Digitisation is triggering an economic and social revolution.
I’m especially grateful you’ve clicked your way here today.
It’s a tiny step in a huge megatrend that’s giving all of us, from business
people and politicians to ordinary people around the world, a great deal of
food for thought: digitisation.

For decision-makers and managers like you, digital transformation is one
of the most complex and difficult challenges you’re currently facing. It
calls your whole business model and the future of your organisation into
question, and is effectively adding a new dimension to the theory of
evolution: the winners now are those that manage to adapt digitally. In
this edition of Disclose we’ll be taking a close look at this principle.

With the advent of digitisation there are growing calls for cybersecurity,
and data analytics is playing an increasingly significant role. The actual
and potential implications for financial services, pharmaceuticals and
manufacturing are causing a stir in this country and beyond. In the six
Focus articles our experts on analogue and digital outline the background
and provide some answers and opinions.

Our Update articles help shed more light on the black box of the new
auditor’s report, go into the pitfalls of applying IFRS 15, Revenue from
Contracts with Customers, for the first time, and show what’s going on in
digital terms in Asia.

If you’re interested in finding out how digitally mature your organisation
is, you might like to try the short online test in the last Focus article. Our
authors will give you insights into how to build on the results to create
firm opportunities.

We hope Disclose gives you – quite literally – digital inspiration and that
you enjoy clicking your way through the latest edition.

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In the spotlight: digitisation

Follow your customers’ needs to find your digital path

For most industries and areas of business there’s no way around digital transformation. And no way around the question of why you’re in the business in the first place. On the way to finding long-term answers to this question, managers and decision-makers will have to redefine the purpose of their business by adopting new, disruptive approaches, establish a supportive digital culture within their organisation, and make sure their products and services really meet the needs of customers. But first things first.

Digitisation, urbanisation and globalisation are just some of the megatrends forcing people to change – and companies to embark on digital transformation. What’s hip today and successful tomorrow might not even be around any more in ten years’ time. For this reason companies will have to constantly reinvent themselves, hand in hand with their customers. This ability to change requires self-criticism, a digital mindset and plenty of patience.

The unbearable lightness of being

The secret to success used to be so simple: it lay in cost or quality leadership. These days things are much more difficult and complex. In the digital world, every company has to work out what value it has to offer, where this value proposition fits into the value chain, and how the business differs from its competition in ways that are really tangible. Trust is writ large; or rather the question of how longstanding trust can be translated into the digital world.

For this reason, part of the huge opportunity created by digital transformation lies in self-cannibalisation. If you embark on digital transformation, you have to scrutinise the purpose of your business and ask what you’re there for in the first place. It’s healthy to question your own revenue model, because if you don’t do it yourself, someone else will. Consider the sharing economy newcomers, whose digital platforms have superseded conventional intermediaries such as distributors. Uber and AirBnB are prime examples. The middlemen could have initiated this transformation themselves rather than having to contend with the consequences after the fact. If you challenge yourself, you can set the pace of innovation and progress and perfect your own competitive agility.
Digitally adept companies have the courage to make do with solutions that are less than perfect. Rather than striving for the ultimate goal, they follow the Pareto (80-20) principle. Organisations that have found their feet in digital come up with ideas quickly, translate them into prototypes just as quickly, and learn even more quickly from their mistakes. They live by the motto ‘launch fast, fail fast, learn fast’. In the digital world, what used to involve phased projects with milestones and acceptance certificates is now done iteratively on an ongoing, simultaneous basis. In a digitised context goals change, drawing on inventiveness, prototyping, and customer and staff interaction. We’re seeing an evolution from B2C and B2B to B2P: business to people.

Customer back on centre stage

In many companies it’s the management, CEO or board of directors that have the say-so; it’s rarely the employees, never mind the customers. This is something that has to, and will, change, as digital transformation continues. A digital corporate culture requires strong leadership that sees the business as a whole and manages to create a common understanding of what it means to be digital. This leadership needs to be able to turn anxieties about imminent transformation into enthusiasm and risks into opportunities. This will lead to approaches that unleash enormous
potential by bundling the creativity within the organisation and making it available to new markets.

Digital transformation is creating momentum in many different dimensions. To harness this, you have to contend with several forces at once: content, commerce and community. Creating new products and services and offering them to existing or new groups of consumers is nothing new. What’s more complex is entering into permanent dialogue with all the different stakeholders, including customers, employees and investors, doggedly finding out their needs, and translating these requirements into newly designed products and services. The customer experience emerges not on the basis of your organisation’s internal view or gut feeling, in dialogue with customers themselves – preferably all of them.

But that’s not all: digital culture has a lot in common with a performance-oriented corporate philosophy. Neither appears overnight of its own accord; both require clearly defined rules and programmes that set down what behaviours are desired, the way the company guides its people into the new culture, and what steps are taken to make cultural change happen and then measure it.

**Steered by facts**

Highly digitised companies put the customer experience and the utility to customers at the centre of everything they do. They process their entire knowledge of their communities in the form of smart data and use this data intelligently. Thanks to digital technologies, this information can be captured in the course of one-to-one contact. This means that defining decisions are made not for reasons of profiling, but on the basis of hard facts gathered first-hand from customers, staff, investors or business partners.

This mechanism unleashes its manifold impact in so-called ecosystems. This happens when companies, customers and other stakeholders pool their needs and talents in a particular field of business to create a new marketplace with new possibilities for everyone. The more people who are in a community, the greater the benefits for all concerned: more offerings, more orders, more information, more insights, more recommendations, more new customers, and more profit. An ecosystem of this sort can be initiated in an immersion session. In the process of common dialogue, groundbreaking ideas can rapidly emerge that – combined with knowledge of the business, experience and technologies – can transform business models or make new approaches ready to become reality (see box).
MCH Group AG upgrades its traditional business model

The origins of global live marketing specialist MCH Group AG go back a hundred years, with the first Swiss Sample Fair held in Basel in 1917 marking the start of a success story that continues apace. These days the company organises giga-events, such as Baselworld and Art Basel, that take place on three continents, and operates all over the world via its Live Marketing Solutions division. So while the MCH Group AG has long led the Swiss fairs market, it has also been able to enhance its international reputation and has almost trebled sales in the last ten years. For a number of years Stephan Peyer, Chief Development Officer, has been working to move the business forward. Digitally aligning the company’s business model is one of his key priorities. “Since the dawn of the Internet, people have been warning that fairs would become extinct with the advent of new digital platforms. Now we know that digitisation can add enormous value, especially in the fairs business.” Peyer has taken innovative approaches to help harness the potential of digital technology for his company, fair visitors and exhibitors. One of the key issues is individualisation. For one of its fairs, MCH Group AG has developed a software solution in the form of an app that shows interested visitors and users where in the world, beyond the fair itself, an event involving an exhibitor is currently taking place. If users find an event of interest displayed they can register automatically and have the event entered in their calendar. “Fairs revolve around personal contact. If we can provide a tool that helps our exhibitors facilitate and foster this personal contact, it makes sense and adds value for everyone concerned.” Peyer stresses the importance of the live experience: “With many products the relationship between buyer and seller outlasts the act of purchasing the product, which means there has to be trust between the two parties. This is the case, for example, for products requiring subsequent service and maintenance, or where the scale of the transaction goes beyond the mere exchange of cash and goods. It’s not so easy to build trust digitally – more than anything it requires physical contact.” It is MCH Group’s job to combine live and digital marketing. “We keep our eyes open and observe all the relevant digital market developments. The probability that revolutionary, if not ‘disruptive’, business models will emerge overnight, is high,” says Peyer. All the same, in these times of rapid change he cautions against rash decisions. “A new type of technology can be obsolete again within six months. So we have to think carefully about which innovations we want to drive ahead and which we don’t.” For this reason MCH Group AG keeps a number of digital initiatives in its sights at the same time, constantly observing and evaluating them. “It’s better to have several smaller irons..."
in the fire than to put all your eggs in one basket. Only time will tell which innovations will gain acceptance in the long term.”

