tell

digitalswitzerland

The digital pulse of the population

A report on public attitudes towards digitalisation, recorded in the context of Digital Day 2019

Executive summary

What's it all about?

The new 'tell' series of events provoked a discussion among over 1,000 people on Digital Day. The new dialogue format on Digital Day brings the population together around a single table to discuss selected topics and come up with appropriate solutions. Together with two online studies (over 6,000 people surveyed by Oliver Wyman and sotomo), audio recordings of the discussions and their evaluation form the basis of this report. Around 20 'tell' events focussed on the following nine topics to mark Digital Day 2019: Work 4.0, Education, e-Democracy, Health, Lifestyle, Media & News, My Data, Mobility and Smart City.

Which methods were used?

For the Oliver Wyman study, conducted in June 2019, around 2,000 people were asked for their opinions on the topic of digitalisation. In addition, sotomo recruited more than 4,000 people via the online platforms blick. ch and rts.ch before Digital Day and surveyed them on the topic of the digital transformation in Switzerland. On the recent Digital Day on 3 September 2019, around 30 hours of audio material were recorded, then transcribed and evaluated by the University of Applied Sciences Northwestern Switzerland. During that process, the resulting texts were analysed using Natural Language Processing techniques and checked, among other things, for sentiments and word frequencies.

What were the findings?

The issue of digitalisation is perceived in a wide variety of ways, depending on the topic in question, and triggers mixed emotions with regard to the future. The high participation in the 'tell' events (over 1,000 people) and in the two quantitative studies shows that the population feels a growing need to discuss and debate the issue of digitalisation.

The population is particularly cautious and concerned about the topic of data. There appears to be great uncertainty about what happens to data and who has access to it. In the areas of education and smart city, respondents see the benefits of digitalisation and are prepared to use new technologies. Learning videos enable individual and completely new ways of learning, which has led to scrutiny of the traditional classroom teaching style. A majority of respondents see the area of media and news as most heavily affected by digitalisation and 60% believe that the credibility of the news has been diminished by the internet and new technologies. In the area of health, there is general agreement that digitalisation brings many advantages in terms of research, but there is a widespread sense of uncertainty in the area of health data.

In most areas, there is a desire for increased regulation and state responsibility. Central platforms (for example, for obligatory study matter or health files) should be made available to prevent the misuse of data by private parties. According to the 'tell' participants, new technologies should also have a positive impact on the environment. Reduction of emissions was one of the ideas put forward. Half of all respondents admit to believing that in the future, some of their work will be done by robots. At the same time, they also emphasise the benefits of flexible working which digitalisation also brings. On the issue of mobility, it was clear that there is a degree of scepticism about self-driving vehicles, but also a positive attitude towards the opportunities for 'Shared Mobility' and 'Mobility as a service'.

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Introduction

Digitalisation is changing every area of our society: education, health, politics, economy, work, leisure, mobility and communication are all being transformed. It is important that this process is actively shaped and discussed in Switzerland. Digital Day is the annual platform for this dialogue and reveals the developments, opportunities and risks of this transformation to a broader public. Digital Day makes these changes tangible and ascertainable. Experts, economy representatives, politicians and the population together shape the route Switzerland is taking towards becoming a leading global centre of innovation.

An initiative of digitalswitzerland

digitalswitzerland is a joint initiative of the economy, the public sector and science, whose mission is to make Switzerland a leading hub for global innovation. To that end, digitalswitzerland is already active in a wide variety of different fields, including collaborations, knowledge transfer, education, start-up ecosystems and policy frameworks. Around 170 of the most well-known companies and organisations as well as innovative locations all across Switzerland are already part of this association. The initiative was set up in 2015.

1. The dialogue at the heart of Digital Day

The national Digital Day was held for the third time on 3 September 2019. Since 2017, around one million people have taken part in this large-scale event at Zurich's central station and in the growing Digital Day regions throughout Switzerland. In 2019, visitors could once again try out digital products, be inspired by innovative projects and pose their own – sometimes critical – questions at 12 different locations.

Digitalisation is changing every area of our society. digitalswitzerland and the Digital Day partners in Switzerland want to play an active role in shaping this process and get as many interest groups as possible involved in the discussion. This goal was supported by the main partners of Digital Day 2019: APG|SGA, Google, Ringier, SBB, SRG and Swisscom. The Swiss agency for promoting innovation, Innosuisse, in its role as strategic partner, is focussed on bringing people closer to the world of start-ups and, therefore, supported various areas of Digital Day.

The successful concept was also well-received outside of Switzerland's borders. Following the Swiss Digital Day, similar events have taken place in countries such as Poland, Sweden and Liechtenstein.

The dialogue with the population has always been at the heart of the Swiss-wide event and grows stronger each year. On Digital Day 2019 the new 'tell' series of events was launched. A round of discussions based on the World Café method. Since its introduction in 1995, the concept has been used worldwide to enable a wide range of interest groups to discuss specific topics.

2. The new 'tell' format

2.1 What is a 'tell'?

'tell' is the new dialogue format for Digital Day. Based on the World Café method, on 3 September 2019, over 1,000 people took part in around 20 different 'tell' events. They discussed topics around digitalisation and shared their hopes and fears. All events followed the same methodology. First of all, experts in the relative subject areas gave short talks to introduce the topic to participants. A presenter then moderated a discussion about three questions on the issue of digitalisation. On one hand, individual participants wrote their answers on paper tissues and on the other, the discussion was recorded on audio devices for a pilot project. The exciting feature of the event was that participants sat at various group tables and kept changing tables. At the end, randomly selected table leaders presented the results in three rounds, marking the end of the event.

2.1.1 How did it come about?

The new 'tell' format was launched just a few months before Digital Day with the aim of actively inspiring dialogue among the population. When, in the wake of Digital Day 2018, there was a call for a platform where more critical opinions could be voiced, the World Café method seemed the perfect way to expand the dialogue and, thus, enable the discussion of critical questions and topics. The English name 'tell' was deliberately chosen so that it could be instigated throughout Switzerland. However, the reference to national hero William 'Tell' was also taken into account.

The idea was to encourage people to give their opinion, as there are no right or wrong answers in this new series of events. With 'tell', each and every citizen can be a hero or heroine!

2.1.2 The pillars of the World Café
The World Café method was developed as far back as 1995 and has been used countless times since. The concept is based on the following pillars.[1]

1. Clarify intent and purpose
Only once you fully understand the reason for the gathering, can you know which participants should be involved and which parameters are important to fulfil the purpose.

2. Create a welcoming space
When people feel at ease, they can think, speak and listen with the greatest creativity.

3. Consider which questions are really relevant
One or more questions can be discussed which support dialogue by means of a logical progression through several rounds.

4. Encourage participation
It's important to encourage everyone present to contribute their ideas and perspectives while, at the same time, allowing people to simply listen.

5. Connect different points of view
The participants take key ideas or topics to new tables, exchange points of view and, thus, enhance the possibilities of generating exciting new findings.

6. Reach new insights and share discoveries
After a few discussion rounds, it is helpful to initiate a conversation with the group as a whole to clarify any questions that may arise.

2.1.3 The process of a 'tell'
The 'tell' format used on Digital Day is based on the international methodology of the World Café. However, a few changes were made.

The participants were introduced to the topic by short talks given by experts. Great care was taken here to ensure that in each case, both a critical and positive opinion was demonstrated. This was done so that participants did not require any previous knowledge of the topic and could form an opinion on the day.

After the introduction, three questions were discussed. After each question, participants changed tables so that they would always engage with new discussion partners. The table leader, chosen at the start, remained at the same table the whole time and gave a brief summary each time new discussion partners came together. Everything that was said was written down by all participants on paper tissues. This could be in the form of words, drawings or loose ideas.

At the end, the moderator had the task of collecting the summaries of all three rounds from the table leaders.

The three questions always followed a progressive structure. While the first question asked about personal perceptions, the second question dealt with the opportunities and risks associated with the specific topic. The third question was designed to generate ideas for concrete implementation strategies. In each case, the three questions were structured as follows:

1. How is life changing for you personally as a result of the digital transformation in *(topic)***?**

2. Digital transformation in *(topic)* **– what are your fears and what are your hopes?**

3. What can Switzerland and you personally do in specific terms so that we can all benefit from digitalisation?

The process was not handled in exactly the same way in all 18 events and the question structure was in some cases formulated in a more individual way, so it was not always possible to make a uniform audio analysis.

