DIGITAL:
BUSINESS MODELS IN DANGER?

nextcontinent

– FOREWORD –

Not a day passes without needing to think about digitalization, how to face its challenges and how to seize its opportunities.

At Nextcontinent, an international consulting network composed of 1200 consultants with a presence in 29 countries, we take at heart to mobilize, with you, their expertise and creativity, to build and roll out solutions tailored to specific situations. Our collaborative approach to consulting, is based on our ability to listen to you, embrace your challenges and respect corporate culture. We act as a catalyst to ensure overall buy-in and sustainable return on investment.

Providing you with the bests results; often starts by asking the right questions.

Everyone knows about digital transformation. But how much do we really know? From a company perspective, it can often be confusing. How do you succeed in the digital shift as a big corporation? How did/will you manage your digital transformation? How do you foster a digital culture? It sounds easy on paper, but how does it look like in real life?

You will find in this study testimonies of some of our clients; that accepted to tell us about their journey to face the impact of digitalization. How to tackle its challenge and seize its opportunities. But also, our own understanding, analysis and recommendations.

We hope you find it enjoyable and insightful, giving you a deeper understanding of what is at stake, as well as providing you with some guidance towards a good decision-making process, to successfully thrive in the digital era.

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TRANSVERSAL EUROPEAN PERSPECTIVES

NEXTCONTINENT STANDPOINT

TAKING THE LEAD IN A DIGITALIZED AND SOON DATA DRIVEN BUSINESS WORLD

NEXTCONTINENT BUSINESS COMMUNITY TEAM

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I. MANAGEMENT SUMMARY

In the age of digitalization, at Nextcontinent we asked ourselves if the current business models of our clients are under threat from digitalization. Building on the experience of our network, followed by interviews with our customers in various industries and workshops with digital natives we were able to draw a picture of the upcoming challenge posed by the "digital tsunami".

Every business is or will soon be in danger and deeply impacted, which makes it imperative on the top-management of every company to act. In the worst case scenarios, companies and their business models have to be radically adapted or reinvented to be sustainable in the digital age. To tackle this coming challenge we recommend:

- Digital transformation always needs to be tailored to your needs and goals; there is no standard model. This means digitalization where it makes sense, not where it is just possible. Reinforce corporate strategies including technologies, rather than technology-driven strategies.

- Create mid-term roadmaps from 1 to 3 years for clear goals. Mobilize your employees for digitalization with the right methods and tools. Do proper change management to ensure people continue applying and supporting your idea.

- Be part of flourishing innovative ecosystems, and capture their value as platforms. Stop locking yourself in and go for partnerships, cooperation and the right network.

- Provide high-quality and seamless experiences to customers, rather than being 'product push' on the market. Interact

with your customers on all channels (including social media) to get the best connect possible.

- Keep your technological core steady but don't forget to look at new technologies like Big Data, Predictive Analytics, Artificial Intelligence, Robotic Process Automation and many more. Become flexible in your IT architecture and governance.

- Be ready to invest and try things. Digitalization will cost money. Dare to get back into the "sandbox and play again" - this is where innovation and disruption happens.

Digitalization is a highly complex field with different new technologies, models, topics and philosophies. Still, we believe that the most important success factor for the digital transformation of your company is still the human, either your employees or your customers.

II. INTRODUCTION: LOOKING FOR LEADERSHIP IN A DIGITALIZED WORLD

Digital has been on everyone's mind lately and will continue to be so. Digital is alive and will keep changing and evolving with time, faster and faster, changing more and more the way we operate in the business world, but it will also change the lives of our customers.

One of the most important questions for us was to gain a deeper understanding of how digitalization impacts business models. What will it mean to your business? Which changes are going to happen? Is my business model at stake? Should I take action now?

To answer these questions, we interviewed CEOs, COOs, CDOs, Lab Managers of large- and medium-sized international corporations as well as start-ups about their journey towards digitalization. This collection of 16 testimonies from across Europe, representing various industries, reveals the struggles, opportunities and methods employed by firms such as Volkswagen-Audi, Mediamarkt, Deutsche Bank, EDF, Google, Sanoma and Chiesi, among others. In addition, we have invited 20 students from seven different countries to tell us what their "Ultimate Company" would be like. It provides another interesting perspective that's worth considering.

III. SEIZING OPPORTUNITIES IN THE DIGITAL AGE IS A 'MUST' FOR ANY TOP MANAGEMENT TEAM

The challenge for all businesses out there is to keep up with the ever-changing world we live in, especially nowadays, when digital change is constant and fast.

A. DIGITALIZATION IS AND WILL IMPACT BUSINESSES FASTER THAN EVER BEFORE

Digitalization is currently one of the major issues facing all industries and a key driver for businesses all over the world. Due to its overwhelming effects on the world and its fuzzy nature, the term can be found daily in the newspapers but is rarely well-defined. Even though many people might assume it is a phenomenon which started this century, it is in fact a development which appeared over 50 years ago.

Digitalization began with the development and use of the first computers in the 1960s. For roughly 30 years, digitalization concentrated on data processing with the main goal of gaining control over complex topics, such as worldwide logistics or automation (see Figure 1).

The development of the internet started a new phase, the digital transformation, bringing the exchange of information from several sources more and more into focus. Companies like Yahoo, Lycos, Altavista and AOL prove that this period was highly driven by the attempt to connect and control the flow of information.

With the development of mobile devices like the iPhone and mobile internet, a new milestone was accomplished, making it not only possible to exchange information but to do this at any time and in any place. The first iPhone was launched just 10 years ago but mobile devices and mobile internet have already been integrated deep into our society in under one decade. This new period is what most people consider to be "the age of digitalization" and it allows for a completely new form of business model, known as the digital business. This kind of business happens in its own eco-system, offering services only in a digital form, making the user pay for data (e.g. audio and video) instead of a physical product. The most famous example of this is certainly Apple, which created its own empire with an ecosystem of devices and stores for apps, music and films.