**MCH Group AG**

Basel-based holding company MCH Group AG traces its roots back to the ‘Swiss Sample Fair’ established in Basel in 1916, which subsequently became Messe Basel. Headed by CEO René Kamm, MCH Group is a leading international live marketing company with a comprehensive network of services spanning the entire fairs and events market. The company employs around 730 people and is listed on the SIX Swiss Exchange. More at [www.mch-group.com](http://www.mch-group.com)

**Summary**

Digitisation forces you to question the things at the very core of your business: efficiency, performance, your value proposition and culture. Highly digitised companies foster a digital culture where they’re permanently communicating, interacting with their stakeholders, and trying out many things at once. They allow their customers and staff to take part in this process, and work with prototypes. This means that success in the digital world comes from the ability to skilfully combine customer focus, strategy and rapid implementation. To do this your company has to focus on the main challenges, underpin them with knowledge of the data, and translate this into concrete action. It’s better to take the first small steps quickly and improve on an ongoing basis than aim for a huge leap but never have the courage to take it. This way your organisation will be able to transcend regulatory, geoeconomic and intercultural barriers and harness unique growth potential.
New technologies are pointing the way forward, and digital business models are taking hold. By adopting the right approach to digital transformation and paying due attention to the newly emerging data security requirements, you can harness interesting new opportunities and grow your business. But these new opportunities also entail new risks that have to be addressed. In recent years our dependency on digital technologies and dangers from the virtual world have grown exponentially. Protecting your data and digital platforms has thus become vital to the survival of your business.

Threats from cyberspace are mounting inexorably. The media are full of negative examples and lively debate. Recent cases that have made the headlines include Ruag, 20 Minuten and Digitec. The groups and individuals who stage cyberattacks, and their modus operandi, are getting smarter. This growing danger calls for a much more acute, or at least a broader, awareness of cybersecurity. As the number of successful attacks increases and with them the amount of sensitive information made public, regulatory requirements at national and international level are becoming more stringent.

There’s no way around digitisation. If your offering doesn’t feature a digital or mobile component, you’re probably already on the way down. This means that digital transformation has to be part of your survival strategy. There’s no shortage of options for using digital to boost efficiency and cut costs at any point in the value chain.

Organisations of all sizes in all industries face a similar array of choices. They all gather and manage customer data as well as sales, product and financial data, so they all find themselves confronted with many new challenges. Responding to the new forces at work in so many dimensions requires a great deal of energy. If you fail to do so, you risk simply disappearing from the marketplace.
Data is capital worth protecting

In recent years companies have definitely invested too little in digital transformation and cybersecurity. To keep up with advances and to be able to continue offering viable products going forward, they have to expand their digital portfolios and strengthen security. Data has become the most important economic factor alongside human resources and capital.

But the virtual world is highly complex; it moves at breakneck speed, and like any other area has its own specific risks. Too many companies see cybersecurity as an issue that can be resolved merely by having perimeter defences in place to stop threats entering their business. But in today’s highly connected environment, this type of approach is outmoded and not up to dealing with the new types of risk. Perimeter defences in business have gone the same way as mediaeval fortresses: as new modes of attack emerged, thick walls were no longer adequate to the task of providing protection, particularly in view of the need to be open for trade and business. In today’s business, protection alone is no longer sufficient
either. Cybersecurity means that companies have to systematically prepare for cyberattacks, respond rapidly when they occur, and deal with the incident as quickly as possible. This is the only way to limit financial and image-related damage. If you want to adopt a holistic approach to cybersecurity, you should take measures along five stages of the cyber life cycle. This will give you the flexibility and endurance to keep up in the rapid pace of digital competition.

1. **Strategy and policy**
   It all starts with having a clear vision, a strategy and a policy defining how your organisation can efficiently deal with cyber risks. This includes defining the data and systems requiring special protection. Very rarely do organisations have sufficient resources available to protect everything appropriately.

2. **Protect**
   Once you’ve laid the strategic foundation, you should build and test security and controls to manage cyber risk and protect key systems and data. Protecting data is increasingly important in a modern security environment. While it’s still necessary to protect systems, depending on the challenges this is less of a priority. Information rights management systems help when it comes to encrypting sensitive data and only giving access to people and functions that actually need it.

3. **Operate**
   Active monitoring is an important aspect of operating an IT environment. Cost-effective monitoring of your own information security with repetitive security tests ensures that the system gives early warning of incidents and violations and enables you to detect attacks and incidents.

4. **Respond**
   Given the current risks, there’s virtually 100% probability that a cybersecurity incident will occur. If it does, your organisation has to be able to respond rapidly and precisely to avoid financial loss and damage to your image. The key is to make the relevant agreements with a security provider early on, before an incident has occurred; otherwise you won’t have time to respond adequately.

5. **Remediate**
   If there has been damage to systems and data, you will have to remediate this as quickly and properly as possible. This is the only way of minimising the negative impact on your business. A systematic learning process will enable you to analyse the incident, feeding the insights back into your risk profile to initiate a new security life cycle.
**Increased use of managed services**

Very few companies achieve digital transformation and protect their digital business processes entirely under their own steam. Managed services – in other words buying a complete service rather than merely technology and advice – are increasingly common in cybersecurity too. This enables organisations to reduce the cost of investment and keep abreast of developments in technology (see box). Drawing on the knowledge of cyber experts and deploying well thought-out solutions enables companies to keep up with the pace of digital transformation and exploit it as an opportunity.

**The cloud: fool-proof or foolish?**

The debate on the security of cloud solutions has been raging for some time. But two separate issues tend to get mixed up. If you look at the security arrangements at a large, professional cloud...
provider, you’ll find they’re vastly superior to the proprietary solutions implemented by companies. This means that an organisation transferring its data to the cloud will enjoy greater security under most scenarios. A second and in many cases new challenge is compliance and data privacy, as large cloud providers store data outside Switzerland. These issues have to be carefully thought through and resolved clearly before an appropriate cloud solution is implemented. In most cases this is possible with a reasonable amount of effort and expense. Using the cloud a company can boost security and reduce its own technical security risks.

**Growing regulation also relevant for Switzerland**

Switzerland traditionally has a good reputation when it comes to data privacy. But new EU rules and the revision of Swiss data protection legislation have brought and will continue to bring more stringent requirements in their wake.

The role of the regulator in the digital economy is to require basic protection of customer data and make sure legislation keeps pace with the times and technology. Against this backdrop the European Parliament has revised the EU’s General Data Protection Regulation (GDPR), scheduled to come into force at the end of May 2018. The regulations contain important additional rights, provisions to protect users, and substantial penalties for violation. They also apply to Swiss companies that store and/or process data from people who are resident in the EU.

The data privacy legislation in Switzerland incorporates most of the existing international data protection rules, and it is likely that many of the new ones from the current review round will be adopted. Although the implications of the revised GDPR on a national and European level aren’t yet clear, we believe the enforcement of the regulation and any penalties that are imposed will prompt companies to tighten their data privacy rules and security controls on their customer data and conduct GDPR assessments. These efforts are likely to be worth it, as violations will be subject to fines of up to 4% of sales or EUR 20 million. Companies are better off investing this kind of money in data security.
Summary
If you want to harness the positive effects of digital transformation, it’s increasingly important for your organisation to protect its data and platforms. Despite the growing dependencies and threats that have long been emerging from cyberspace, most companies are still not sufficiently aware of this, and will have to step up their investment in cybersecurity if they want to catch up. Now is the time to do so, especially given the new data protection regulations. By confronting the new challenges and making sure your move into the digital world is accompanied by the right security, you can build credibility and trust in your business. You have to make security consciousness part of your corporate DNA.
Success in our globalised, digitised world means being different and better, and permanently standing out from the competition. That’s nothing new. What’s new is how you go about it: with data. With the mere mention of IT investment likely to bring a frown to the face of many managers, it can be hard to put this new way of thinking into practice. So let’s take a look at the business sense behind data and the power of data analytics.

A company can only succeed through differentiation. There’s nothing new in this insight, nor in the realisation that differentiating yourself in today’s hypercompetitive environment requires far-sighted strategy and a unique positioning. You also need the necessary resources and the flexibility to respond rapidly and appropriately to changes in the market, or even pre-empt them. And you need a certain flair for recognising customer needs, and plenty of patience. While most businesses work hard on these value-adding factors, astonishingly they frequently neglect one of the most important factors of all: their data.

**Build your foundation first**

Many companies have a whole range of applications and complex database structures to enable them to access and use their customer, sales and financial data. Every few years they launch a new initiative to get to grips with this complexity, usually by adding to or remodelling their existing structures – achieving a greater or lesser degree of success, as more applications will be added as time goes on, and with each new application the IT and data landscape becomes more complex. The trouble is, companies often forget that data itself is are powerful capital with immense value-adding potential.