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1   The World Café Community. www.theworldcafe.com
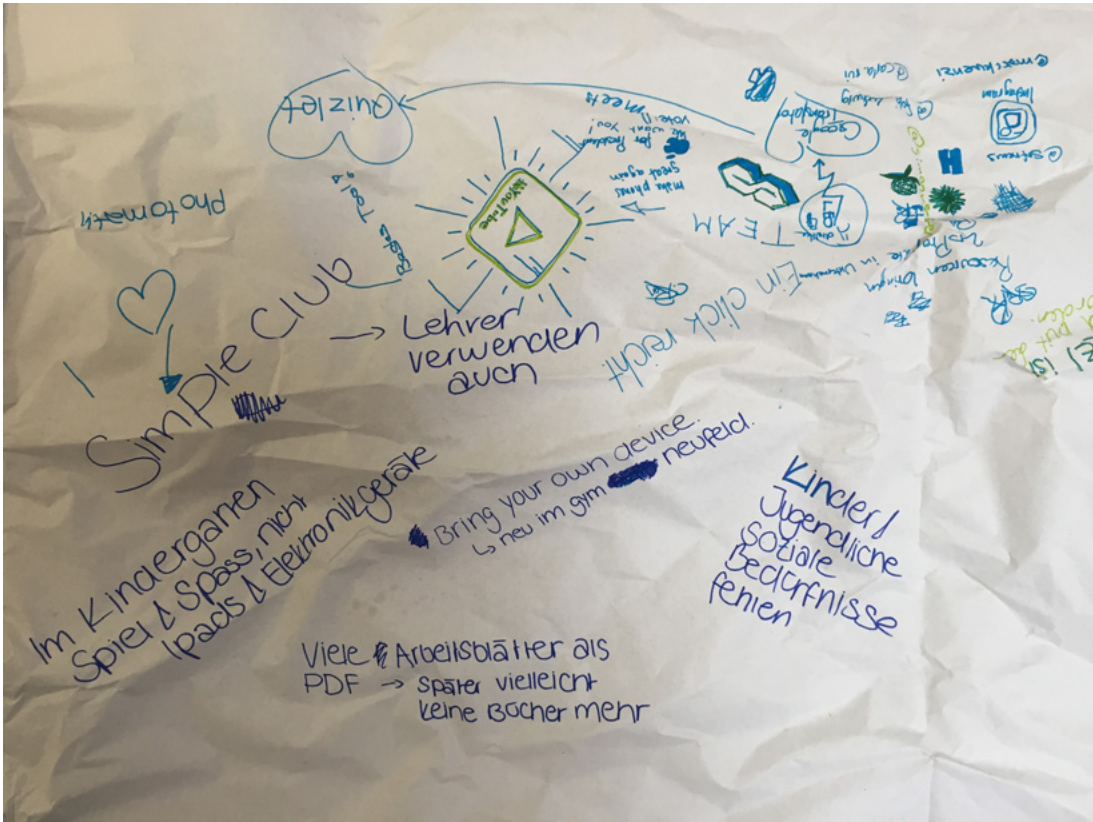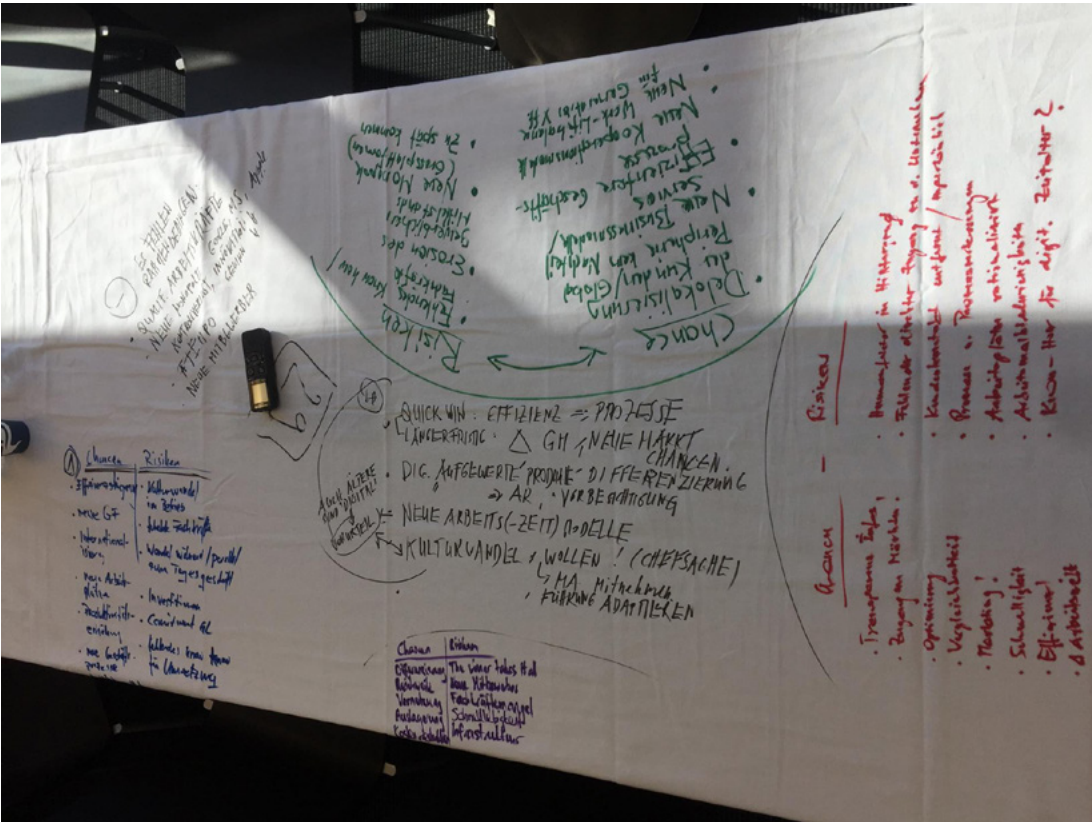
2.2 Topic Overview

The issues discussed at the 'tell' events all fell within these eight Digital Day topics.

Work 4.0	**Education**
Health	**Lifestyle**
Media & News	**My Data**
Mobility	**Smart City**

2.3 The 'tell' hosts

The contractual partners of Digital Day were free to bring in additional support for the implementation and advertising of the 'tell' events. 44 Organisations were involved in running the 18 events.

– Bern University of Applied Sciences, Switzerland Innovation Park Biel and Gassmann Digital AG
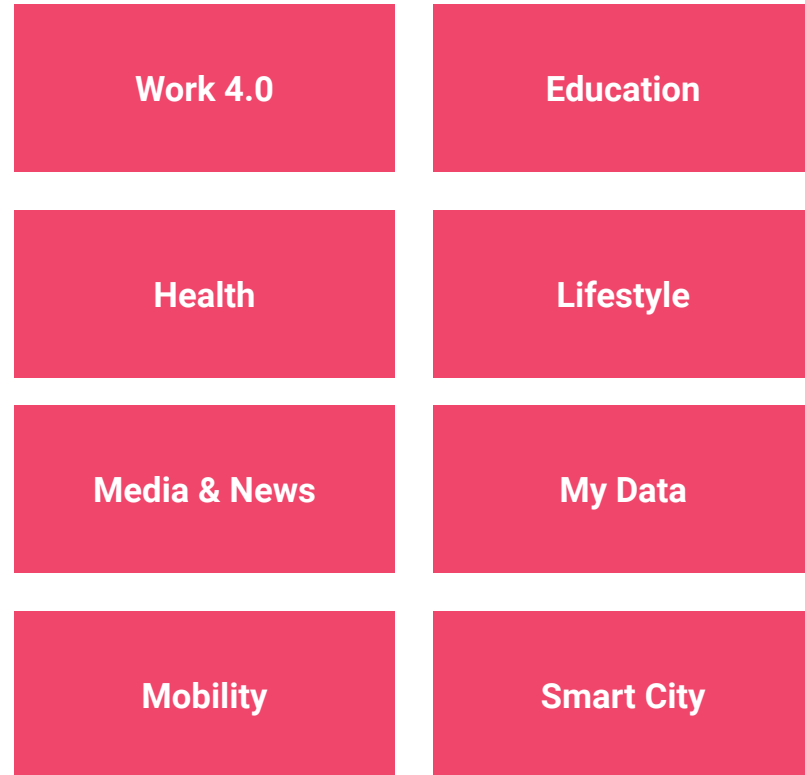
– City of Lausanne

– City of St. Gallen, run by the Tagblatt newspaper

– Digital-liechtenstein.li run by the formatio private school

– digitalswitzerland, economiesuisse, the world economic forum (WEF)

– EPFL Transportation Center, EPFL Habitat Research Center, dhCenter UNIL-EPFL, SBB, Vaudoise Assurances

– HEIG-VD

– Initiative for Media Innovation (IMI), Academy of Journalism and Media (AJM) of the University of Neuchâtel, EPFL, Le Temps and the Radio Télévision Suisse (RTS)

– Impact Hub Bern, staatslabor

– Impact Hub Geneva

– Impact Hub Lausanne

– Impact Hub Lugano, Sketchin

– Impact Hub Zurich

– Migros Aare, organised by furrerhugi

– Office for Business and Tourism of the Canton of Grisons, organised by Viaduct and run by the University of Applied Sciences of the Grisons (formerly HTW Chur)

– Personalized Health Basel and Impact Hub Basel with support from DayOne and the foundation Mercator Switzerland

– PwC Switzerland

– Republic and Canton of Geneva, HES-SO University of Applied Sciences and Arts Western Switzerland, International Committee of the Red Cross (ICRC), Initiatives of Change Schweiz, University of Geneva

2.4 Topics under discussion

The topics were interpreted in very different ways by the partners which gave rise to many different discussion rounds.

Work 4.0

'Human beings at the heart of the digital transformation'
Organiser: Republic and Canton of Geneva, HES-SO University of Applied Sciences and Arts Western Switzerland, International Committee of the Red Cross (ICRC), Initiatives of Change Schweiz, University of Geneva

Digital Day offered a chance to explore the role of local and international political decision makers in supporting the digital transformation from a legal, ethical and social point of view. The issue of employability formed the focal point of the event.

Education

'Smart education'
Organiser: Digital-liechtenstein.li, formatio private school

Opportunities, fears, utopias and realities: the education of the future.

'How will digitalisation change learning?'
Organiser: Migros Aare, furrerhugi

Digitalization has long since entered the classroom. For some time now, digital tools have been used in every sphere from primary school to adult education. And yet, we are still discussing the benefits of digitalisation in the context of learning. What skills do we need in the future in order to keep pace with our jobs?

'The effects of the digital revolution on education'
Organiser: Impact Hub Lausanne

How are Swiss universities positioning themselves in light of the new issues surrounding education and digitalisation?

Health

'Who do you trust with your data – and what do you want in return?'
Organiser: Personalized Health Basel and Impact Hub Basel with support from DayOne and the foundation Mercator Switzerland.

Nowadays, data is being collected, collated and evaluated everywhere, including in sensitive areas such as medicine and health. This gives rise to basic questions, the answers to which require a social consensus. Under which conditions are we prepared to share our data and with whom?

Lifestyle

'"tell" sustainably digital: digitalisation as an opportunity to counter climate change?'
Organiser: digitalswitzerland, economiesuisse, WEF

Is digitalisation speeding up climate change – or is it the other way around? What does it mean for humans and the environment? Can I still consume digital products with a clear conscience? Who benefits from digital advances and why?

Media & News

'Digital media and the general public: a shared commitment!'
Organiser: Initiative for Media Innovation, Academy of Journalism and Media (AJM), University of Neuchâtel, EPFL, Le Temps and Radio Télévision Suisse (RTS)

Who do you trust more when it comes to keeping up with the news: the media or your network? What do you like about the current work done by the media on their new platforms, and what do you dislike?