DEVELOPMENT OF DIGITALIZATION SINCE 1900
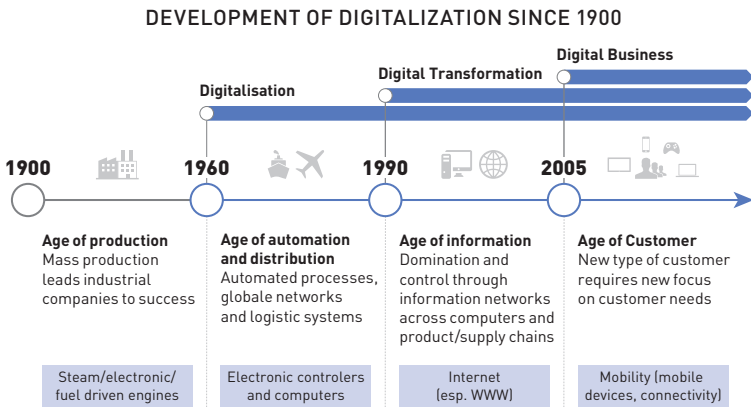
Figure 1

Considering the development of digitalization, from simple processing and controlling to a new complex and data-based form of business, as shown in figure 1, it becomes clear that the term "digitalization" not only covers the transition of data from an analog to a digital form but various topics from the connectivity of devices, sources and information, the creation of whole ecosystems containing data, platforms and devices up to completely new markets.

The impact of digitalization is game-changing, affecting both society and the economy. New businesses and ideas have profoundly shaken the role of the different economic actors, business models, the principles of value creation and so on, with extreme rapidity. Nearly half of the world's population can now access the internet, boosting its development even further.

NUMBER OF WORLDWIDE INTERNET USERS SINCE 2005 (IN MILLIONS)
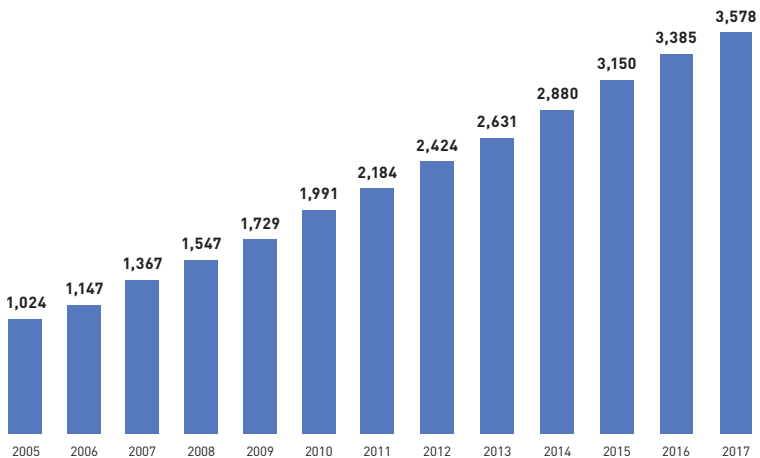
Figure 2

The direction is clear: more and more people are joining "the digital world" between data and devices, creating a more and more attractive market for companies. Future models and markets for this world are the "Internet of things" (IoT) or the internet of everything (IoE). Both models predict a future where nearly everything is connected, offering new chances to generate data, extract information and create value.

The IoT refers to the concept of intelligent machine-to-machine communication, as for example the ability of a machine to order material itself, as soon as it realizes the supply is going down or repairs or replacements need to be done. The Smart Grid concept is a good example of the Internet of Things since producers of electricity, such as wind turbines or solar panels, can communicate to the grid and the consuming machines when a high amount of energy is available and make them run correctly in this period. No human interaction is required and through the automation of many tasks, higher efficiency can be accomplished. Micro trades in the stock market are good examples of this concept. The fast buying and selling process is done entirely by and between computers, so humans are no longer involved in the actual trading process.

The "Internet of Everything" (IoE) advances this concept even further and refers to the connection of everything, such as humans with their devices, machines and other sensors around the world to create an ecosystem in which many things can be connected and therefore automated as well. Smart city concepts are examples of how this approach works on a bigger scale. Imagine a city controlling its streets, electricity and citizens according to weather, traffic and many other factors which help to optimize everyone's lives. The possibilities of an all-connected world seem endless.

Alongside "Digitalization" the term "Industry 4.0" has arisen within the last few years, sometimes leading to confusion. The origin of this term can be found in an initiative by the German government, which aims to boost digitalization in manufacturing companies. The Industry 4.0 is defined by the Fraunhofer Institute as "intelligent, real-time capable connection between humans, machines and objects with the aim of the management of systems". The Vision of Industry 4.0 is the self-organized Smart Factory, which offers the potential for a fourth industrial revolution. Topics like the IoT are part of the Industry 4.0 vision.

Although we have clarified a few terms and topics about digitalization, it is still obvious that digitalization itself is a huge and fast-evolving topic, which makes it hard to draw clear lines. Such a complex phenomenon is difficult to describe and nearly impossible to predict in the long run. The past 25 years have shown how fast the market has been changed by several revolutionary inventions such as the internet, digital cameras, smartphones, electric mobility, platforms or the current hype about artificial intelligence.

We have to ask ourselves: what does digitalization mean for companies?