To capitalise on and systematically harness the potential of your data to build new areas of business or optimise existing ones, you need a solid foundation – a foundation you can trust. But investing in a trusted data layer requires business and financial far-sightedness, as it will seldom pay for itself within a year. The added value only comes later, but it’s well worth waiting for: a reliable data foundation makes a business agile, lean and competitive.

Below we look into three examples of how data can be used to add value. They all revolve around data, and in each case targeted investment in data and data analytics generates value that can be monetised.
**Predictive health: the crowd helps the individual**

On behalf of a German doctors’ organisation we at PwC have developed a predictive model for the medication of multiple sclerosis patients. The actual tool runs via an easy-to-use app that physicians can use to improve the way they select appropriate medication for their patients and manage their well-being more efficiently and systematically. The app draws on more than 190,000 data sets for other MS patients, the experience of thousands of doctors, and the medical knowledge of other parts of the pharmaceutical industry. This expert tool interprets this universe of data using complex algorithms to make reliable predictions about patients’ drug tolerance and the development of their health.

This kind of predictive, personalised data analysis optimises the use of data, allows the information it contains to be exploited, and facilitates dialogue between the people involved. Everyone benefits: the patient gets quicker, more successful treatment and improved quality of life; doctors are able to make better recommendations and boost their reputation; the pharma industry has an opportunity to refine its knowledge of the efficacy of its drugs; health insurers benefit from lower healthcare costs; and the physicians’ organisation achieves a virtually unrivalled position in its field.

**Regulation: data analytics reduces the cost burden**

Regulatory pressure on financial services providers is unrelenting. The supervisory authorities regularly impose new requirements in areas such as financial reporting and capital and risk reporting. Companies are increasingly having to field enquiries from the authorities into their customer and portfolio structures, product characteristics, risk profiles and other indicators – usually in addition to the existing regulatory requirements. Enquiries of this sort tie up enormous resources and generally take a long time to deal with. The problem is that the necessary data can’t be compiled and aggregated at the click of a button. Increasingly, data is no longer available in the granularity required. And it’s not managed uniformly or structured according to the same logic. Given the huge number of transactions the average bank processes on a daily basis, the additional burden imposed by a new regulatory requirement can be overwhelming.

It doesn’t have to be this way. Banks are already spending a lot of money making sure they keep to the law, and there are few industries with higher costs of compliance. If financial services providers could invest even a fraction of this money in a trusted data layer, they could profit
enormously in terms of agility, flexibility and speed. There is a huge amount of knowledge to be gleaned from the data they already have, especially in terms of customer behaviour. With a solid data foundation supporting a modern data analytics infrastructure, banks are not only equipped to deal with unexpected enquiries from the authorities, but can exploit their data as a source of value-adding knowledge that will help them refine the customer experience they offer.

Ecosystems: the whole is greater than the sum of its parts

A credit card company, a supplier of luxury goods and we at PwC joined forces to the benefit of everyone involved. The luxury goods company wanted to know more about its customers’ purchasing data. In return for a consideration, the credit card company provided this data in anonymised, aggregated form. We at PwC served as a neutral third party to structure this data and do the necessary analytics. We were able to show where the luxury goods company stood in the market and competitive landscape, and how it could improve in terms of value to end customers, sales, and the way it designs and markets products.

This example clearly illustrates how it’s possible to monetise data while staying on the right side of the data protection laws by creating an intelligent ecosystem of selected players. Sharing your data in an ecosystem of this sort enables you to bundle competencies, open up market potential and add monetary value for everyone involved. Each party has to define its own role within a data ecosystem. For example, a company might decide to use external data, such as geolocalisation or social media activity, to better understand the needs of its customers or optimise customer service and advice. Or, as in the third example, it might take the role of a supplier of data, selling it to third parties, for example in the form of data on communication, movement or consumer behaviour.

Summary

Data is a precious commodity – maybe even more precious than you thought. So it’s worth gathering data, investing in a solid data foundation, and using analytics to mine this data for precious strategic ore. This is possible within the framework of the data protection and compliance rules. Investments of this sort may only turn a profit after a few years and are likely to involve fundamental changes (for example the digital transformation of your business). In the process you should never lose sight of the value to customers and realise that this value might only be created if you come up with a real innovation or team up with other partners in the market and value chain to create an ecosystem. Whichever path you choose, acknowledging data as business capital with attractive potential returns, and making a tangible long-term investment in this intangible value-adding factor, can pay off in the form of market agility and room for manoeuvre – both of which will give you a unique edge over the competition.
In the spotlight: digitisation

**Build on the reality – not the hype**

The fourth industrial revolution has hit manufacturing. In other words, Industry 4.0 or – in broader terms – the Internet of Things is now hard reality. This is manifest in the increasing digitisation and networking of products, value chains and business models. It’s creating brand new challenges and attractive opportunities for players in a whole range of industries. What’s needed is a well thought-out Industry 4.0 strategy focused on the right investments and a willingness to prepare for major change within your organisation. If you want to be part of the race, there’s only one time to start: right now.

The development of technology and its implications are right at the top of the list of mega-trends giving CEOs the most food for thought. In our global Industry 4.0 study, we took an in-depth look at the drivers and consequences of this transformation (see box). It revolves around digital technologies and the networking of machines, products and components and other systems involved in the manufacturing process. Companies don’t see Industry 4.0 as an end in itself. It’s linked to clear economic goals, potential benefits and opportunities to differentiate in the global marketplace. For example predictive maintenance by way of sensors and intelligent data analysis is a key Industry 4.0 value driver.

The forces of digitisation are impacting industrial operations at three levels simultaneously. If you want to stay ahead you have to be aware of these forces and make sure they’re leveraged intelligently in your business:

2016 study by PwC: ‘Industry 4.0: Building the digital enterprise’

*This is the biggest worldwide study of its kind, covering more than 2,000 participants from nine major industrial sectors and 26 countries. The key finding is equally weighty: digitisation will revolutionise industrial manufacturing. Industrial companies expect to see cost reductions of 3.6% annually over the next five years, merely through improvements to internal processes and more effective management of the value chain. They also anticipate an annual revenue increase of 2.9% on average from*
a) **Digital integration of the value chain**  
Greater digital value creation is transforming operating costs and process architecture both horizontally – in other words from supplier to end-consumer – and vertically, from product idea to customer care.

b) **Digitally networked products and services**  
Digitisation of products and services is completely redefining the market offering. Digitisation enables companies to offer their customers new or extra products and services, helping maintain competitiveness and boost revenues.

c) **Digital business models**  
Digitisation is turning conventional business models and entire market structures on their heads. Disruptive approaches are facilitating tailormade solutions that create significant extra benefits for customers. This development is closely tied up with cooperation along the value chain and the integrated use and analysis of data.
Now we’ll look at three of the eight technology trends, focusing primarily on the present before venturing a look into the future.

3D printing: the fourth dimension of manufacturing

3D printing, or ‘additive manufacturing’, is still often seen as a plaything or tool for printing promotional gifts. But this couldn’t be further from the truth: 3D printing is already commonplace in industrial manufacturing. It’s used, among other things, to build prototypes, making and perfecting a sample before building an expensive mould for mass production. 3D printing is also playing a key role in the replacement parts industry. Instead of spending a lot of money to fly an expensive service technician or complex spare part to the ends of the earth, you simply print the missing component where it’s needed. This technology is used, for example, on wind farms and offshore platforms, which are already maintained by technicians with a 3D printer in their service vehicle or...
actually on site. 3D printing completely eliminates the complicated process of procurement and logistics when you need a spare. ‘In-time’ repairs also help substantially reduce costs.

A wide range of materials, including plastics, metals and even chocolate, can already be handled by 3D printers. This expands the potential applications of this digital technology enormously. Used as part of the industrial manufacturing process, 3D printing saves time, manpower, warehouse space, logistical expense and, when all’s said and done, substantial costs. It also results in a welcome reduction in the complexity of industrial designs, as a 3D printer often needs less material and fewer parts to reproduce the desired component. The question of production and quality control remains open. Industry standards still have to be defined, along with effective regulation to ensure data security.