'Media use in future'
Organiser: Bern University of Applied Sciences, Switzerland Innovation Park Biel and Gassmann Digital AG

Fake news or professional journalism? Where are we heading?

'Local journalism – yesterday, today, tomorrow'
Organiser: City of St. Gallen with Tagblatt

Digital offers are mushrooming but they, too, are finding it hard to earn money from journalism. This raises the question: How will the citizens of a city find out what's going on in their area in future? Who will research this information, fact check it and formulate it in an attractive way? And via which channels will we consume this information?

My Data

'My virtual life'
Organiser: HEIG-VD

A virtual life encompasses many areas. In this event, the following areas were discussed: my virtual money, AI and me, virtual training, my virtual job.

'How secure is your data and who has access to it?'
Organiser: Office for Business and Tourism of the Canton of Grisons, organised by Viaduct and run by the University of Applied Sciences of the Grisons (formerly HTW Chur)

Data is the gold of the digital world. But who does this data 'belong' to, and how is it used? How will we manage our data today and in the future? And do we trust the companies that collect and store our data, then use it to generate a very personal profile?

'The effects of the digital revolution on my data'
Organiser: Impact Hub Geneva

Access to information that was previously not available or non-existent gives rise to new challenges. New influence tech-niques and marketing incentives, the emergence of debates about privacy protection, new political horizons in relation to computer hacking etc.

'The topic of data security was broached under the title "Switzerland's biggest brainstorming session"'.
Organiser: PwC Switzerland

Our everyday life is digital. Social media, e-commerce, tablets and smartphones are constantly changing our consumption and communication behavior. At the same time, we disclose more and more personal information online. Together with the Swiss population we discussed the handling of personal data.

Mobility

'Digital Mobility: What opportunities and what challenges are there?'
Organiser: EPFL Transportation Center, EPFL Habitat Research Center, dhCenter UNIL-EPFL, SBB, Vaudoise Assurances

Challenges and opportunities of future mobility How about having no more congestion in our cities, but instead, just a couple of autonomous shuttles taking you to your destination?

Smart City

‘City debate on digitalisation: Smart City Zurich & Artificial Intelligence’
Organiser: Impact Hub Bern, staatslabor

How will the city council interact with its citizens? How will our political processes change as a result of digitalisation? What will the Swiss state of the future look like? In order to shape this transformation sensibly, we have to understand how Swiss citizens think about digitalisation. Are they afraid of artificial intelligence, or are they looking forward to technologies that will make their lives and work easier?

‘Digital transformation in our cities’
Organiser: City of Lausanne

The city of Lausanne invites people to enter into a dialogue about the digital transformation in the public sector, which could improve and/or ease not only the daily lives of its citizens, but also that of employees in various jobs.

‘What might the city of the future look like?’
Organiser: Impact Hub Lugano, Sketchin

‘City debate on digitalisation: Smart City Zurich & Artificial Intelligence’
Organiser: Impact Hub Zurich

Digitalisation opens up new possibilities in the city: how we organise our lives, how we work, how we use our resources and how we live together. The city of Zurich is creating a framework for making use of the opportunities offered by the digital transformation and is building on the intelligent networking of people, organisations and infrastructures. After all, digitalisation opens up new possibilities for participation and online discussions between citizens and the city council.

3. Methods: Quantitative and Qualitative

3.1 Oliver Wyman study

Oliver Wyman is a member of the digitalswitzerland initiative and is committed to promoting Switzerland as a digital hub. Digitalisation brings new opportunities for work, education and health. At the same time, it is important to take into consideration the concerns of the population, such as cybercrime or the effects on interpersonal relationships and income equality. Oliver Wyman is committed to the Swiss market and is keen to ensure that Switzerland can take full advantage of the opportunities that digitalisation is offering while overcoming any challenges.

In both 2017 and 2018, Oliver Wyman conducted a survey prior to Digital Day in order to decode the digital DNA of Switzerland. The results of the study carried out in June 2019, together with the sotomo study, form the basis for this report and the further discussion of the findings from the 'tell' events.

3.1.1 Method
In June 2019, Oliver Wyman surveyed around 2,000 people in Switzerland aged 14 years or more to ascertain their attitude to the issue of digitalisation. The analysis was carried out in German and French and is representative in terms of age, gender and residential area (city, suburb, country).

Representative status (profiling extract)

Bar chart — age distribution:
- 14 – 19 years old: 8%
- 20 – 29 years old: 16%
- 30 – 39 years old: 18%
- 40 – 49 years old: 20%
- 50 – 59 years old: 18%
- 60 – 69 years old: 13%
- 70 < years old or more: 8%

Donut chart (gender): Female 50%, Male 50%
- Female
- Male

Donut chart (language): French 25%, German 75%
- French
- German

Source: © Oliver Wyman
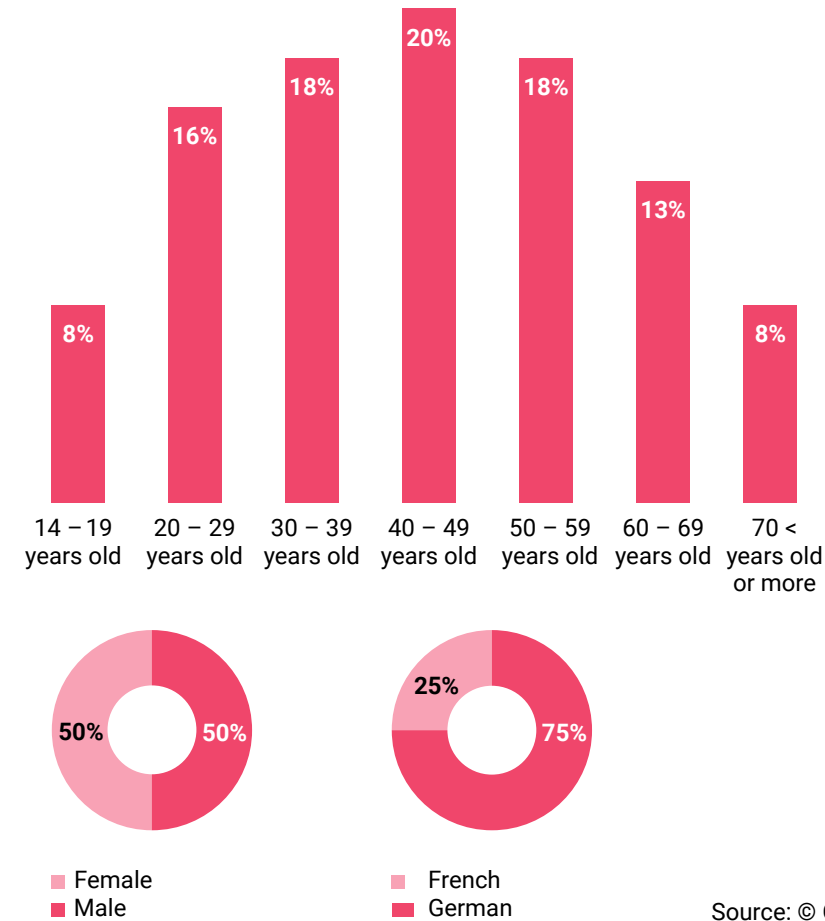
3.2 sotomo study

With regard to Digital Day 2019, the research institute sotomo was commissioned by Ringier AG to survey over 4,000 people in Switzerland. The representative study reveals the way the digital transformation is evaluated and perceived by the adult residential population of Switzerland.

3.2.1 Method

4,368 people between the ages of 18 and 70 were surveyed over a two-week period. Participants were recruited via the platforms blick.ch and rts.ch and the study is representative in terms of age, gender and educational qualifications.

3.3 Research cooperation University of Applied Sciences of Northwestern Switzerland

A special research cooperation was agreed with the University of Applied Sciences of Northwestern Switzerland. It was able to use the 'tell' recordings for its 'Speech-to-Speech' project. Together with Zurich University and the University of Applied Sciences of Zurich, they are training a system for the machine language recognition of Swiss German (dialect) and optimising the quality of the system as far as possible.

By way of addressing this problem, the project requires a body of 2,000 – 3,000 hours of audio recordings, including transcription into standard German. This quantity of data is being collected from various sources and should cover the various dialects as broadly as possible. The approx. 30 hours of audio material from the 'tell' events also forms part of this project. In return, the University of Applied Sciences of Northwestern Switzerland evaluated the audio material and provided us with the anonymised results.

3.3.1 Method

The 'tell' discussions were manually transcribed (Swiss German) or machine-transcribed (French/Italian). The resulting texts were then analysed using techniques from the field of Natural Language Processing (NLP). Natural Language Processing is one of the most frequently used techniques in machine learning application. Specifically, Sentiment Analysis, Named Entity Recognition, Topic Modeling and Word Frequencies were all applied.

Sentiment Analysis

The Sentiment Analysis looks at what sentiments are expressed about a certain subject. Most of the procedures used rely on linguistic sources or use the concept of machine learning. Of course, even the best software cannot capture all the nuances of human language and classify the tone correctly.[2]

Named Entity

Named Entity Recognition (NER) is a process in which clearly nameable elements (e.g. names of people or places) in a text can be marked automatically.

Topic Modeling

Topic Modeling serves to find topics or discourses in text. It uses statistical processes that link each word with every other word in order to measure the frequency of their use and then establish relationships between these words. The words are counted without regard to sequence or appearance.

Word Frequencies

Word Frequency is a statistical measure that reveals how often a certain word appears in a text or body of text.

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2   What is a Sentiment Analysis. clickworker.de/sentiment-analyse

4. Opportunities and Risks: what moves Switzerland

4.1 Findings

The findings from the three existing studies (Oliver Wyman, sotomo, research cooperation) are summarised in the following subsection. Selected statements from the 'tell' events back up the findings by providing support and clarification. To that end, the German and French transcripts were also scanned manually and interesting statements highlighted and integrated into the report.