One might say "why not ignore the trend and stay where we are?" But not acting on digitalization is not an option. The classic and perhaps most famous example of what happens to a company that doesn't follow the trend of digitalization is certainly Kodak. Kodak even invented one of the first digital cameras but didn't believe in the technology and didn't follow the market trend, and was erased from the market within just a few years. The same fate awaited Nokia, which developed classic mobile phones when brands such as Apple and Samsung were already

providing smart phones. We could cite many more examples but the conclusion is clear. Digitalization is not a trend, it will not be over in a few months. If you ignore digitalization, customers and the market will sooner or later ignore you.

Given these and other examples, some might try to label digitalization as a negative and destructive phenomenon. But there are many positive examples, which prove that companies are not helpless against new upcoming and disruptive competitors. In the following chapters we show, with the example of Thalia and Hugenduble, and its E-Reader Tolino, how companies are able to defend their market against a giant like Apple. In fact many new companies and opportunities for business have been created through digitalization.

We refrain from labeling digitalization from a global perspective as a positive or negative phenomenon, but what is clear is that it has raised new challenges and changed many rules and roles in the economic landscape. Lately, technical innovations, always considered as a key resource for a company's success, have been delegated in importance to second place. Current business models are more and more focused on innovation and especially disruption. Many successful companies in the last few years have been able to conquer markets not by using a specific technical innovation but by applying the right business model. Platform models such as AirBnb, Uber or Alibaba used existing technology and became leaders in their market. Empirical studies have shown a much higher potential for success in business model innovation than in all other forms of innovation. So if we talk about the impact of digitalization and if we acknowledge that digitalization offers new chances and possibilities but also threats, then we need to look not only at products but also at business models, as well as digitalization. This rule applies to

all companies, as all of them will sooner or later be affected by digitalization.

As most companies already know how to handle product and process innovations in the age of digitalization, the current "blind spot" and threat for companies lies within business model innovation.

B. THERE IS NO SPECIFIC TYPE OF SUCCESSFUL BUSINESS MODEL WHEN GOING DIGITAL

The previous chapter leads us to take a closer look at business models and to ask ourselves how it is threatened by digitalization. In order to answer this question, one needs to have a clear picture of what a business model really is and how it is defined. In order to discuss business models and the challenges they may be facing today or in the future, we need a common understanding and a common language for the definition of the term "business model". The University of St. Gallen, which has published numerous studies and articles about business models, describes it as follows.

The comprehensive definition of the term "business model" has four basic dimensions: the customers of a corporation, its offering, the way it is produced and the revenue mechanism. In summary, the business model comprehensively describes the "who-what-how-why" of any corporation which is conducting the business, with "who" – the customers – sitting in the center of these dimensions, as the most important aspect.

Therefore a business model can be seen as a set of assumptions or hypotheses. The process of defining a business model is part of the company's business strategy. In other words, the business model answers the question of how a company plans to make

money and how it wants not only stay in business but also how to grow in its market.

As for the question "business model in danger?" it is also crucial to understand exactly what a digital business model is. Numerous studies, books and articles on strategy and business model development have been published – it is summarized by Christian Hoffmeister as follows: *"A digital business model is the valuable design of digitally measurable and controllable exchange relationships between at least two digital systems."*

An essential part of every business model is its equipment characteristics. When talking about digital business models, the equipment characteristics themselves have to be digital in order to allow for an exchange of services or products. Hoffmeister takes this definition one step further by claiming that a digital business model can only work when the entire ecosystem is digital. The environment for digital business models is clearly defined by technology and infrastructure. Therefore both sides of product and/or service transactions need to be equipped with computers, tablets or smartphones to successfully interact with one another. One of the best examples of the need for a digital environment for a business model to work is "Facebook". The idea of connecting users all over the globe and enabling them to exchange all types of content with each other is based on their ability to go online and access Facebook's platform. So at the most basic level, digital business models can only be successful in a completely digitalized ecosystem and therefore companies and their customers need to have full access to the technical framework.

In the contemporary world, companies are increasingly faced with the challenge of shortened life cycles, disruptive innovations, a progressively uncertain economic environment

and well-informed consumers. It therefore needs to take a generic approach to enable companies to either drastically change or develop new business models from scratch.

As Baden-Fuller and Haefliger (2013) point out, radically improved product or service offerings will not lead to superior profits on their own. In fact, companies need to tackle the interdependencies that arise between the choice of business model and technology. Most notably, the authors stress the fact that technology does not operate in isolation but in high interoperability. To enable this to happen, and to ensure all of these connections and links are aligned and work smoothly with each other, a sound foundation is needed. Moreover, the right choice of business model can further ensure that innovation takes place within a business. Only business models that are agile and flexible enough will, rather than stifle innovation, embrace and thus accelerate it. Business model innovation, at its core, can be viewed as developing a new business model over and over again, just as a start-up needs to generate a business model at its inception. This is why approaches that are first and foremost used by start-ups are also great ways to reinvent already existing business models.[1]

In this context, the Business Model Canvas represents a widely recognized approach in strategic management to meet both requirements – enabling firms to drastically change or develop new business models.

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1. Baden-Fuller, C., & Haefliger, S. (2013). Business models and technological innovation. Long range planning, 46(6), 419-426.

THE BUSINESS MODEL CANVAS

KEY PARTNERS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
Who are our key partners? Who are our key suppliers? Which key resources are we acquiring from partners? Which key activities do partners perform?	What key activities do our value propositions require? Our distribution channels? Customer relationships? Revenue stream?	What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each customer segment? Which customer needs are we satisfaying?	What type of relationship does each of our customer segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they?	For whom are we creating value?
	KEY RESOURCES What key resources do our value propositions require? Our distribution channels? Customer relationships? Revenue streams?		**CHANNELS** Through which channels do our customer segments want to be reached? How are we reaching them now? How are our channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?	