A click into the future:

3D printing
In the course of the next decade, we’ll see the evolution of an independent 3D printing industry, which will transform the manufacturing industry’s entire value chain. Geostrategically located 3D printing farms will take the place of global air, sea, rail and road freight. Industrial companies themselves will concentrate on developing, designing and marketing their products, with actual manufacturing and assembly taking place decentrally close to the end-customer. The last mile will be covered by drones, self-driving cars and sharing economy providers. The Port of Rotterdam shows that a vision of this sort can become reality. Here you can watch the installation of an additive manufacturing fieldlab with 3D metal printers.

Robotics
In only a few years we’ll see products such as mountainbikes manufacturing themselves in smart factories. The manufacturer will supply the idea, the engineering and a ‘resource block’ of raw materials – carbon, alloy, hard rubber and titanium – along with a digital plan that not only contains the design of the individual components and their assembly, but also manages the timing and coordination of all the human and mechanical resources involved, just in time to meet orders from the bike or online store.

Augmented reality
We’re at your service!

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**Robotics: human-inspired IQ**

Switzerland is a leading player in intelligent systems and robotics. For example the Institute of Robotics and Intelligent Systems (IRIS) at ETH Zurich has eight independent laboratories doing research into connecting mechanical and process engineering and the life sciences. At the National Centre of Competence in Research (NCCR), EPFL Lausanne has brought together developers from all over the world to harness human-centred robot technologies to improve the quality of life. These are just some of the endeavours that have enabled unprecedented leaps to be made in robot intelligence in recent years. Today robots can work out their position in their surroundings and use their highly developed motor skills and haptic perception to quite literally give humans a helping hand. For example, on an automated production line a robot lifts heavy parts into which people build smaller and lighter components. The jargon in industry is ‘cobotics’. In modern logistics centres, latest-generation forklift trucks organise themselves as a self-learning swarm, without any drivers or planners at all, to do work at maximum efficiency that would be very physically demanding for humans.

**Augmented reality: seeing things more clearly through a new lens**

Augmented reality refers to the process of enhancing our perception of reality with the help of a computer by using digital technologies to connect the virtual with the real world. This type of approach is already used in service and assembly. Take the example of a cargo ship in the middle of the Pacific with a fault in the engine room. The engineer on board can’t solve the problem without the help of a specialist. Using an augmented reality device, the specialist can guide the engineer through the repair from anywhere in the world, localising the problem precisely, visualising the faulty part, including the serial number, on the screen, and giving instructions on how to dismantle the engine and install the new part. Augmented reality tools can save costs in industrial production, help
avoid errors and breakdowns, and improve the quality of service and maintenance work.

**Summary**

The fourth industrial revolution is well under way and is creating a whole new dimension of market opportunities for industrial companies. So if we have only one recommendation for business leaders, it’s to get started now! Digital transformation is happening so quickly that your room for manoeuvre, in terms of both time and competitiveness, is shrinking by the day. The first thing you should do is outline a strategy for your approach to Industry 4.0 and prioritise the core areas of investment. This vision should be followed rapidly by the first pilot projects. You should get to grips with the new forms of technology and manufacturing. You should also be aware of what resources you’re going to require, and get solid data analysis skills on board by recruiting suitable talent or hiring external specialists. Finally, you’ll have to drive the digital transformation of your organisation forward, making sure it extends to your routine manufacturing processes. Here you should definitely look into the benefits of joining forces with suppliers, technology partners and even competitors to create a digital ecosystem.
Digital didn’t have a lasting impact on most financial services the first time around in the late 1990s, but now it’s definitely here to stay. The challenge for the industry is less about predicting and reacting to individual trends than adopting new approaches to assess the impact of technology on people’s behaviour, formulate the right ‘strategy that works’, and implement solutions rapidly, flexibly and proactively. While outsiders are set to change the face of financial services, all is not lost for established players, provided they get busy quick.

The first Internet wave back in the late 1990s gave financial services a severe buffeting, but failed to permanently rearrange existing structures. However, the technological disruption of the last ten years or so, coupled with the regulatory strictures triggered by the 2008 financial crisis, have left no doubt that digital transformation is here to stay – as much in financial services as in other industries already further down the road to digitisation.

For financial services executives, who grew up in a bricks-and-mortar world with infrastructures and business models that hadn’t radically altered in decades, this can be a real challenge. Some are even still in denial. We still see the media ridicule companies that operate with Bitcoins, and indeed Blockchain, the technology underlying the leading virtual currency, is so complex and abstract that it’s hard for anyone but an expert to grasp how it works, never mind its potential for severely disrupting the way financial services operate. Who’s to say that Blockchain will even turn out to be a great disruptive force? Or predict which of the other emerging technologies – such as artificial intelligence or virtual reality – will achieve a major breakthrough and pave the way for completely new business models in financial services?

The truth is, nobody really knows. Even the mighty Google originally failed to spot the power of apps; instead it put all its eggs in the browser basket, and had to change tack to catch up. Most tech experts will refuse to venture a prediction five, or even three, years into the future. Where does that leave leaders in financial services who have to make decisions that will shape the fate of their organisation during their tenure and beyond?
Learning to read the technology landscape

In recent years financial services executives have been so busy staying abreast of new regulatory issues that most have understandably had little time to explore the latest developments in technology and assess their impact. But while nobody can claim to have a complete overview or be able to predict the future, it doesn’t do any harm to keep an eye on and understand the main trends. Here are some of the technologies currently in the running.

1. Crowdfunding, peer-to-peer lending and social investing
Now that technology enables people to connect online, they don’t necessarily need an intermediary in the form of a large bank to borrow, lend or invest. This could revolutionise financial services, particularly in third world countries, where most people are online only via a smartphone. Western bankers beware: many of the forces of global transformation are being driven by people in the developing world rather than in traditional markets.

2. Artificial intelligence (AI)
AI still isn’t taken as seriously as it deserves to be. But the first robo-advisors (online investment platforms driven by algorithms) are already making inroads into the market for simple investment profiles. And it’s worth considering the potential that still remains for artificial intelligence to transform mid- and back-office processes so that they no longer need people to run them.

3. Big data analytics
Banks and insurance companies have always possessed a mass of data, much of which has remained unexploited. But with lower margins creating greater pressure and the power shifting to consumers, the financial services sector has to learn from other industries how to use this precious data to find out more about its customers. The tools are now available in the form of big data analytics.

4. Virtual reality (VR)
There have been huge advances in VR since the 1990s. A technology once limited to abstract 3D houses and simulations is set to have a massive impact on the mainstream and disrupt all industries. VR will radically change the way we interact with people, computers and the Internet. Imagine a world where clients can consult their virtual relationship manager in a perfect 3D environment on their way home in their self-driven car. Are they going to fly for hours to another city for the same advice? Are financial services players going to have the technology and processes in place to interact with their clients in this newly-found downtime?
5. **Blockchain and cryptocurrencies**

We’ve already talked about Bitcoin. It’s easy to knock it, but just consider the potential of universal cryptocurrencies that don’t require validation from an authority such as a bank, especially in developing countries where people don’t have access to a stable currency and may trust their central banker less than most of us do. We’re seeing the emergence of new categories of money. We’re also seeing a new kind of trust: digital natives are more likely to trust technologies and algorithms than institutions or individual people. This has massive implications, and the financial services industry has to be able to respond.

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**Learning to understand people’s behaviour**

While it’s good to be able to read developments, it’s important not to get too hung up on the technology itself, and to realise that technology has to be picked up by people if it’s to provide a breakthrough. Distinguishing the hype from the technological gold nuggets means being able to look at people and their behaviour, and thinking about how the technology might fit in in social and economic terms. You don’t have to be a futurologist to do so. Just ask the real experts in digital technology – your children or grandchildren – and notice what’s exciting them, what media they’re using and how, and what they’re not so enthusiastic about. They’re the next generation of financial services customers, so it’s their needs and habits that have to be understood rather than those of an older generation whose ways are already familiar.

This technological strategic foresight is crucial for any company – financial services included – that is serious about surviving the coming decades. There’s no guarantee of getting it right every time, but it’s a good place to start. Depending on the size and nature of the organisation, it can be worth hiring this foresight from outside in the form of advice on digital strategy and implementation. But a lot can also be done with existing resources by encouraging people within the organisation, especially more creative and innovative members of staff, to feed their technological know-how and experience into strategy, product development, distribution and business models, and get them actively involved in the process.