Work 4.0

According to the sotomo study, 9% of respondents assume that their job could be replaced by computers or robots in 10 years. A further 48 percent believe that at least part of their job could be replaced in the same way. It is striking that these values are just as high in non-manual professions such as administration, banking and insurance.

'When we think about the mobility sector, i.e. the automotive, railway and airline sector, we must be clear that here, too, jobs will assume a different form and individuals will need to be retrained.'

Around half of all Swiss citizens assume that digitalisation will lead to more job losses than new job gains. Only 16 percent assume the opposite. Those people who are actively involved in the areas of planning, IT, consulting and management tend to be the most optimistic.[3]

'Digitalisation will lead to something else. There are jobs that will disappear. What will then happen with those people?'

The expectation is that not only will there be pressure on jobs, but also, and especially, on the nature of the work. 53 percent expect that in future, there will be even more challenging work. 19 percent believe the opposite.[4]

The Oliver Wyman study discovered that the majority of respondents feel sufficiently trained for the next five years (82%). A minority of those questioned (20%) feel left behind in terms of digitalisation and unable to keep pace with technological advances.

'Mentally, people are the same as before, so even when technology takes a step forward, people still don't think and work with the tools that are available.'

'I have to deal far more with worries, particularly of the older employees in the team, when it comes to digitalisation.'

The hope that new jobs will be created is heavily dependent on the sector. There is, however, a general agreement that the internet and technology will make work easier and simpler.

'I think that one aspect of digitalisation is that many people will no longer have to go to a specific place to work.'

'I feel that my work is more compact in my notebook, which I always have with me, and that I can react much faster, and that documentation is much easier for me than before.'

With regard to 'Work 4.0', there was a lot of discussion about France, the USA and China, during which it was noticeable that the terms USA and China were given a far more positive spin than France.

The majority of respondents indicated that the internet and new technology were improving education. There was more agreement from people with a lower level of education than from those with a degree or doctorate.[5] → **DIAGRAM ON PAGE 24**

At the 'tell' events, the issue of education and digitalisation was also discussed with great intensity. Key words here were YouTube and general (tutorial) videos.

'In terms of opportunities, I would say that you can partially replace teachers through digitalisation.'

'You simply have the option of finding information via YouTube and videos without having to go to school.'

'Anyone can access all knowledge virtually; you just have to know how to find it.'

Education

The lower the level of education, the higher the agreement that internet and technology educate us
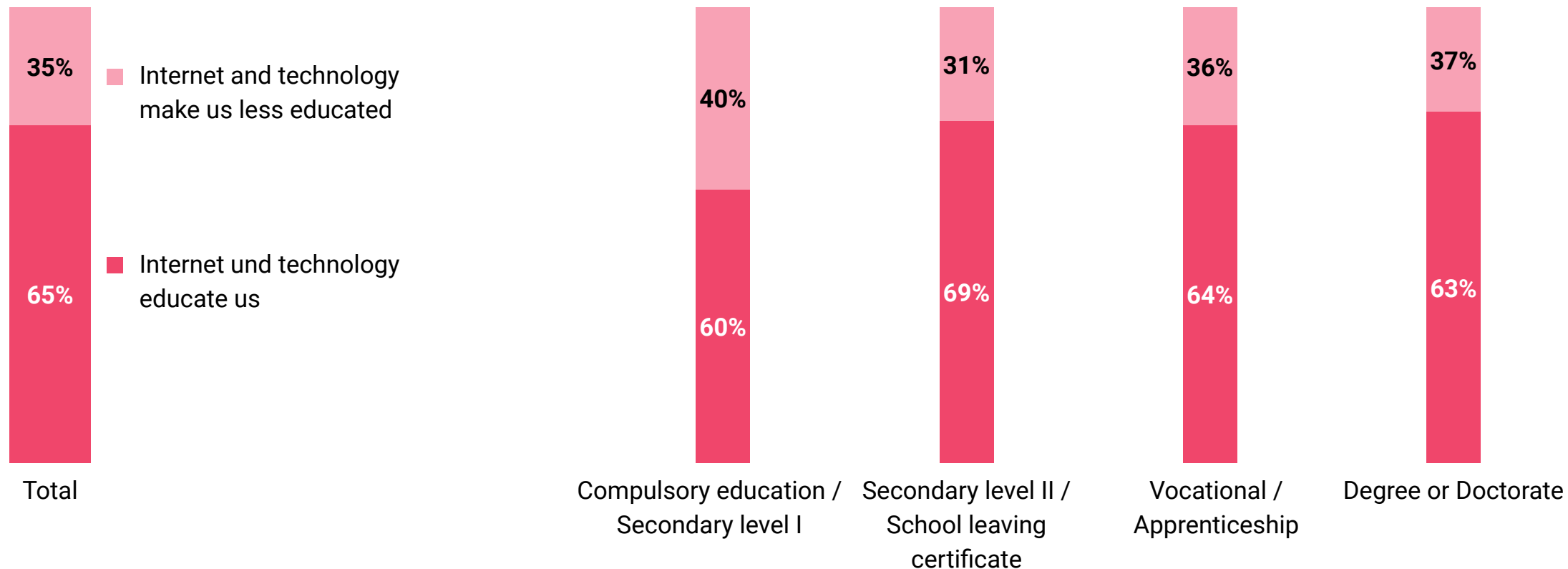
35% Internet and technology make us less educated

65% Internet und technology educate us

Total

40%
60%
Compulsory education / Secondary level I

31%
69%
Secondary level II / School leaving certificate

36%
64%
Vocational / Apprenticeship

37%
63%
Degree or Doctorate

Question: To what extent do you agree with the following statements? "Internet and technology educate us", % agreement = agree (strongly)
Source: © Oliver Wyman

'In addition, you always have YouTube and Google at hand. So nowadays, you are more flexible, geographically independent and don't have to carry heavy bags around with you.'

However, some sceptical opinions were voiced during the 'tell' events:

'I slightly doubt that all the teaching you get at high school can be outsourced to YouTube.'

'Certain skills, such as social skills, fall by the wayside with online training.'

'Yet at the same time, there's pressure to always keep educating yourself further.'

'Language is always much more, it's also a culture. Intercultural skills are becoming more and more important. We need to be able to read and write. We mustn't move away from that.'

'The great danger at present is the fact that there's a new way of thinking: What we have done so far isn't worth anything. Because it's simple, because it's not digital.'

Although the majority feel that school cannot and should not be foregone altogether, there is general agreement that the school system also needs to be adapted to the corresponding digital possibilities.

'Where we are heading it's actually all about the schools learning how to learn.'

'School can still be the first point of dissemination.'

'That's also the teachers' responsibility. Not just to stand at the front of the classroom and show PowerPoint presentations, but rather to get involved by conveying social skills and working together in a group.'

'You can only think creatively about something if you have the basic skills. You can't express yourself through art if you can't draw. If you don't have the skills, you can't deal with it. And that's what schools must promote – these basic skills.'

'Clearly from the Federal Government, promote it more strongly, in other words, with financial support. Put more money into digitalisation. And that also includes automation, artificial intelligence, etc.'

There is widespread agreement about making learning easier through the internet and new technologies.

'You can personalise your learning, it can be tailored to your needs, you can take from it what you need and not what the teacher or some lecturer says.'

To some extent, the responsibility is handed to the state, too.

'I think it would be a good idea if the state had a homepage and you could do official courses there, so it could offer state-run school courses about certain topics.'

Health

On the issue of health, there are divergent opinions on the influence of digitalisation. 63% would trust hospitals, doctors or health insurance companies with their data in future in order to receive more personalised services / offers in return. Women and younger age groups were more critical about the impact of digitalisation on health.[6]

→ DIAGRAM ON PAGE 28

'And I believe that whether you are in England, Germany or Switzerland, wherever you are, healthcare in that sense is also a private factor. People can earn money from it.'

More than anything, discussions at the 'tell' events focussed on the issue of a central platform, where health data could be collected and only visible to certain people. Based on electronic patient files.

'I believe we should support the efforts to create a standard platform for the data.'

Women and younger age groups are more critical about the influence of the internet and technology on health
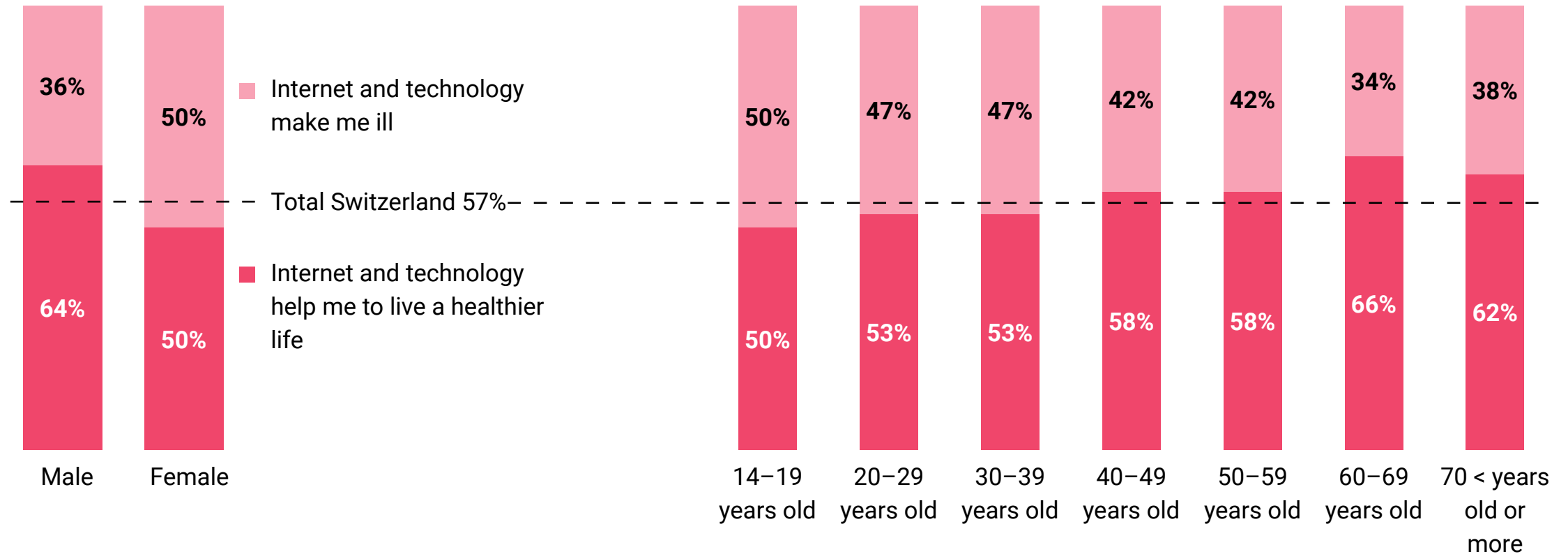
Male: 36% / 64%
Female: 50% / 50%

Internet and technology make me ill

Total Switzerland 57%

Internet and technology help me to live a healthier life

14–19 years old: 50% / 50%
20–29 years old: 47% / 53%
30–39 years old: 47% / 53%
40–49 years old: 42% / 58%
50–59 years old: 42% / 58%
60–69 years old: 34% / 66%
70 < years old or more: 38% / 62%

Question: To what extent do you agree with the following statements? 'Internet and technology help me to live a healthier life', % agreement = agree (strongly)
Source: © Oliver Wyman

'Hope: that my medical condition is, as it were, also transferred. Another hope is: completely new findings for research.'