COST STRUCTURE	REVENUE STREAMS
What are the most important costs inherent in our business model? Which key resources are most expensive? Which key activities are most expensive?	For what value are our customers really willing to help? For what do they currently pay? How would they prefer to pay? How much does each revenue stream contribute to overall revenues?

Figure 3

As depicted above, the Business Model Canvas consists of nine basic building blocks that, when combined, formulate a company's strategy of how to monetize its services or products[2].

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2. Osterwalder, A., & Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.

The model, if applied gradually, covers the entire value chain, starting from the customer segmentation to the value proposition to, ultimately, the cost structure of the enterprise.

The customer segments represent the group of people or organizations that will be impacted by the value proposition offered by the business. Companies can differentiate their offers by, for instance, a common problem, propensity of purchase, range of channels and behavior. These factors determine whether a company decides to choose to operate in a mass-, niche-, segmented- or multi-sided market.

The core building block, when creating a business model should generally be the *value proposition*. It is the place where value is created for the customer, for instance, in solving customer problems or in satisfying customer needs.

In the light of digitalization, another building block has become even more complex than it had already been in the past: channels. The canvas understands *channels* as the medium through which the value proposition is delivered to customers, e.g. communication, distribution, and sales channels.

The forth building block – *customer relationships* – establishes the types of relationship the company will have with its customer segments. Possible relations can be realized through personal assistance, self-service, automated services, communities or co-creation. As companies can decide to serve more than one customer segment, these relations are not mutually exclusive but can rather co-exist.

Strategic management generally distinguishes between the creation of value and how companies can capture the value they

created. Following this logic, the canvas also divides these two activities namely into value proposition (as described above) and revenue streams. The building block revenue streams outlines how companies can monetize their services and products. This activity, however, is twofold. On the one hand, the company itself must come up with innovative solutions to maximize its revenue streams. On the other hand, the customers' willingness to pay influences whether the chosen model will be successful.

A company's ability to capture value is a main driver for business model innovation. From the mid-1990s until the early 2000s, the so-called dot-com bubble showed what happens when companies do not generate a comprehensive business model that covers all building blocks and neglects the part where the company captures value.

Back then, promising start-ups launched businesses, which certainly created value for its customers but could not monetize any of this value for themselves and eventually went bust. "Pets.com" is one of the most remarkable dot-com failures. The company sold pet supplies to retail customers and burned nearly US$300 million of investment capital during its two years of existence. The newspaper industry still suffers from its "free of charge" culture because its actors did not foresee the trend from print towards online news. Today they are desperately trying to find ways to make consumers pay for online content.[3]

Key resources are the assets required to offer and deliver the value proposition and make the business model work. Depending on the industry a company operates in, the business requires different key resources. Human resources are a key

3. The Economist (2009). All the news that's free to print. Available at: http://www.economist.com/node/14072274 (Accessed: 22 August 2017)

success factor especially in knowledge-intensive and creative industries. In other industries manufacturing facilities or machines are equally important as well as intellectual resources such as patents or copyrights or cash and credit lines as part of financial resources.

Key activities represent the most important things a company must do to create, develop and deliver its value proposition. As with key resources, key activities vary from business model to business model. A manufacturing company's key activity would usually be production. A management consultancy's key activity would be problem-solving, i.e. coming up with (innovative) solutions with a results-oriented approach.

The eighth building block is called **key partnerships**. It includes the network of suppliers as well as other partners that keep the business model running. The Business Model Canvas differentiates between four types of partnerships: (i) strategic alliances between non-competitors, (ii) strategic partnerships between competitors, (iii) joint ventures to develop new businesses, and (iv) buyer-supplier relationships to ensure reliable supplies.

As profits are defined as revenues deducted by costs, the **cost structure** too is a pivotal part of every business and it determines whether the company will have a solid bottom line. Companies that fail to understand their cost structure are very likely to end up in financial distress or bankrupt.

Every company that wants to accept the digital challenge and develop its business model needs to evaluate all aspects of the canvas, whether they can or need to be adjusted in order to add value to either the clients or to the business itself.

C. DIGITALIZATION IS A POTENTIAL THREAT AND OPPORTUNITY TO EVERY BUSINESS MODEL

After considering the development of digitalization and the impact on the economy, as well as examples of companies who failed or succeeded in the digital transformation, we have come to the conclusion that the answer to the question "Is the current business model of companies in danger from digitalization?" must be "yes".

In the past, the question of innovation was equated with the ability of companies to generate new technical solutions, new products and new services. This ability will continue to be of great importance in the future for a company to remain economically successful. However, this ability alone is not sufficient. New digital business models have the potential to revolutionize entire industries and the ability to innovate will be decisive for rescuing business models from the danger of digitalization.

Still, the most important thing to realize is that you never know if and when the big impact will come to your industry, your market and your business model. Disruptive innovations are usually only visible when they have reached a certain market maturity. In this context "blockchain" comes to mind: in Switzerland, the Russian Vitalik Buterin is working on a revolutionary software which is likely to change global payment traffic forever.

Large banks, such as Goldman Sachs, JP Morgan, UBS and Credit Suisse, have only recently joined forces to conduct research on a common standard because they are afraid that their business model for payment solutions might be in danger. Meanwhile, the word "blockchain" has even been added to the Oxford Dictionary.

It is impossible to provide a global answer to the question "Are business models in danger from digitalization?" since companies can only get an idea of the current risk by analyzing their own situation. In the past, many industries have been massively shaken by new players, disrupting the existing business models and many companies.

As a general rule, one might say, the less a business is digitalized, the more attractive it is for a digitalized competitor to challenge your specific products and business model. The less digitalized your whole industry is, the higher the risk that you will be challenged by disruptive highly digitalized competitors from a different industry. Examples of this are Amazon, Uber, AirBnB or Netflix, who entered the market with a completely new approach, making all other companies struggle.