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**Changing mindsets, marshalling resources**

In this scenario the role of an experienced executive is to instil strategic foresight as a key capability of the organisation and put a proactive strategy in place that ensures the potential and necessity of digital transformation are at the core of the company’s business model. But it also means recognising that the pace and uncertainty of change require a
new approach to developing and implementing models, products and services. The important thing is to have a point of view and act on it promptly, even if it means bringing an offering to market before it’s fully mature. In the digital economy, customers are able, and often expect, to be involved. There are therefore new possibilities for listening to customers and finding out what they really need and want. Why second guess when you can ask them directly?

Companies shouldn’t be afraid to change their minds or admit failure. In such an unpredictable business and technological environment, they’re almost bound to fail on occasion. They can build that into their plans and formalise processes for using setbacks as an opportunity to learn.

**Build on your strengths**

Realising the necessity of digital transformation doesn’t mean abandoning your strengths. Players with a good name and reputation in the financial services marketplace can build on this trust in the digital era. Customers booking accommodation on an online sharing platform might lose a good night’s sleep if the room isn’t what they expected; but a client investing via a new, untested online platform stands to lose a lot of money if things don’t turn out. While new players from completely different areas of business might well shake up financial services, established players can capitalise on the fact that trust in a name and experience still means more than in most other industries.

Experienced financial services executives are also very familiar with the regulatory landscape and the challenges of compliance. If they can build on this experience, have a feel for where the industry is going and how the regulatory landscape will change, and combine this with an understanding of the technology, they’ll be much better placed to work out how new technologies can help assure compliance more efficiently and effectively. It’s worth remembering that the pace and reach of technological change are as much a challenge for the regulators as for banks and insurance companies. Regulation is global, and in the digital space there’s a good deal of potential for regulatory arbitrage for those that can seize it.

**Work out where you need support**

As in all areas of business, there’s plenty of outside help at hand if you need it. A large firm, such as PwC, can provide support all the way from discussing how to incorporate digital in business strategy at C-suite level to actually implementing new, user-centric digital solutions on the customer’s behalf – and all the steps in between, including tax, legal and compliance in different countries all over the world. Companies should examine what resources they have, what capabilities they want to build
themselves, and what they want to buy in. It may make sense for a large organisation to have its own innovation laboratory. Others may prefer to work with an outside expert network. The mix will differ depending on the organisation, but it’s crucial to understand the issues and the importance of having a clear strategy to find the most appropriate balance.

**Summary**

While it’s hard to predict precisely which technologies will disrupt financial services and how, it’s clear that the industry will be transformed. Digitisation is forcing players to rethink models and mindsets. They can sit back and react more or less passively to technological developments, or they can view digital transformation as an opportunity to get closer than ever before to their clients. In addition to technological expertise, this requires an understanding of people and their behaviour – something that seasoned players in financial services have always had.
Click your SME into 4.0

There’s no way around digital transformation. New technologies are forcing companies of all sizes in all industries around the world to challenge their analogue business models. To find out how Swiss SMEs are approaching this herculean task, where they stand, and how they see themselves going forward, we joined forces with Google Switzerland GmbH and Digital Switzerland to conduct a study under the banner ‘Digital transformation: How mature are Swiss SMEs?’ Here we present some of the key findings, and even more importantly, some firm recommendations on what your SME should be doing next.

The study ‘Digital transformation: How mature are Swiss SMEs?’ approached the topic of digitisation from different angles. We wanted to look at the digital maturity of the companies participating, investigate the factors driving and hampering successful digitisation, and find out more about the soft factors behind the new hard KPI, digital maturity. To do so we invited more than 300 small and medium-sized enterprises in Switzerland to do a self-assessment, and talked to decision-makers at well-known Swiss companies. Three of these interviews were summarised in a case study.
Processes and infrastructure

- Some of our internal processes are rudimentarily digital, some manual.
- Internal processes are digital and in some cases interconnected.
- Internal processes are digital and in most cases interconnected.
- All processes are on a single digital platform.

Digital sales

- We have a standardised website for sales.
- We have accompanying measures and digital services augmenting online sales.
- We use big data to create offerings for individual customers.
- We have used digitisation to fundamentally change our business model.

Customer involvement

- Customers can give feedback on a standardised basis via digital channels.
- Customer feedback is automatically processed and analysed.
- Customers are involved digitally in isolated business processes (e.g. sales and development).
- Customers are involved digitally in all business processes (sales, development, etc.).

People and culture

- Digitisation hardly concerns our staff.
- We make sure staff use digital tools.
- We provide training and experts to further the digital development of our staff.
- We promote innovation by including digital skills in our hiring criteria.

The current picture
The degree of digitisation at Swiss SMEs varies. Digital maturity correlates positively with the size of the organisation, and negatively with the age of its management. The younger the executives, the more highly digitised an organisation tends to be. The participating companies have made internal processes and training staff on digital matters their priority. Unfortunately, customer involvement is right at the bottom of the agenda.

Companies are tending to focus on existing structures, because rethinking their business model is a more radical move than redesigning existing processes. This illustrates how most SMEs seldom approach new business models as an opportunity, and continue to rely on conventional models when it comes to interaction with customers.

Organisations that have undergone partial or full digital transformation now see themselves as more competitive. Investment in digitisation and the boost to competitiveness go hand in hand. The majority of the more highly digitised companies in the study believe the financial investment has on balance been worth it.

«Digital transformation: How mature are Swiss SMEs?»

In August 2016 we surveyed representatives of more than 300 Swiss SMEs with diverse business models in a wide range of industries. They were asked to rate the status quo at their own organisation on a scale of 1 to 4 in the categories processes and infrastructure, digital sales, customer involvement and digital culture. Each organisation’s degree of digitisation was calculated by averaging these scores. We also asked more detailed questions on specific themes. In most cases the evaluation is based on a comparison of the degree of digitisation and responses to other questions.

You’ll find the entire electronic study here.
On the basis of our study findings, interviews with many managers and experience in digital transformation at SMEs, we have published firm recommendations. They’re designed to help decision-makers get started with digitisation and ensure the process moves forward smoothly. To summarise, Swiss SMEs are well advised to take a look at every nook and cranny of their market and muster the courage to embark on digital transformation. But first things first.

1. **Make digital a C-suite responsibility**
   Various factors contribute to the success of a business, regardless of the market or segment in which it operates. It has to have the right business model, the skill to develop, design and market products and services, lean processes, a high degree of innovation, and the ability to deploy financial and human resources appropriately. The fact that digitisation affects all these areas means it’s no longer a purely IT matter; digital transformation radically impacts the whole organisation. For this reason it should be right at the top of the strategic and operational management agenda. Managers have to have the courage to confront the complexity of the issues, place customer needs centre stage, eradicate inefficiencies, and accelerate the process of digitisation.

2. **Make large leaps in small steps**
   When you embark on the digital path you commit to a permanent learning process. A digital project can’t be approached in the classic manner with a major long-term goal, protracted project phases and milestones. The digital process calls for small, nimble steps with immediate feedback and learning effects. You have to launch fast, fail fast, learn fast. In other words, in digitisation small steps can also result in big successes. For example, a new project management platform might be all it takes to bring about radically new development.

3. **Make the customer king again**
   Successful Swiss companies have always developed in line with their customers and incorporated their needs. This also applies to digitisation. So you should take the expectations of key accounts seriously. The main challenge is to drive digitisation forward, not for the CEO’s sake, but to create a better product or service for the customer. You don’t have to do everything that’s technically possible – only the things the customer actually wants.

4. **Keep an eagle eye on the market**
   Nothing’s worse or less likely to result in success in the digital world than trying to keep up with competitors or new entrants to your market. Digitisation sets a ruthless pace and takes its own course,
which may not necessarily be a straight line. For this reason your company needs to know its market intimately and painstakingly assess the competition. As the advance of the sharing economy shows, your rivals may well be from other industries.

5. Radically challenge your own assumptions
The study shows that Swiss SMEs are holding back from reworking their business models. This is unfortunate, as organisations that keep an eye on other players and industries, recognise promising approaches and adapt them to their own business not only question their existing business model, but make precisely this self-criticism their greatest strength. If you cannibalise yourself, you take the wind out of your competitors’ sails and ensure you’re the one setting the pace. This also places you in an attractive and innovative light and means your customers are much less likely to jump ship.

6. Free up the necessary resources in good time
Our study shows that most companies that have invested in digitisation don’t regret it. On the contrary: they now see themselves as more powerful and competitive. For this reason you should keep an eye on developments in your area of business and make appropriate resources available for digital measures in good time. This could be investing in a start-up, building your own digital team, or making digital maturity an integral part of your management and HR policy.