'There are less duplications. So you can reduce costs as a result. You can also monitor it all better by the way.'

In the health care sector, the discussion was first and foremost about the opportunities and risks of digitalisation in Switzerland, but China, Denmark and Estonia were also mentioned, with Denmark being positively emphasised in particular.

'In other words, no matter where I go to the doctor or hospital in Estonia, everyone there can always access the same data pool. And I can check my data myself at any time. A kind of log file.'

Lifestyle

Only one 'tell' event was dedicated to a single issue, which was classified as 'Lifestyle'. 'Digitalisation and Sustainability' was the main topic of the discussion and there was a particular focus on the issues of the environment and use of CO_2.

'You change your mobile phone. But then you appease your conscience because you take it back to the shop. And you don't think about where it ends up. And we all know that these devices are sent somewhere in Asia. And poor people take them apart by hand.'

'I believe that digitalisation will also help us with the whole efficiency thing, which we all need.
It's great, saving resources, sharing and all that.
But we're deluding ourselves a little here. After all, we believe we're making a good contribution.
We don't need any less. Or do we?'

'I believe the most important thing is always that you act as your own role model. We can't change the whole world, but we can pass on this positive sense of innovation.'

Media & News

Respondents feel that to date, digitalisation has had the most impact on the way we deal with news and information. Three quarters of respondents count this as one of the areas of life that has changed the most as a result of digitalisation.[7]

Among the younger year groups, social media and online news clearly dominate. Older age groups, in contrast, still tend to get most of their news from the television. The majority of respondents (60%) believe that the credibility of the news has declined as a result of the internet and technology.[8]

Fake news and the general quality of the news coverage were frequent topics of discussion.

'I'm also prepared to pay for a source that I trust.'

'Speed over quality is a bit of a focus right now.'

'For me, I realise that I need experts to filter the information because I don't have time to read and see everything. And that's why the official media such as SSR or newspapers are there to do the filtering for me.'

The quality of the news in terms of credibility is deemed higher by respondents who pay for online news.

Internet and technology enhance the credibility of the news through more transparency and variety of sources

Internet and technology reduce the credibility of the news through a greater lack of transparency and contradictory sources

Total
- 40%
- 60%

I pay for online news
- 51%
- 49%

I occasionally pay for online news
- 51%
- 49%

I do not pay for online news
- 37%
- 63%
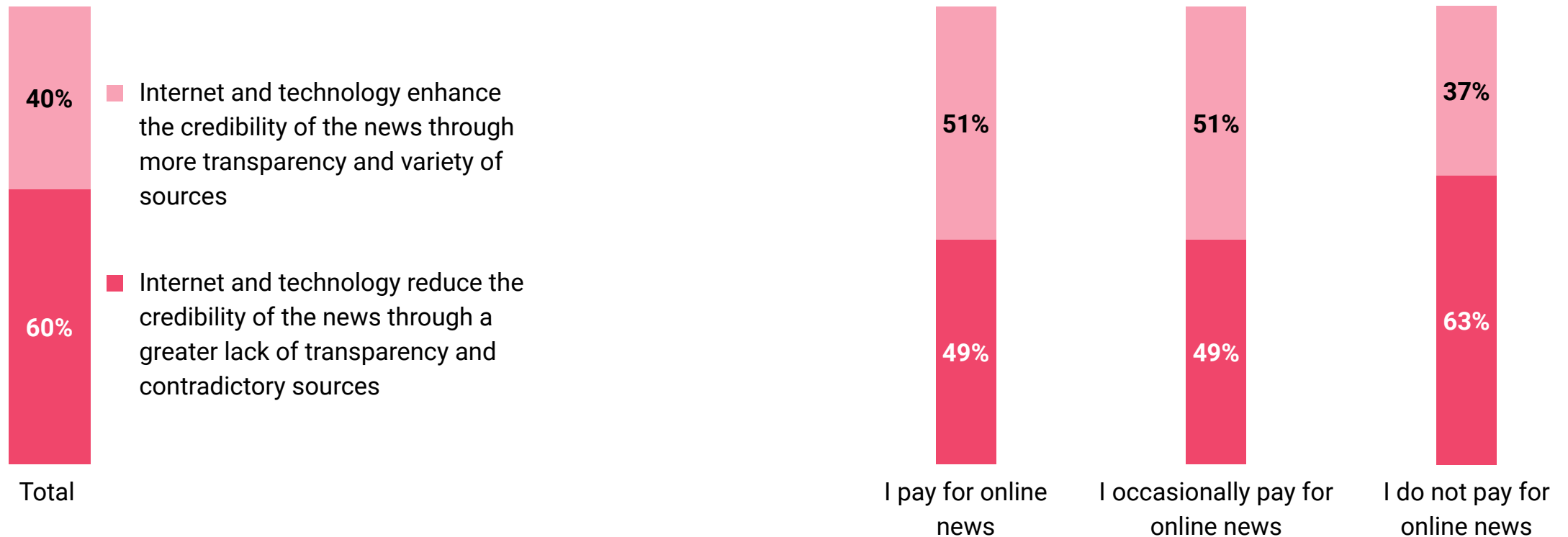
Questions: To what extent do you agree with the following statements? 'Internet and technology reduce the credibility of the news through a greater lack of transparency and contradictory sources'
% agreement = agree (strongly)
Source: © Oliver Wyman

However, there was also intensive discussion of the new, positive opportunities for digitalisation in the area of Media & News.

‘The man in the street may well have a far greater chance of being heard than was ever possible in the past.’

‘Now editors can't just brush any stories or issues under the carpet.’

‘Non-linear news consumption is another positive. In other words, that you can also watch the television news at 2 (o'clock) in the morning if you want. That's a positive result of digitalisation.’

The platforms Facebook and YouTube were also rated more positively within the topic of Media & News than that of data security.

‘I don't believe regionality will be lost as a result of the digital transformation. You'll just find it in other products, like on Facebook.’

‘What I still find exciting are the new possibilities that everyone has to be their own little news editor or journalist. And not just these influencers. There are these YouTube channels run by a freak who's creating something, a specialist in their field. Absolutely fascinating. These people can tell you stuff that you don't hear about anywhere else.’

My Data

The topic of data was rated negatively by the majority in all three studies. There was widespread agreement about the rise of cybercrime as a result of the internet and technology, with a call for more regulation, as shown by the Oliver Wyman survey.

'We certainly believe that federalism is a great obstacle that we need to overcome. And also within Switzerland, we need to get ready to exchange data. But we must also try to eliminate data misuse.'

'That people should be more aware of their data and demand data from the relevant places.'

'The problem with cybersecurity starts with freedom and protecting the personality of the individual.'

The fear of disclosing personal data online and not knowing what happens to it, appears to be a very important issue for respondents as well as in the discussion rounds.

'I don't want my mobile phone to be constantly listening in on me.'

'We asked ourselves whether instead of handing over data, we should retain control of our own data. With a kind of ID, an identity card. So that you can decide for yourself when you want to disclose this data.'

'That you simply don't know where the data is, who has what. That leads to huge uncertainty and excess stress. And that results in a certain passivity.'

In the 'tell' events, Facebook tended to come off quite badly. Opinions around the issue of 'My Data' were particularly negative.

'At Facebook etc., there is not one person in charge who must take responsibility for data and data security. With regard to data leaks.'

'Distrust of the giants (Amazon, FB, WhatsApp…) is growing. You no longer know what happens to your data.'

The USA and China were controversially debated countries at the 'tell' events in connection with data security. It is striking that both these countries have a rather poor image in this respect and are often mentioned in a negative sense.

'That's the other extreme about China. Where the state also collects data. I just have no insight there. At most, I can see how high my score is, meaning the game level that I've reached in China. Nothing more.'

Low trust regarding provision of personal data, certain sectors (e.g. health system) enjoy greater levels of trust

Change in trust
Previous year (% points)

'I am happy to share my personal data in exchange for free services'
- 31%
- 29%

'I worry about disclosing my personal data online'
- 53%
- 54%

'I would rather be "offline" in order to protect my privacy'
- 45%
- 42%

Sector	Trust	Indifference	No trust	Change
Hospitals, doctors or health insurance providers	63%	12%	25%	-2
Universities, colleges, research institutes	61%	19%	21%	+3
Banks	58%	11%	31%	-1
Car and household insurance companies	50%	17%	33%	-1
Government and public institutions	48%	15%	37%	+2
Airlines and travel operators	44%	19%	36%	0
Mobile phone providers	39%	19%	42%	0
Retail businesses	38%	22%	40%	0
Online retailers (e.g. Amazon)	26%	20%	54%	0
Technology companies (e.g. Google)	25%	17%	59%	0

■ Survey 2019   ■ Survey 2018

■ Trust   ■ Indifference   ■ No trust

Question: To what extent do you agree with the following statements? 'I am happy to share my personal data in exchange for free services', 'I worry about disclosing my personal data online', 'I would rather be offline in order to protect my privacy', 'Will you in future trust the following sectors with your personal information and data in order to receive personalised services/offers?',% agreement = agree (strongly)
Source: © Oliver Wyman

Mobility

The issue of mobility was not just omnipresent in the discussion rounds, but also formed part of the quantitative surveys.