When faced with this unpredictable challenge, a company has to find a way to handle this risk. As a first simple approach, every company has to ask themselves three main questions:

1. Where does my company stand regarding the level of digital maturity in each of its parts?

2. What level of digital maturity does my company and my industry have compared to other companies and industries?

3. In which strategic position do I want to be in the future regarding digitalization and market leadership?

The first question can be answered by the concept of digital maturity models. This approach offers a method to benchmark your company based on specific topics in digitalization. General models for all industries exist as well as industry-specific

models. Alongside universities such as St. Gallen, various companies have developed their own version of maturity models. There are several models available and the number is still growing. Companies should only perform these ratings with the assistance of a third party, to avoid bias when answering questions or to avoid political issues within a company. Choosing a digital maturity model should be led by the question of whether the model provider developed its model based on the same external factors as your company depends on, such as region, industry or company size.

Regarding the second question, several digital maturity reports can be found online. Usually every maturity model has its own maturity report, which offers you the chance to benchmark. The level of detail in each report differs and can be part of the criteria for choosing the correct model.

Such reports help you understand the position of your company and your industry in the digital transformation. They also help to show the direction to look in if you want to learn from companies, who are close to your business and have already taken a step which you are still considering. Considering experience in a related but not competitive industry, from companies that have already tackled the digital transformation, is one of the big opportunities which many companies miss, due to fear of being label as old-fashioned.

The third question can be answered with more conventional strategic thinking. To tackle the challenge of the digital age, a company needs to include digitalization in its own business strategy. When answering the question *"What position do you want in future markets regarding digitalization?"* it is tempting to reply "first place". But this simple strategy is not recommended.

Not every company needs high-end digital transformation for every employee, process and system. As described in the previous chapter, it should match your business model and support your business. As a company, having your own smart phone app might look cool but if it doesn't support any of your processes or give you a deeper insight into your customer, the value is very questionable. Digitalization is not an end in itself, it has to support your strategy and the value you deliver.

Reflecting upon the outlined trends, challenges and possibilities it becomes clear that our perspective on customers, companies and innovation has to change. The way other companies have started to tackle the challenge is an important source of inspiration to think outside the box and find your own way to enter the digital age. This also means that digitalization cannot be "parked" in any small specialized department or outsourced to any vendor or consulting company. Every employee in the company and even all vendors and consultants need to be on board with the topic. Digitalization needs to be managed by the top management to ensure a true change and digital transformation.

IV. TESTIMONIES AND MAJOR TRENDS IN OUR CLIENT JOURNEY TO TACKLE DIGITALIZATION

A. GETTING FOCUSED ON CUSTOMERS

Adopting a customer-centric approach is the key to delivering a unique and comprehensive customer experience

Customers aspire to a comprehensive experience and this experience has to be unique from the shopping experience to the consumption of the product/service itself. Now, more than ever, companies have to step into the customer's shoes. What do they expect? What are their aspirations? What extra attention we can bring them? How do I make their journey easier and quicker?

Adopting a more customer-centric approach is the key. To follow this approach, companies need to review their business model with a focus on their customers. The business model canvas is a useful tool to generate the right questions such as: Do I need to adapt my value proposition to satisfy my customer? Might it be useful to extend the services around my product? Or do I need to re-think the channels I am using to interest customers? And so on. Head of Finance, Philippe Vincens and Digital Expert Raphaël Rivière at Google France highlighted "Know your customer. All over again" as a key success factor to face future challenges. According to them: *"Customer behavior and journeys have been particularly impacted by digitalization and the use of multiple devices. By analyzing these journeys, we came to understand that there is no one standard journey anymore but that each customer is, through his/her experience, situation and desires, unique."* (Philippe Vincens and Raphaël Rivière, Google France).

New Power of Customers through digitalization

Through digitalization and multiple devices, customers have more power than ever and companies are under a lot of pressure to fulfil these expectations. On the one hand, customers can select from anywhere at any time through different channels from a wide range of products/services. Due to the rise of comparison platforms and search engines, customers can examine and compare the different products/services to gain the best added value. Consequently, consumers are much less brand-loyal and search for the best price-performance ratio for themselves.

Companies need to re-think their complete value proposition and need to deliver more added value, both in terms of low cost and higher customer satisfaction. They need to be more

customer-centric by adapting the way they interact with customers to deliver the best customer experience and make them feel unique. As Andre van Vuuren, operations director at CED Repair, stated during our interviews *"Every moment of the process is about customer experience, the insured party knows what they are up to, and it is offered in an appropriate manner."* (Andre van Vuuren, CED repair).

CED Repair, one of the biggest claim specialists in Europe, has created a new system, MultiHerstel, which helps employees provide the best possible service to the insured party in terms of damage claims. MultiHerstel processes the damage repair based on the information gathered by the employee and offers better information to the insured party and price effectiveness to their clients, the insurance companies. The platform works as an interface between the insured party, the repairer and the insurance company and manages the communication between the different parties. By doing this, they improve the customer experience not only for the insured parties but also for the insurance companies.

On the other hand, customers are not only able to consume but also to question, criticize, share or recommend via social media. They can strongly influence the market by entering and sharing their feedback via Facebook, Twitter and so on. In addition, they can recommend or advise against a product/service with their comments stated directly on online shopping portals such as Amazon or rating portals and influence by their comment other potential customers. In the best case, companies achieve a positive comment and enjoy a free advertisement, but they can be also confronted by negative statements which need to be handled. CNP Assurances has therefore implemented active survey and research policies and innovative initiatives

regarding customer satisfaction. Our interviewee Magaly Siméon from CNP, said that by listening actively, it becomes possible to identify risks and recognize opportunities. As she explained: *"The goal is to connect with clients, to support them throughout their life and be at their side for important events."* (CNP Assurances).