7. Develop your people and get new talent on board
A clear majority of study participants believe they have sufficient know-how to tackle the challenges of digitisation. Companies with a low level of digital maturity tend to have much less digital knowledge in house. Since people are also a key parameter in the digital universe, companies should tell their employees about their digitisation plans, get them systematically involved and train them appropriately. A good technical grasp and digital teamwork are the basis of successful digital transformation. This may mean you have to find new talent and give these people an incentive to stay.

8. Establish a culture of innovation
Successful Swiss companies have always fostered a strong culture of optimisation. This is one of the findings of «Swiss Champions 2016», a study conducted by PwC with the aim of explaining the ingredients in Switzerland’s recipe for success. This typically Swiss striving for the best results and innovation should be something companies should also pursue in their digitisation efforts. It helps a lot when it comes to finding more efficient solutions. And since Swiss SMEs can’t afford to stand still, they’re well advised to create a solid culture of innovation as a basis for their digital future.
Summary

The study ‘Digital transformation: How mature are Swiss SMEs?’ is a co-publication from PwC Switzerland, Google Switzerland GmbH and Digital Switzerland. In the survey we investigated the degree of digitisation at Swiss SMEs and looked into the main drivers of digital change. We recommend managers and decision-makers to take a good look at their present market and beyond and question their existing business model. Digitisation can affect – and improve – any process, customer interaction and revenue model. For this reason it’s a good idea to place the topic of digitisation in the overall context of your SME, venture your first, small steps, and move ahead with courage and purpose.
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Update

Shedding more light on the black box: the new auditor’s report
by Prof. Dr. rer. pol. Thomas Berndt – Page 36
Shedding more light on the black box: the new auditor’s report

Transparent consolidated financial reporting is supposed to provide a better basis for investment decisions, discourage creative accounting practices and generally improve the functioning of the financial markets. In recent years this has prompted tighter requirements regarding the scope and detail of the information stock-exchange-listed companies disclose in their financial reporting. The expanded auditor’s report required by the new auditing standards, with key audit matters and explicitly delineated responsibilities, is much more company-specific and transparent. Overall, this improved transparency will help build trust in the audit, boost the quality of the auditors’ work, and ultimately safeguard the recipients of reporting more effectively.

Sunlight is said to be the best of disinfectants. The belief that light – in other words transparency – is the best protection for participants in the capital markets has been one of the guiding principles of regulators for over a hundred years. Transparency is supposed to provide a better basis for investment decisions, discourage creative accounting practices and generally improve the functioning of the financial markets. In past years, this has prompted much more stringent requirements regarding the scope and detail of the information stock-exchange-listed companies have to disclose in their financial reporting. As late as the 1990s, in many cases consolidated financial statements were fairly modest in size; these days it’s not unusual for a company’s annual report to span 200-odd pages, and even more in highly regulated industries such as banking and insurance. With compensation, risk and segment reporting, information on business combinations, impairment, financial instruments, pension liabilities and related parties, there are few areas of a company’s economic situation where a report is not required. Soon this will be joined by a non-financial declaration on the environmental, social and employee situation and compliance with human rights and anti-corruption measures in the management report, as ordained by the European Union.

This all begs the question as to how auditors are supposed to audit this sheer quantity of information within a reasonable space of time and formulate a well-founded opinion on the individual and consolidated financial statements. For the vast majority of the people reading corporate reports, the process by which the auditors come to their opinion is to all intents and purposes a black box, and of interest only if qualified or, in rare exceptions, refused. Otherwise people simply assume that the
economic situation presented, if you like confirmed, by the auditor
matches the actual circumstances. This lack of understanding of the actual
process and the scope and object of the audit has helped create a gap –
often debated in theory and practice – between an interested public’s
expectations of the audit and the role the auditor is actually required to
perform. Many a naive investor will be scratching their head in wonder
at an unqualified auditor’s opinion despite shell companies, falsified
emissions tests, major errors in investment or heavy losses.

New and reworked standards

New professional standards are designed to shed light on the black box of
the audit, make the auditor’s report more informative and close the
expectation gap. To this end the International Auditing and Accounting
Standards Board (IAASB) has issued a package of five new or revised
financial reporting standards:

- **ISA 700 (revised): Forming an Opinion and Reporting on Financial
  Statements**
- **ISA 701: Communicating Key Audit Matters in the Independent
  Auditor’s Report’s**
- **ISA 705 (revised): Modifications to the Opinion in the Independent
  Auditor’s Report**
- **ISA 706 (revised): Emphasis of Matter Paragraphs and Other Matter
  Paragraphs in the Independent Auditor’s Report**
- **ISA 720 (revised): The Auditor’s Responsibilities Relating to Other
  Information**

Of most interest to readers of auditors’ opinions are ISA 700 (revised) and
the new ISA 701. These, in conjunction with other changes, are binding for
the audit of listed companies (or to use the European Union’s
terminology, public interest entities) for reporting periods starting on or
after 16 June 2016. For listed Swiss entities, ISA is binding as of 21
December 2016, and following adoption in the Swiss financial reporting
standards the new requirements are likely to be applicable to basically any
regular audit from 2018. Essentially there are three core aspects.

Firstly, the new rules will lead to the abandonment of the traditional
standardised formulaic option. Instead, they require the auditor’s report
to provide comprehensive entity-specific details. Information will not only
have to be provided on the auditor’s opinion itself, but also on the
fundamentals within the individual entity that have led to the auditor’s
opinion.
Secondly, and closely connected, the auditor must report on so-called key audit matters (KAMs). Since the audit is geared to providing an audit opinion on the financial statements as a whole with sufficient comfort, the auditor must conduct a risk-based audit to ensure all material matters are captured. While the new rules don’t alter the basic methodology adopted by the auditor to any great extent, they do, for the first time, require publication of information that was previously internal to the audit. So in the future, readers of auditor’s reports can expect to find comprehensive information on two to five issues deemed by the auditor to be key audit matters. The auditors first have to go into how the key matters have been identified (for example qualitative and quantitative parameters of materiality) and how they are connected with the audit (for example because of their complexity or paramount importance in terms of assessing the economic situation or the management’s margin of discretion on accounting policy matters). Then the auditors must explain the specific auditing approach adopted and mention any further relevant information in the company’s financial statements. In practice there will be disputes on these matters between preparers and auditors of financial statements, as the materiality criteria for a risk-based audit are not necessarily the same as the aspects of materiality considered in the preparation of the financial statements. There are already numerous IFRS rules referring to the disclosure of judgements and other major sources of estimation uncertainty (including IAS 1.122 and 1.125, IAS 36.134(f), IFRS 13.92(d) and (h)).

Thirdly, the new rules require an explicit description of the responsibilities of the auditor and the legal representatives of the entity in relation to financial reporting. This is designed to address the widespread public misconception that the auditors could or should be involved in the preparation of the financial statements and themselves remedy the weak points identified.

**Examples from practice**

While we’ve seen many entities in the UK and the Netherlands apply the new rules to their auditor’s reports as early as 2013, only for the current reporting season have the first companies in the German speaking world – Leonteq Ltd. in Switzerland and TUI AG in Germany – voluntarily adopted the extended auditor’s report in their annual report. Instead of a formulaic auditor’s opinion of less than one page, Leonteq has produced a comprehensive auditor’s report of around six pages, and TUI’s extends to over nine pages. A particularly positive feature of Leonteq’s report is that the auditors give a specific materiality threshold of 5% of profit before tax, and then go on to identify three key audit matters: the measurement of complex financial instruments measured at fair value, revenue recognition, and the portfolio and risk management system. At TUI there
are as many as six key audit matters: acquisition of non-controlling interests, impairment of goodwill, impairment of an interest, provisions and other areas of judgement, deferred taxes on loss carryforwards, and adjustment of EBITDA.

These two examples show that the new auditor’s report is considerably more entity-specific and transparent. Basically it appears to be an appropriate means of giving investors a better understanding of the meaning and purpose of the audit and the matters key to evaluating the audit. For the first time readers are also getting information that was previously kept between the auditors and the entity’s board.

