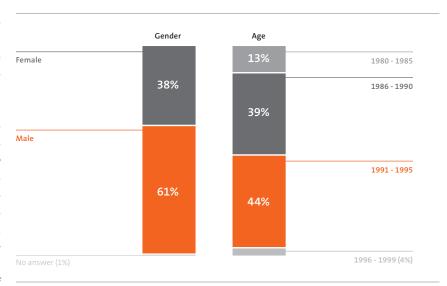
Even though many of the interviewed Leaders of Tomorrow are students, nearly all of them have at least a certain amount of job experience (Exhibit 17) allowing them a realistic assessment of the "real" business world.

A truly global group representing more than 90 countries of residence, from all regions of the world, participated in the survey. Exhibit 18 provides a regional perspective on the participants: the largest numbers of respondents are currently living in Western Europe, followed by those from Eastern Asia and Southern Asia. More than half of the participants lived in OECD and less than half lived in non-OECD countries during the time of the survey.

To understand how an increasingly globalized world is developing, it is important to have this broad participation from across regions and countries, and from both developed and emerging or developing economies. Too often, social science studies suffer from only interviewing "WEIRD" people: "Western, Educated, Industrialized, Rich, Democratic" (Henrich et al., 2010).

Exhibit 1

#### Survey participants: Demographics

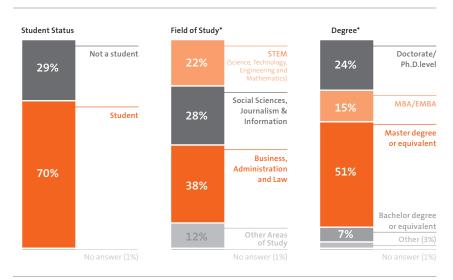


Numbers are percentages of cases

 $n=1,400; \text{``Leaders of Tomorrow}-\text{Wave 2018''} \mid \text{\o} \text{ GfK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{\o} \text{ GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Symposium: Global Perspectives Barometer 2018} \mid \text{GrK Verein \& St. Gallen Barometer 2018} \mid \text{GrK Verein$ 

Exhibit 16

### Survey participants: Education



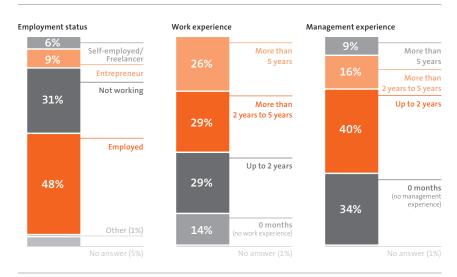
Numbers are percentages of cases

\* Current field of study/degree for students or field of study of highest degree/highest degree hold for non-students.

n = 1,400; "Leaders of Tomorrow – Wave 2018" | © GfK Verein & St. Gallen Symposium: Global Perspectives Barometer 2018

xhibit 17

# Survey participants: Current employment and job experience



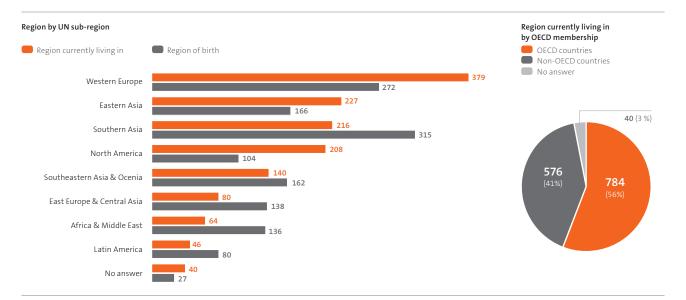
Numbers are percentages of cases

n = 1,400; "Leaders of Tomorrow – Wave 2018" | © GfK Verein & St. Gallen Symposium: Global Perspectives Barometer 2018

With active and very vocal participants coming from all around the world, this study can certainly give a voice to a culturally and economically diverse set of contexts, values, desires and mental models. Something that is necessary to reflect the truly global and increasingly multi-polar world we live in.

Evhihit 18

#### Survey participants by region



Regions follow United Nations sub-region scheme; the more common term "Middle East" was used for what is formally called "Western Asia".

OECD countries: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

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