For her, the objective is *"to be omnipresent, be more positive and reassuring: an insurance has to be a trusted third-party and provider that reimburses and supports them alike, during their whole life."* Actively listening is very important to become more familiar with customers and to satisfy their needs: what are our customers talking about? Which problems are our customers facing? How can we solve their problems? What can we contribute?

In combination with social media, a new term has been established: "Social Listening". Companies follow customer talk on social media including blogs, news and forums, to adapt their response and their offer to the needs of individual customers. Tim Cole, German expert on the internet, e-business, the social web and IT security stresses in his book "Digital Transformation" that companies have to learn from what they have heard to provide something good: a company has to actively interact with customers by actively listening and providing comments, questions and hints.

With some luck, a relationship of trust is established and the company regains some of its brand loyalty. To be omnipresent some tools like "Google Alert" can be used to provide signals if the company's name is used on the World Wide Web. Other tools also offer further analysis functionalities: these tools not only scan social web platforms but also deliver reports on the market and customers.

Use of data to offer added value tailored to individual customers

Social media is not confined to delivering direct customer feedback to a certain product/service or to the company: since the start of Facebook in 2004, the number of social networks has exploded and their dynamic has converted web users from simple spectators to contributors. As our interviewees from Google France stated: *"Every day in 2016, we are creating as much data as was produced from the beginning of mankind to 2004. And this data comes in many forms: photos, videos, GPS data, web searches, social connections, cookies and so on. This trend will even be heightened with the Internet of Things."* (Philippe Vincens and Raphaël Rivière, Google France). It has been never so easy to get information about customers than today. The amount of data has exploded and companies need to empower themselves to use the data in an efficient way to improve the customer experience.

The amount of data has not only exploded as a result of the use of the internet and social media. The automotive industry for example gathers a massive amount of data from its cars to improve the value proposition and channels for different customer segments: *"By the year 2025, there will be over 600 million connected vehicles all over the world. The car will be the greatest generator and processor of data in what we call the Internet of Things, and this will allow for real-time communications between the manufacturer, car and user."* (Laura Ros, Volkswagen Spain).

Laura Ros told us in an interview that the digital ecosystem growing around the automobile provides her company new insights: they are learning more about customers than in the past; this includes the customers' likes, needs and preferences.

Volkswagen Spain has identified that *"A good way to add value for customers and offer them customized experiences is to take advantage of the vast amounts of data that both the automobiles and their drivers will generate. These data have to help us get to know our customers better so we can build loyalty."* (Laura Ros, Volkswagen Spain).

Based on data collected on their customers, Volkswagen can offer added value tailored to individual customer segments.

But data independent from its source have to be used carefully by companies: if they misuse data, customers can easily penalize the company by quitting the customer relationship. In addition, through social media the information regarding misuse can be spread and the reputation of a company can be damaged. The power of dissatisfied customers is huge and companies should not underestimate it.

Companies need to re-think and build a strong relationship with their customers

Because customers have gained so much power through digitalization, companies need to rethink their customer relationships and how they communicate with customers. To do so, companies need to think about how they can use all the opportunities the World Wide Web is offering them, e.g. by using a multichannel strategy instead of classic sales channels. For the managing director of La Feltrinelli, Alberto Rivolta: *"Digital channels allow contact with a wider range of consumers easier and faster, with an inevitable overcoming of territorial boundaries and enforcing of the providers' presence wherever there is no suitable material coverage."* (Alberto Rivolta, La Feltrinelli).

Digitalization enables companies to offer their products/ services to more customers than ever if they understand how to use digital channels in an efficient way. They need to learn to guide the customer and to arouse their interest. For the Head of Digital Transformation of the Monte dei Paschi di Siena Bank, Simone Bruschi, one key success factor is that the management of the customer contact system *"has to become an active system, reactive inbound, that solves customer problems and offers a next-step action. It must also become a multichannel system; the customers could either contact or be contacted by the bank through different channels in a symmetrical and synchronous way."* (Simone Bruschi, Monte dei Paschi di Siena Bank).

Digital channels and therefore the number of multi-devices enables mutual communication between companies and customers. Processes need to be adapted to be more customer-centric. Companies need to build a strong relationship with customers. According to Paul Swoboda, CEO of GRAWE Romania Assurance: *"People are needed for customer support and sales processes and customer experience is always the most important factor when it comes to building a long-term relationship. Digitalization"* (Paul Swoboda, GRAWE Rominia Asiguare).

B. CULTURE AND CHANGE MANAGEMENT IN THE DIGITAL SHIFT

Employers and employees together for a new corporate culture

Digitalization has not only fostered the emergence of new technologies and changed the way we consume, but also significantly contributed to changing the way we want to live our lives. We have seen a major shift in people's relationships to work and what they now expect from it. They want to see a new

employee culture. But such culture can only come if the entire company culture enables these changes.

We are certain that success is not about technology but people. We believe in people and the power of mobilization. Also, we hold to the certainty that nothing can be achieved without people. This is why giving your employees freedom and helping them find a sense of fulfilment is essential.

Steve Jobs (Co-founder of Apple) said *"It doesn`t make sense to hire smart people to tell them what to do; we hire smart people so they can tell us what to do".*

Humans enable change, with their ideas and know-how, as well as their will to do so. The ability to surround yourself with the right talents to push your business forward is crucial – people with a vision, able to share this vision, enablers of change, who will participate in finding the right mindset. And make sure you keep these talents. Your corporation should be a place that attracts and retains the talent that will help you build your company's future. Giving your employee the freedom and the right set-up to create and inspire might well be the major key to success. For Dr. Olaf Zeitnitz, CEO at VisualVest, a Fintech located in Germany, there is no doubt that hiring digital natives is necessary, but you need an appropriate working atmosphere to retain them.