Once the key audit matters have been identified, the auditors explain the resulting implications in terms of a risk-based approach in the relevant audit areas. This generally means the auditing technique enabling a reasonable audit opinion. For example the auditors might mention sensitivity analyses, spot checks, back-testing, testing the efficacy of controls, plausibility tests on budgets and/or market expectations, reviews of measurement models, etc. Even if this information isn’t immediately understandable for interested laypeople, it will help them to recognise the wide range of matters that are relevant in assessing an entity’s economic situation, and the assumptions, estimates and judgements involved. The auditor can then be expected to make this assumption understandable and – within certain bounds – plausible. An important positive aspect of the new auditor’s report is that it’s formulated in entity-specific as well as general terms.

Points of criticism

Key audit matters might be a particularly good way of shedding light on the black box of the audit, but it’s worth remembering that where there’s light there’s also shadow. Five points of criticism in particular are raised with respect of the new auditor’s report:

1. the abandonment of the simple formulaic auditor’s opinion
2. the increased amount of information
3. the vagueness of the notion of key audit matters
4. the possibility of a greater liability risk for auditors
5. lack of clarity on the anticipated response of the financial markets

The first argument ultimately has to do with the interest of many investors in the outcome of the assessment – similar to a credit rating – rather than the technical details of how this assessment was made. This will certainly apply to some lay investors, but probably not to professionals. While
many lay investors prefer to limit their attention to a few figures such as earnings per share, operating profit or equity quota, professional investors will certainly want to take additional explanations and information into account to understand and question how these figures were arrived at. Not only this, but the new auditor’s report still includes a short audit opinion comparable with the current formulaic opinion. Anyone wanting to know more about the audit’s areas of focus and the risks with regard to the presentation of an entity’s financial reporting for the first time has an appropriate tool at their disposal that takes them slightly closer to the board’s state of knowledge.

The second argument regarding the increased amount of information cannot be denied. On the other hand, the new auditor’s report really does contain new information that was not previously available. It remains to be seen whether this isn’t merely information the regulators and auditors deem to be useful in terms of making decisions, or whether investors will also find it helpful. However, no one who bemoans an actual or alleged lack of trust in the work of the auditor can deny that transparency and communication are valuable when it comes to building or rebuilding this trust.

As for the third argument, a core requirement of the new rules is that the auditor identify and discuss key audit matters. This, unsurprisingly, is precisely the question the debate hinges on. Since business models, internal controls and the way financial reporting is organised vary from entity to entity, these things are also key audit matters – we’ve already seen that in the examples of Leonteq and TUI. There is a concern – not unfounded – that the old, formulaic opinion was understandable and comparable but the new auditor’s report won’t be. Some claim it could even lead to a new set of misconceptions and extend rather than narrow the expectation gap. In defence of the new approach, it has to be pointed out that the auditors don’t get to choose the key audit matters arbitrarily. The standard lays down a systematic approach for identifying them. First the auditors must define matters that have to be discussed with the company’s management in any case on the basis of the previous year’s findings, concrete circumstances or legal requirements. Some of these matters will require greater attention from the auditors, for example because of their complexity or the judgement or risk of error involved. Only then does the auditor identify especially important matters and justify their selection. Limiting the auditor’s report to key matters should also be in the interests of readers and prevent them from being overwhelmed by too much information. It’s about presenting the overall picture, not about reproducing virtually the entire audit report (which in any case would be legally problematic).
The fourth argument addresses the auditor’s view and the concern sometimes raised that the notion of key audit matters could increase the liability risks. Experience so far in the UK and the Netherlands doesn’t suggest that this will be a problem. After all, the only things that are disclosed were already to a large extent part of the risk-based audit approach. On the contrary, the transparency of the approach could very well create opportunities by making the auditor aware of the contribution of their work and underscoring the quality of the audit. If indicators such as quantitative materiality thresholds are disclosed in a comparable form, this could also increase the quality of the audit overall.

Finally, the fifth argument focuses on uncertainty as to how the financial markets will respond. For some, the new rules don’t go far enough. They claim that merely identifying and communicating key audit matters and the resulting risks isn’t sufficient, and that it’s ultimately unclear whether and how investors should be incorporating these risks in their evaluation models. At this point it’s not possible to say whether providing information on key audit matters will lead to higher or lower valuations. What is clear is that in terms of the function of the audit, nothing fundamental has changed: the goal is to come to an opinion, with a sufficient degree of certainty, on whether or not individual or consolidated financial statements as a whole contain, knowingly or unknowingly, any material misstatements. The goal, now and going forward, should not be for the auditors to give an investment recommendation.

**Summary**

*Will the new auditor’s report achieve the aims it sets out to? Or will it end, as so many transparency initiatives have in the past, with misconceptions, a lack of interest, and the conclusion that sunlight can also be blinding? The new financial reporting standards undoubtedly shed more light on the black box of the audit. They make the auditor’s report more transparent, provide details of the scope of the audit and the relevant responsibilities, and give information on entity-specific key audit matters to justify the opinion. This should serve as a foundation for building greater trust in the role of the auditor, improving the quality of the audit, and ultimately protecting the addressees of financial reporting more effectively. Organisations, the auditing profession and investors should make the most of this opportunity.*


4. See also Art. 10(2c(i)) of Regulation (EU) No 537/2014 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC, OJ L 158/77 of 27 May 2015, whereby the audit report must provide, in support of the audit opinion, ‘a description of the most significant assessed risks of material misstatement, including assessed risks of material misstatement due to fraud’.


Digitisation is in full swing in Asia, and is having an impact on both business and society. But the picture is mixed: while Asian countries are setting the trend and the pace in some areas, they need to catch up in others. As a leader in innovation and engineering, Switzerland will continue to play a key role in the economic and geocultural exchange with Asia.

China is the pioneering force driving economic and social developments in Asia. The clocks tick at a different rate than in the West: a year in China corresponds to around four years in Europe. In the last decade, major growth in China has had a big impact on society. The country has become more international, and people have a much better understanding of Western corporate culture and business etiquette, and better language skills.

Digital transformation is also a hot megatrend in Asia; it’s amplifying the time-lapse effect and having a major impact on the continent’s development. Wages in China have risen 15% on average in recent years. This increased pay is slowly making it unrealistic to continue producing goods at competitive prices in China. Unlike Europe, where many manufacturing processes are already highly automated, China still relies too much on manual labour, and has enormous potential for automation. Added to this, as a result of social policy a growing number of people have been going into retirement since 2012. With the huge pool of labour shrinking, in the future there will be fewer hands to do the work.

Large leap rather than small steps

Traditional Western companies experience digital transformation as an evolutionary process consisting of different steps over a certain period of time. Not Chinese companies. Here digitisation can happen in one great leap, with production facilities replanned and rebuilt from the ground up, all the way to digital, fully automated manufacturing. This is creating immense opportunities for Swiss companies in the plant and equipment industry, particularly those specialising in machines or designing production processes. They can more or less design a factory on the drawing board that’s then built and commissioned in China. This way a Chinese company can massively boost its productive efficiency at one fell swoop and manufacture end-products at a much higher level of quality.

Innovation in Switzerland’s DNA
This is where Europe’s innovatory prowess – and Switzerland’s in particular – comes in. In Asian education, innovation is defined and weighted quite differently than in Switzerland. In this country innovation is part of our DNA, and has helped shape our history and economic system. This is the background to the impressive wave of mergers and acquisitions currently sweeping sections of the Swiss economy: China has realised that Switzerland makes an interesting supplier that offers a great deal of innovatory and engineering potential. Asia’s hunger for innovation looks set to lead to the following development:

In Switzerland and Europe we’ll see the emergence of research and development centres initiated by Chinese companies. These centres will design production facilities and machinery for the Chinese market or adapt existing offerings for use in China. This R&D activity will be funded by Chinese investors. This way, Chinese companies will be able to invest in extending the workbench. Thanks to digital technology, it’ll be possible to deploy these new R&D centres in two time zones, harnessing the West’s innovation potential and creating more productive development time.

Twenty-four hours a day: time has become a key success factor in digitised business exchange with Asia. Companies used to roll out new products in different development zones on a staggered basis, starting in North America and then waiting two years before launching the product in Asia and the rest of the world, if necessary with slight adaptations. In the digital world, consumers expect the same availability and simultaneous launch of products and services around the clock, all over the world. It’s no longer possible to exploit the time advantage or high margins in different regions.