What's striking here is the widespread scepticism about the breakthrough of innovations in the field of transport: Only 30 percent assume that self-driving cars will have been established by 2030.[9]

This is confirmed by the Oliver Wyman study, which also highlights the fact that in rural areas and in French-speaking Switzerland, doubts about self-driving cars are slightly greater than in German-speaking Switzerland.

This topic was also discussed in the 'tell' events where it received generally positive ratings.

'When it comes to transport, autonomous driving is perhaps an exciting topic where you can minimise stop-and-go to a certain extent, where exhaust fumes are currently emitted needlessly because people don't concentrate on their driving. If cars were fitted with sensors, that could be optimised.'

'If cars could communicate with each other and the one in front put its brakes on, my car would also brake. That's just enhancing our general quality of life, isn't it?'

'We call our car. Our car picks us up, then takes us to the place we want to go, and we get out. No parking problem, the car doesn't belong to anybody and we have fewer emissions as a result.'

'With the new technology it's now possible to reduce the number of vehicles, as they are now all connected to each other, make less noise, can be disposed of better and improve traffic conditions.'

Only 7 percent believe that air taxis will be introduced in the future. Though 45 percent still assume that by 2030, goods will be delivered by drones or robots.[10]

The topic of 'Shared Mobility' was also discussed, and scrutinised from an ecological and economic perspective.

'If cars would fully drive on their own, that would achieve a lot in savings. But then the other four people would have to sell their cars. Or not buy one in the first place.'

Smart City

Through new technologies, people are more prepared to use digital services. Here there is a difference between city and countryside as well as between French-speaking and German-speaking Switzerland.[11]
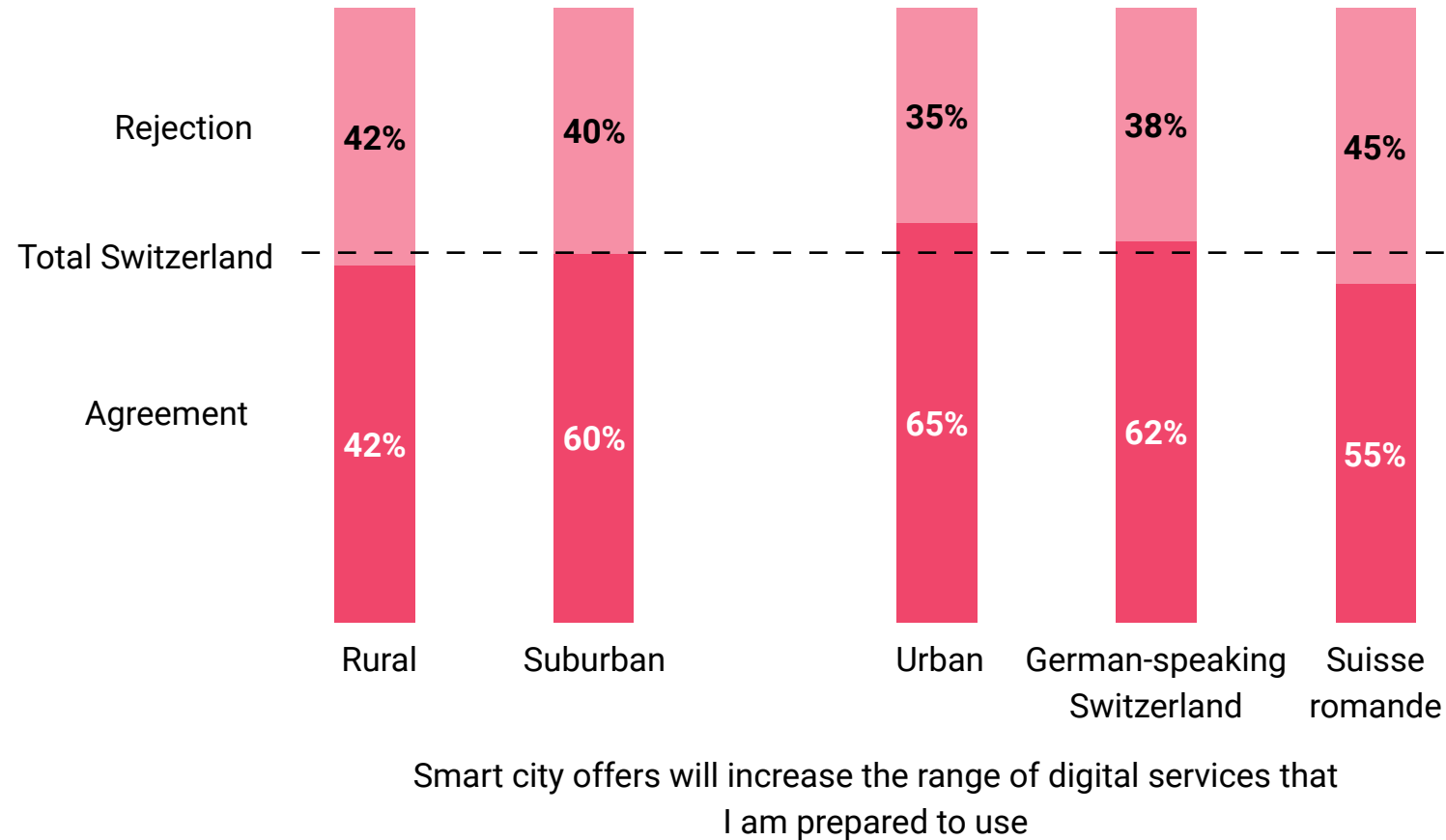
→ DIAGRAM ON PAGE 40

'We are starting to have intelligent cities, with new applications being developed all the time. There's still a certain risk involved. I think that when we automate a decision, we maintain a certain degree of freedom, whatever happens. But we will have more supervision which will in turn lead to a huge loss of freedom.'

'When we talk about digital transformation, it no longer just includes technology, but also changes in behaviour, changes in vision and also organisational changes in the public sector.'

'I think it's great that I can see precisely how much electricity each appliance in my house uses. That makes me far more aware.'

To what extent do you agree with the following statements?

Rejection

Rural	Suburban	Urban	German-speaking Switzerland	Suisse romande
42%	40%	35%	38%	45%

Total Switzerland

Agreement

Rural	Suburban	Urban	German-speaking Switzerland	Suisse romande
42%	60%	65%	62%	55%

Smart city offers will increase the range of digital services that
I am prepared to use

Question: To what extent do you agree with the following statements? % agreement = agree (strongly)
Source: © Oliver Wyman

The discussion around 'Smart City' was heavily focussed on the city of Lausanne. Participants discussed what has already been implemented in this area or is due to be implemented in the near future.

'The first thing is the maintenance and use of the public domain or public sector using digital means, for example automation (thinking of the driverless M2 metro in Lausanne, which has been in the public sector for years). However, it can also affect, for instance, the automatic care of parks or gardens. The second paradigm is that of recording: We want to put sensors everywhere, for example in underground car parks, small lights that show whether a vehicle is present or not, whether there are free spaces or not. However, these sensors could also be vehicle noise sensors, traffic light sensors or energy sensors in homes to follow the consumption curve.'

The feelings about Lausanne as a Smart City were very positive. Furthermore, a great deal of the discussion revolved around Google solutions.

'Today's connected cities bring great hope in the sense that artificial intelligence can support us in everything we do. But we need a framework for that development that understands the social situation of citizens.'

'Then again, for example, the TPG (Geneva Public Transport) uses data to analyse traffic. Thanks to their data management, they are able to reduce congestion.'

'As long as the Canton doesn't provide a service, the smaller communities won't benefit from it.'

66% of respondents indicate that the internet and technology allow improved co-determination opportunities.[12]

e-Democracy

'But today, in our work as journalists, we are very optimistic about the contribution made by digital technology. It is really exceptional to see the effect that sharing information has on democratic participation. It makes it far easier to get a clearer picture. I call it digital democratic information.'

'We all supply intelligence which leads to a democratisation of that intelligence.'

'Today we are fortunate enough to live in a democracy but that wasn't always the case. It's very easy for a leader to use data to endanger democracy.'

'We have to find a way of regaining control of our data. But we also have to control how the algorithms work. The biggest risk for me is when technology imposes visions on us and threatens democracy.'

There is still a call for more regulation – a view that is particularly expressed by women. This was revealed by the Oliver Wyman study but emphasised in the 'tell' discussions as well.

'But there it's once again the decision makers, especially in politics, who have to set the framework conditions so that things move in the right direction, right?'

3   sotomo, 2019.

4   sotomo, 2019.

5   Oliver Wyman, 2019.

6   Oliver Wyman, 2019.

7   sotomo, 2019. Question: In your view, in which areas of life in our society has digitalisation had the most impact to date? (max. 3 answers).

8   Oliver Wyman, 2019.

9   sotomo, 2019.

10   sotomo, 2019.