What do employees aspire to? What will make your company attractive to talent and make them stay?

There is a new generation gap, as people aspire to see their role as an employee change. At CNP, Magaly Siméon (Member of the Board) is aware that it is a very important challenge,

which has so far been put to one side: *"One of the greatest challenges facing today's insurers will be to reinvent their ways of working and their relations with their employees. They often represent an intangible asset that is too little-known and underappreciated."* (Magaly Siméon, CNP).

Employees want a better work-life balance. Work alone is not seen any more as a source of self-completion. People want to be able to have more varied centers of interest and experiences outside of work as well as spending more time with their family. But more importantly, employees want more freedom in their work and the possibility to exploit their capability to the full. This is the case at Sanoma, where Lassi Kurkijärvi (Former Innovation Director) implemented *"intrapreneurship"* as part of the corporate culture. The idea was to stop planning and to start doing, in other words shift from *"asking for permission"* to *"asking for forgiveness"*.

Scaling agility to deliver faster and better

"Companies have to put spaces into place where employees can express themselves and give them the tools and the means to innovate", (Jean-Claude Laroche, EDF) explains Jean-Claude Laroche, Chief Digital and Innovation Information Officer at EDF. The traditional "V-Model" should be replaced by a more agile one, in which trial and error should be allowed and not be synonymous with a penalty of any sort. For this to happen, the corporation itself has to change its way of functioning.

As Jan Wohlschiess, Global COO/CFO Wealth Management at Deutsche Bank pointed out to us: *"Digitalization needs to be a natural component of both corporate strategy and culture – not limited to certain components and products".*

In other words, the company culture itself has to change along with the new aspirations of employees. One cannot thrive without the other. This new mindset and way of doing things has to be implemented at every level and accepted by everyone within the organization. If given more freedom, employees will become more agile, making your organization more agile too.

Big corporations need to behave like start-ups in order to be ready for changes in the market. No more "we've always done it this way". Actually, unique processes do not exist. Be open-minded. According to Dr. Olaf Zeitnitz, CEO of the Fintech, VisualVest: *"In order to be successful, companies must be agile and especially be open to new ideas and opportunities from non-bank financial services and from abroad".* Additionally, he says that the corporate culture should never stay still.

"The culture of the companies is hugely important and is in constant change and steadily developing further." (Olaf Zeinitz, VisualVest).

PMU is working in an agile way to develop new ways of betting thanks to digital products. Samuel Loiseau, the Marketing and Customer Service Director of PMU, told us: *"Digital technology changes the time lapse of development."* Digitalization enables shorter and shorter time-frames, forcing companies to be more agile in order to stay competitive.

A newer and broadly adopted perspective of the company of tomorrow

We have witnessed a new wave of inspiration regarding working lifestyles. At Nextcontinent, we organized a "student challenge" bringing together twenty students from seven countries, with a

total of eleven different nationalities. Digital is a game-changer for business. The aim of this challenge was to get students to design their ideal company. We asked them: how should corporations manage change? What do you aspire to? What does the perfect job and employee look like? From there, we were able to come up with some very interesting insights and concepts, which relate to the aspirations of the new generation. The next generation wishes to see a new corporate culture. First of all, this new culture means developing an entrepreneurial spirit inside the corporation, where every employee should be able to propose new ideas, and be heard, and so work with more flexibility and freedom, in order to innovate and be creative. Secondly, they want a less rigid hierarchy inside the company. Nowadays, people truly want to use their potential to the maximum, which requires less apparent hierarchy and more dialogue; a company in which everyone is taken seriously thanks to a relationship based on trust. The students developed three business models, in line with the previous concepts and shaped them into prototypes. To gain a deeper insight into their work, please refer to the ultimate company article.

C. INNOVATION BY IMPLEMENTING A WIDE RANGE OF ORGANIZATIONAL MODELS

Testing a large variety of organizational models to generate innovations, either incremental or disruptive

"Digital is constantly redefining norms and challenging the status quo" (Philippe Vincens & Raphaël Rivière, Head of Finance & Digital expert/Chief of staff at Google Insurance).

A real buzz has surrounded the word "disruption" for some time now, often leading people to confusion. We think it is important to address the distinction between innovation and disruption, which are two not so different constructs. *"Disruptors are innovators but not all innovators are disruptors".* While innovation tends to

improve an existing concept or product as part of a step-by-step approach, thanks to technology, disruption tends to innovate not in an incremental way but in a completely different way. Disruption is at the same time destructive and creative; it happens when I change more than one or two components of my business model, for example, coming up with a new innovative product but with a new innovative pricing and distribution form. When deciding to disrupt yourself, the direction is clear but the outcome might be far from your existing business. This is the more challenging, scarier part of disruption for big corporations. Many companies have been disruptive, such as Netflix who shifted from DVD-rental to creating an online streaming platform including its own media content productions "Netflix Originals".[4]

These are examples of companies that knew when and how they had to renew themselves before it was too late. If you look at the story of Kodak, as mentioned above, they did not foresee and/or did not take the necessary action in time. Kodak's core business was selling films for photography. But then film photography disappeared when digital cameras appeared on the market. *"The right lessons from Kodak are subtle. Companies often see the disruptive forces affecting their industry. They frequently divert sufficient resources to participate in emerging markets. Their failure is usually an inability to truly embrace the new business models the disruptive change opens up. Kodak created a digital camera, invested in the technology, and even understood that photos would be shared online. Where they failed was in realizing that online photo sharing was the new business, not just a way to expand the printing business"*. (HBR, 2016).