**Digitality the new mentality**

The internet has evolved into an intranet in China, and the Chinese workforce is digitally literate. It’s no accident that these days the leading digital platforms – names like Alibaba, Taobao, Tencent and WeChat – are all made in China. WeChat’s functionality, for example, is years ahead of WhatsApp. Asian countries also lead the way in terms of payment systems. If you want to pay for parking in Singapore or Malaysia you don’t need small change; instead you use a debit card behind your windscreen. A scanner at the entrance to the car park automatically captures all the necessary payment data; that’s it: you’ve paid for your parking. When you buy a newspaper at the kiosk you rummage for your smartphone, not loose change, in your pocket. This transformation in Asia over the last ten years proves that the continent has long since left the Dark Ages in digital terms.

**Lagging in terms of processes**
Platforms such as the online payment solution AliPay and the Taobao virtual marketplace have been implemented across the board throughout Asia. But the continent lags behind in other areas of digital, especially process efficiency. Processes that can be taken care of in a couple of hours in Europe sometimes take a whole day in China. One of the reasons for this is that different processes, departments and companies aren’t sufficiently connected and don’t interact. Most companies in Europe have to a large extent automated interfaces to suppliers and business partners right along the horizontal value chain, and ensure they’re optimally aligned. A good example is the interlinking of POS, warehousing and logistics. There are also cultural reasons for Asia’s relative lack of process efficiency. Unlike in Europe, trust has to be earned, and Asians don’t necessarily trust other people straight away. Digitisation is opening up attractive opportunities for players in the Asian economy to optimise in this area.

**Social issues also at play**

Some of the biggest challenges facing China include an ageing population, the necessity of opening up to the rest of the world, and education. For example, there are pension reforms in the pipeline designed to deal with the effects of the one-child policy. But changes in society will also be driven by digitisation, as it erodes class differences and cultural barriers and reduces the effects of geographic distance. Parents in China and other parts of Asia will focus even more closely, and invest even more in, their children’s education. Only the best qualified young people will have any prospects of a job that will enable them to start a family or even a career. Those that fail to find their feet in the digital world will be forced to take jobs in lower-pay areas such as delivery. This is likely to result in an even wider income gap and secondary social problems. Down the road this development will also impact the West, because children and young people just out of education will face increasing competition from Asia. In this respect Asia holds an unbeatable trump card: its sheer size.

**Summary**

*If you do business in Asia you should check to see where you and your business partners stand in terms of digitisation. Digital maturity – and the unharnessed business potential – can vary widely depending on the industry. As much as digital transformation is also accelerating economic developments and shaping the future, business dialogue with Asia still requires old-fashioned skills in understanding the industry, risks and opportunities. Only one factor has changed fundamentally and shifted dimension: time. Digitisation has virtually eradicated the West’s time advantage when it comes to developing and launching new products and services.*
**Update**

**IFRS 15, Revenue from Contracts with Customers: first application imminent**

Increasingly complex sales transactions have prompted the standard setters to amend the rules on revenue recognition. The new IFRS rules will be applicable for periods beginning on or after 1 January 2018. Here we look at the question of whether it’s possible to avoid transition effects by switching to Swiss GAAP FER.

In a joint project, IASB and FASB have formulated almost identical IFRS and US GAAP standards governing the key area of revenue recognition. IFRS 15, Revenue from Contracts with Customers replaces the existing standards, IAS 11, Construction Contracts, and IAS 18, Revenue. In the two-and-a-half years since the publication of the new standard, its impact on IFRS users has been shown to vary. While some entities have had to make major adjustments, for others revenue recognition has remained unchanged.

**Core points of the new standard**

Essentially the new standard determines when revenue may be recognised and in what amount. The core principle is that an entity recognises revenue when it transfers the goods or services as agreed with the customer. IFRS 15 implements this core principle in a five-step model. The first step involves identifying the contract with the customer. In the second step, the individual performance obligations in the contract are identified. In practice, however, rather than covering only the sale of goods, contracts often contain additional performance obligations to the customer, for example follow-up services or the right to future discounts or products free of charge. Such contractual components often constitute performance obligations that have to be treated separately, and revenue may be recognised on performance. The third step in the model involves determining the transaction price – in other words, working out how much revenue can be recognised for the contract in question. This raises interesting questions, for example if the contract contains a financing element or variability in the selling price. The fourth step involves allocating the transaction price to the performance obligations identified in step two. Generally this is done in proportion to the standalone selling prices of the individual performance obligations. After the fourth step, it is therefore clear how much revenue an entity may recognise for the fulfilment of each individual performance obligation. The fifth and final step clarifies the question of when an entity is deemed to have satisfied a
performance obligation and when it may recognise the corresponding revenue. On the basis of a ‘transfer of control’ model, a performance obligation may be satisfied either at one point in time or over a period of time. Revenue recognition on the basis of individual performance obligations essentially results in a meaningful representation of revenue in the financial statements. However, the model can pose major challenges for an entity if there are differences between the timing and amount of revenue recognised and the timing and amount of the invoice or cash flow.

**Figure 1: Five step approach for recognising revenue**

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<td>Separate performance obligations</td>
<td>Determine transaction price</td>
<td>Allocate transaction price</td>
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**Effective date and transitional requirements**

To allow any necessary changes to systems, the IASB has set a fairly distant deadline for first application. The standard was published in May 2014 and must be applied for periods beginning on or after 1 January 2018. Two options are available for transitioning to the new standard:

- Users can apply the standard retrospectively; under this option the comparative information provided in the 2018 financial statements must be presented as if IFRS 15 has always been applied.
- Entities can apply the standard as of 1 January 2018 without adjusting the comparative information provided.

**Is switching to Swiss GAAP FER an alternative?**

Various Swiss IFRS users that would have to contend with transition effects as a result of IFRS 15 are considering a switch to Swiss GAAP FER. Until recently, Swiss GAAP FER contained virtually no rules on revenue recognition. Prompted not least by the changes to IFRS and US GAAP, Swiss GAAP FER launched its own project to adapt its revenue recognition rules. The resulting changes are applicable for periods beginning on or after 1 January 2016. Rather than create a separate standard, it was decided to modify the revenue recognition policies
established in the Swiss GAAP FER Framework, FER 3 Presentation and Format and FER 6 Notes.

Some of these changes result in a situation where IFRS 15 transition effects will also occur on a switch to Swiss GAAP FER. For example, Swiss GAAP FER now also requires that separately identifiable components of business transactions be valued separately. The corresponding revenue is recognised when the service is performed or an asset is delivered. Therefore, the treatment of such business transactions under Swiss GAAP FER hardly differs conceptually from the treatment under IFRS 15. Entities dealing with discrepancies in the timing of invoices, cash flows and revenue recognition under IFRS 15 will have to resolve the same issues under Swiss GAAP FER. Given the same transaction is supposed to be recognised on the basis of its economic substance under both standards, this should hardly come as a surprise. The use of judgement with consideration of materiality is permitted under both IFRS and Swiss GAAP FER.

In the consultation on revenue recognition under Swiss GAAP FER, the treatment of unusually long payment deadlines was also raised: ‘If the agreed payment of the consideration for individual transactions is subject to an unusually long deadline, the corresponding portion of revenues is to be shown as finance income.’ Ultimately the proposed addendum was not implemented. However, during consultation it was noted this accounting treatment of a material financing component would already be required under the existing Swiss GAAP FER guidance. This means switching to Swiss GAAP FER would not permit an entity to avoid recognising material financing components separately, even if this aspect is not directly addressed by the standard.

There are undoubtedly areas where Swiss GAAP FER allows greater room for manoeuvring than IFRS 15. This includes the application of the PoC (percentage of completion) method laid down for long-term contracts under Swiss GAAP FER. Under the PoC method, revenues are recognised on an ongoing basis over the duration of construction or service delivery. IFRS 15 also contains the concept of revenue recognition over a period of time. However, it can only be applied if control of goods or services is transferred to the customer on an ongoing basis. FER 22, Long-Term Contracts, takes a less restrictive stance on the way the PoC method is used. From this point of view, a switch to Swiss GAAP FER may be interesting for entities that under IFRS (especially IAS 11, Construction Contracts) have until now recognised revenue over a period of time but do not actually meet the new IFRS 15 requirements in terms of the continuous transfer of control.
**Summary**

Deciding on the most appropriate financial reporting standard for your company is a key question that should be addressed holistically. Rather than being swayed by individual accounting-related issues, you should think about the requirements your financial reporting has to meet. Besides considering the expectations of your various stakeholders, it is also important to take into account the regulatory environment and any local reporting requirements affecting group companies.
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