11   Oliver Wyman, 2019.

12   Oliver Wyman, 2019.

Consensus that the internet improves our rights of co-determination
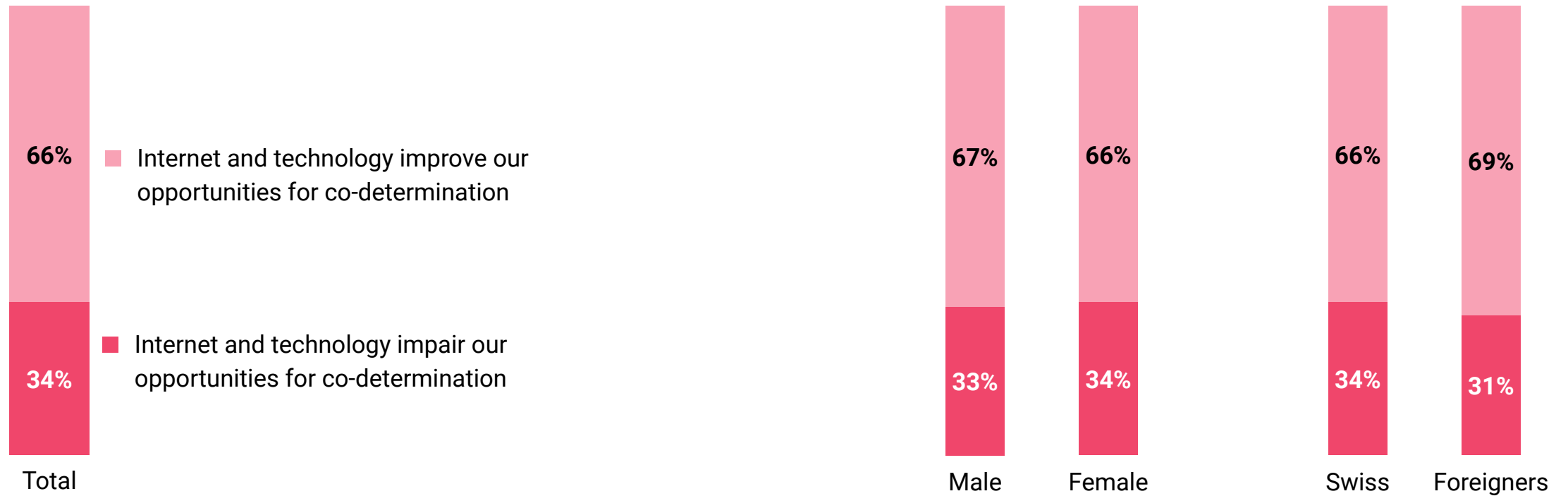
66% ■ Internet and technology improve our opportunities for co-determination

34% ■ Internet and technology impair our opportunities for co-determination

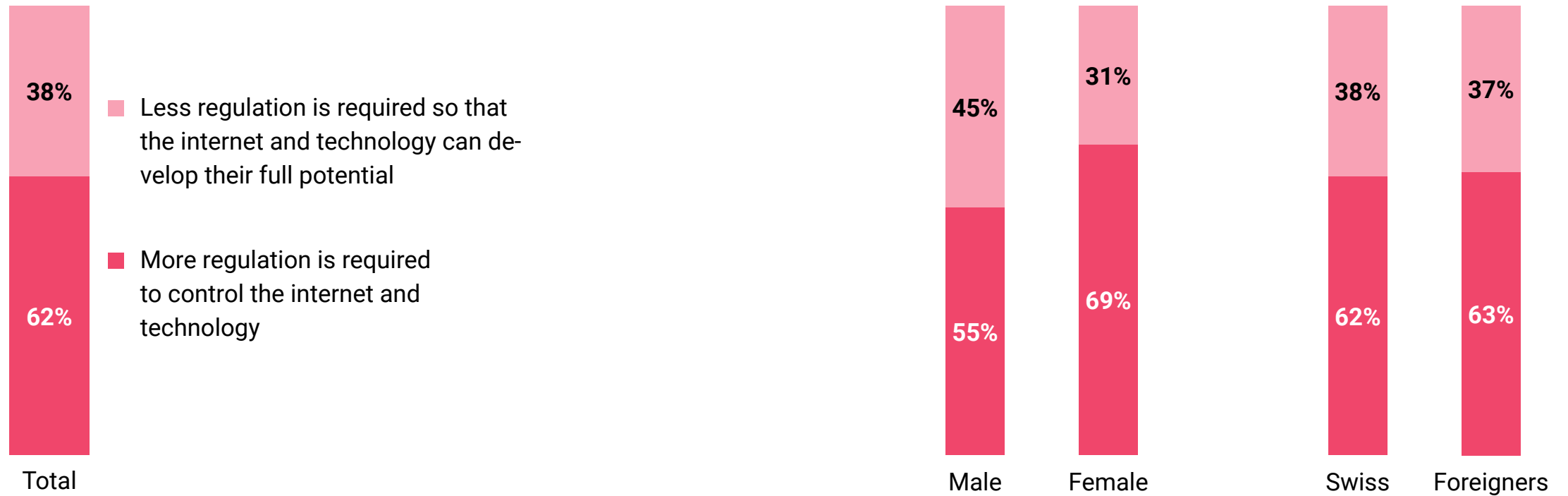| Total	Male	Female	Swiss	Foreigners
66%	67%	66%	66%	69%
34%	33%	34%	34%	31%

Question: To what extent do you agree with the following statements? 'Internet and technology improve our opportunities for co-determination', % agreement = agree (strongly)
Source: © Oliver Wyman

General desire for more regulation, especially amongst women

38% Less regulation is required so that the internet and technology can develop their full potential

62% More regulation is required to control the internet and technology

Total

Male: 45% / 55%
Female: 31% / 69%

Swiss: 38% / 62%
Foreigners: 37% / 63%

Question: To what extent do you agree with the following statements? 'More regulation is required to control the internet and technology', % agreement = agree (strongly)
Source: © Oliver Wyman

4. Opportunities and risks: what moves Switzerland

4.2 Discussion

The three studies clearly showed that the issue of digitalisation is viewed in very diverse ways. While one technology is seen as an opportunity in one area, in another, it can be viewed as a threat. The high level of participation in the 'tell' events (over 1,000 people) and in the two quantitative studies shows that the population has an increasing need to talk about and debate the issue of digitalisation.

The evaluation of the 'tell' events proved to be a challenge due to the various procedures, question structures and, at times, low quality of the audio recordings. However the quotes give an insight into the conversations and form excerpts from the discussions.

The digital future triggers mixed reactions amongst the Swiss population: 36 percent indicate that they look forward to it, 35 percent fear it. Men are clearly more optimistic about it than women. Age, on the other hand, only plays a subordinate role.[13]

The 'tell' events have revealed that digitalisation is viewed positively in the areas of Education and Smart Cities. In the area of health, there are many doubts but also hope with regard to research. People are particularly cautious when it comes to their own data: Here, the general feeling is decidedly negative. Even in the sotomo study, the loss of privacy through data collection is clearly the most widespread fear, at 64 percent. Widespread agreement about the increase in cybercrime through the internet and technology, along with a call for more regulation, was established through the Oliver Wyman study.

Respondents in the sotomo study feel that to date, the biggest effect of digitalisation has been on the way we handle information. In future, however, they expect the greatest changes to be in the labour market. Yet there is still widespread agreement that people are sufficiently trained for the jobs of the future.[14]

According to the sotomo study, respondents expect the effects to be greater in the future than in the past, especially in the areas of mobility and health. The Oliver Wyman study also encountered broad agreement about the simplification of personal mobility planning, especially in the cities, through the internet and technology.

Participants want more regulation and activism on the part of the state. They are asking for central and protected platforms – not just for health data but also in the area of education.

Digitalisation seems to be rated as especially progressive and positive in the area of education. Participants appear to feel that the individual opportunities to gain knowledge are highly significant. On the other hand, there is a fundamental desire to retain classic schools, as great value is attached to social, physical contact.

In principle, digitalisation seems to bring many benefits and the majority of participants were open to and curious about change. But many fears were also expressed – especially with regard to data security. Wherever participants feel powerless, they want more regulation and protection from the state. → **DIAGRAMS ON PAGE 48 AND 49**

13   sotomo, 2019.
14   sotomo, 2019.

Internet and technology are seen as an opportunity by 75% of respondents, a view that is shared amongst all age groups
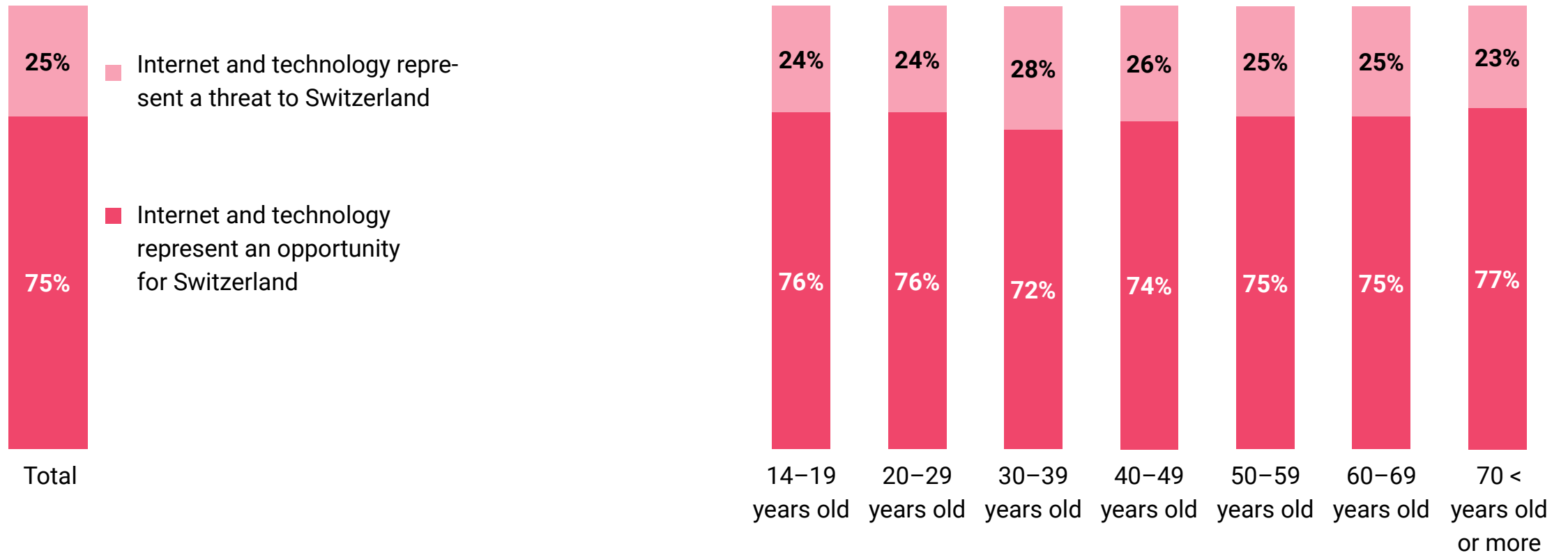
25% Internet and technology repre-sent a threat to Switzerland

75% Internet and technology represent an opportunity for Switzerland

Total

| 24% | 24% | 28% | 26% | 25% | 25% | 23% |
| 76% | 76% | 72% | 74% | 75% | 75% | 77% |

14–19 years old | 20–29 years old | 30–39 years old | 40–49 years old | 50–59 years old | 60–69 years old | 70 < years old or more
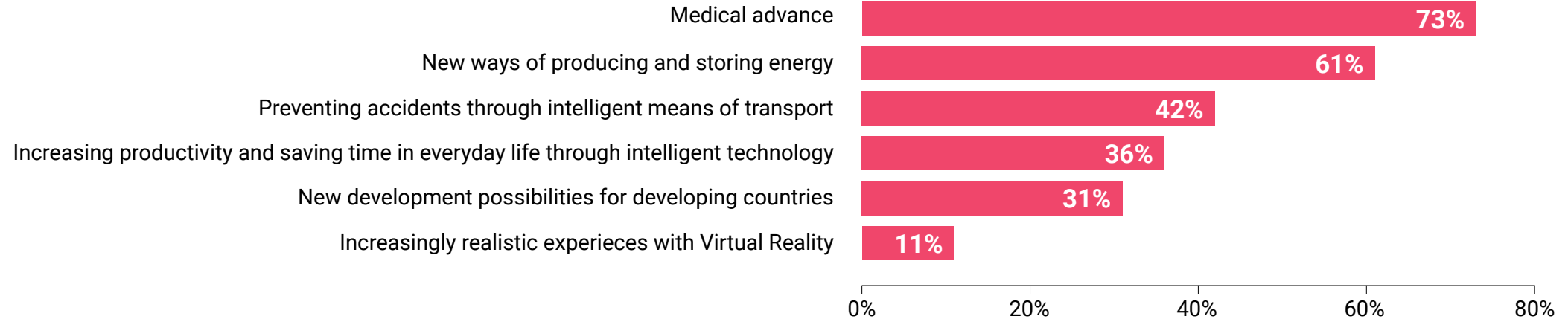
Question: To what extent do you agree with the following statements? 'Internet and technology represent an opportunity for Switzerland', % agreement = agree (strongly)
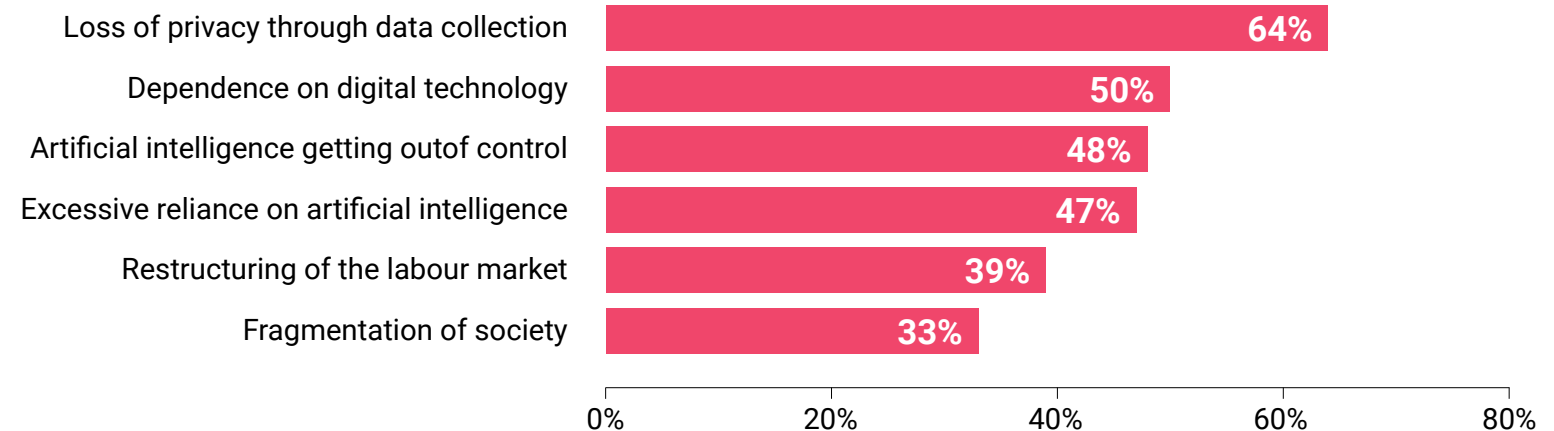Source: © Oliver Wyman

4. Opportunities and risks: what moves Switzerland

Digital transformation: what to look forward to / what to fear

What we look forward to

Medical advance	73%
New ways of producing and storing energy	61%
Preventing accidents through intelligent means of transport	42%
Increasing productivity and saving time in everyday life through intelligent technology	36%
New development possibilities for developing countries	31%
Increasingly realistic experieces with Virtual Reality	11%

What we fear

Loss of privacy through data collection	64%
Dependence on digital technology	50%
Artificial intelligence getting outof control	48%
Excessive reliance on artificial intelligence	47%
Restructuring of the labour market	39%
Fragmentation of society	33%

Source: © Oliver Wyman

4. Opportunities and risks: what moves Switzerland

Conclusion and Outlook 2020

Switzerland is concerned about the issue of digitalisation. The studies and discussions have made this clear once again, and proved for Digital Day 2020 that dialogue and the involvement of the population is of enormous value. The large number of participants in the approx. 20 'tell' events also demonstrated that people in Switzerland want to get involved and have ideas about changes. It is important to keep listening to these voices and not to disregard them when it comes to making decisions. The statements of the respondents show that there are many different opinions about the issue of digitalisation. Opportunities and challenges are viewed differently depending on age, gender, profession and educational level.

The greatest uncertainty is about the issue of personal data. There is a widespread sense of powerlessness among the population. At 64%, the loss of privacy through digital data collection is one of the most widely reported concerns among respondents. It is important to offer personal data even more protection in future and to coordinate it through a neutral site. In the discussions, the state was frequently mentioned as a possible institution, although there was also a certain scepticism in this respect. There is a clear desire for insight into health data. 63% of respondents would trust hospitals, doctors or health insurance companies with their data in future in order to receive more personalised services / offers in return.

A certain degree of discontent could be felt around media & news, in particular, and a sense of powerlessness in the face of the news giants. It seems that it is becoming increasingly difficult for respondents to filter and correctly assess information

Respondents see one of the biggest advantages of digitalisation as making it easier for them to do their jobs. It is important to continue to expand flexible workplaces – but without forgetting the social aspect. Half of all respondents assume that in future, more jobs will be lost to new technologies than new jobs will emerge. As a result, lifelong learning is hugely important, as this is the only way that employees can adjust with flexibility to new conditions and learn key skills in time to keep pace with the new technologies.

Despite the rapid rate of change, digitalisation is opening up whole new possibilities in the field of environmental protection and sustainability research. Using the latest technologies, emissions can be reduced and optimised. Respondents see this as a huge benefit and welcome this advance.

With new technologies come new possibilities, including in the education sector. Nowadays, information is both free and almost universally accessible. This leads to a discussion about reviewing the existing school system and reaping the benefits offered by new opportunities. However, particular attention must be paid to the social aspect which must be given even more emphasis in future.

For Digital Day, these findings mean that we are on the right course not only to increase the awareness of the population but also to encourage people to play an active role in the process. The dialogue will, therefore, be strengthened still further in 2020, the 'tell' dialogue rounds expanded and opportunities explored to find new ways in which the many ideas of the population can be integrated into decision-making processes.

We are already looking forward to exciting formats and future discussions around the issue of digitalisation.

Acknowledgements

The digitalswitzerland team would like to thank its 44 contributors, who made the 'tell' project possible, organised events and inspired people from all across Switzerland to get involved in the discussions:

- Academy of Journalism and Media (AJM), University of Neuchâtel
- Bern University of Applied Sciences
- City of Lausanne
- City of St. Gallen
- DayOne
- Digital-liechtenstein.li
- digitalswitzerland
- dhCenter UNIL-EPFL
- economiesuisse
- EPFL – the École polytechnique fédérale de Lausanne
- EPFL Habitat Research Center

- EPFL Transportation Center
- formatio private school
- Foundation Mercator Switzerland
- furrerhugi
- Gassmann Digital AG
- HEIG-VD
- HES-SO – University of Applied Sciences and Arts Western Switzerland
- ICRC
- IMI – Initiative for Media Innovation
- Impact Hub Basel
- Impact Hub Bern

- Impact Hub Geneva
- Impact Hub Lausanne
- Impact Hub Lugano
- Impact Hub Zurich
- Initiatives of Change Switzerland
- Le Temps
- Migros Aare
- Office for Business and Tourism of the Canton of Grisons
- Personalized Health Basel
- PwC Switzerland
- Radio Télévision Suisse (RTS)

- Republic and Canton of Geneva
- SBB
- Sketchin
- staatslabor
- Switzerland Innovation Park Biel
- University of Applied Sciences of the Grisons (formerly HTW Chur)
- University of Geneva
- Tagblatt
- Vaudoises Assurances
- Viaduct
- WEF

Primary sources

Sources
– Oliver Wyman, Switzerland's digital DNA, was collected in June 2019.
– sotomo, der digiale Wandel aus Sicht der Schweizerinnen und Schweizer, done on behalf of Ringier AG on 28 June until July 12, 2019.
– Audio material evaluations by the University of Applied Sciences Northwestern Switzerland, collected on Digital Day 2019.

Contact and Imprint

Contact
digitalswitzerland
Daniela Christen
Projektmanagerin 'tell'
daniela@digitalswitzerland.com

Design
Scholtysik & Partner