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4. Harvard Business Review: "Kodak's Downfall wasn't about Technology", https://hbr.org/2016/07/kodaks-downfall-wasnt-about-technology.

Every player on the market should be prepared for such eventualities. But how do you prepare for something you might not see coming? Every company needs to answer these questions itself but in the end, we believe innovation or disruption are inevitable. Continuous innovation will allow you to stay a step or two ahead of your current and potential new competitors. Additionally, as Bob Herbold explained (Former COO of Microsoft), it is a lot easier to grow by making a transformational change when at their peak. Indeed, *"initiating a meaningful change is much more difficult in a state of decline when resources are depleted and confidence is low. Many companies fail because they miss that ideal point of transformation"*.[5] If you decide to disrupt yourself you should be careful, as it does represent a drastic change.

Jasper Baggerman, Innovation Lab Manager at Wolters Kluwer warns: *"I hear innovation managers of corporate companies say 'we will disrupt ourselves', cool talks for cool boys. But it's questionable if that is really smart... It is a waste to destroy your own profit. Aim to set up new businesses which create additional profit. That is hard enough for a corporate organization".* (Jasper Baggerman, Wolters Kluwer).

Disruption has to be handled with caution, especially when your corporation has existed and been established in the market for a long time.

For some businesses, innovating without operating drastic change, or completely rethinking their entire business model

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5. Forbes, 2014,
Disrupt Your Business Before Someone Else Does
"https://www.forbes.com/sites/rebeccabagley/2014/03/17/disrupt-your-business-before-someone-else-does/" \l "773591ba12c1.

to face up to the digital transformation will be enough; for others, it won't be. Always looking for ways of improving your organization is crucial. Digital accelerates everything, meaning that you have to move just as fast in order to stay in the race and not fall behind another firm.

Depending on your business industry, you will tend towards disruption or innovation. Paul Swoboda, the president of Grawe, an insurance company based in Romania, explained to us: *"It appears to be more efficient to choose evolution over disruption. A radical change of business model won't be appropriate. The business model would be the same but improved."*

For the companies choosing disruption over evolution, there are many different ways to do so, as Philippe Vincens and Raphael Rivière, both working for Google France, explained: *"Everyone has to take part in the innovation marathon and challenge. For competitive intelligence, but also for a competitive edge, it is vital companies disrupt themselves before others do. They can do so by promoting internal development and innovation, creating "Innovation labs" like AXA did or capitalizing on external growth and co-development."*

Samuel Loiseau, Marketing and Client Services director at PMU (a leading betting company in France) stated that *"Innovation is not only efficient, it is vital for our market"*.

Exploring the potential of disruptive technologies and trends

Another aspect of digitalization is technology, which offers you a lot of opportunities but can be also a challenge for you and your company. Technology helps you capture business or organizational value and optimize your relationships with

customers. What's important is that you understand the potential technological innovation could have for your business and to use it carefully, as technology has another side as stated by Simone Bruschi: *"The banks have to change the way they look at technology because technology is the business. Algorithms could be key success factors, but could also determine the bank's failure"* (Simone Bruschi, Monte dei Paschi di Siena Bank). He discusses the threats and the opportunities of technology, but the positive effects are predominant: he expects a lot of benefits from activities that can be remotely managed. For instance, a lot of non-profitable activities can be done by automatic tools rather than employees.

Paul Swoboda from Grawe supports this idea: *"Manual data entry should be reduced in the future. Local workforce is overqualified, thus it might be more efficient to delegate the support of more complex processes to them, to be responsible for more sophisticated tasks in the processes"* (Paul Swoboda, Grawe).

But he also warns of the flipside: *"becoming more digitalized on specific tasks implies the risk that people will lose the capability of seeing "the big picture" of the process".* For him the benefit is greater than the flipside. So do not underestimate the negative effect of new technology but think also about the added value for your business and your organization by introducing new technologies into your company.

Investing is crucial

Nonetheless, to do so, no matter which industry you belong to, or your company size, to tackle the digital shift and keep your boat floating you'll need to invest, whether in terms of technology, talent or R&D. We saw earlier that innovation or disruption

is crucial: however, we have also seen that without the right mindset, you will probably not succeed. For Alberto Rivolta, the managing director of La Feltrinelli, *"all retail companies are behind in terms of investing in digitalization".* According to him, *"the priority in investment is CRM. It should be different from the pure player's CRM, ensuring higher value for the brand and experience in this environment"* and *"not investing at all is out of the question for La Feltrinelli. You can cease investing if you offer services but you can't if you sell products."*

However, for the automotive industry, the prior investment seems to be about R&D on new connected vehicles, as Laura Ros, the director of Volkswagen Spain told us: *"In the case of the automobile industry, the success of this digital transformation will be conditioned to some extent by the amount invested in R&D, since the development of these new connected and autonomous-ready vehicles, the creation of the digital ecosystem and the implementation of new mobility services all require significant investments".* Laura Ros, Volkswagen Spain).

Of course, your investment should be proportional to your needs and you should invest wisely. As in the previous chapter, talent is really important; you might consider investing in new talents, since those new minds can largely contribute to your success. But to encourage innovation and be sure of where to invest, building partnerships can be a good card to play.

Building up valuable eco-systems

Being part of an eco-system is really important and could represent a very good way to help you get more perspective and help you thrive. When you can't always only rely on internal innovation or disruption, capitalizing on external development

could be extremely fruitful. Developing partnerships is important to be able to see beyond your own business, and to get extra help to develop your ideas faster and to make them reality, giving you a broader and fresher look at the opportunities that you could seize. PMU uses the help of external start-ups to foster ideas, even though they are absolutely not part of the same market. For Marcelle Mettes, director of innovation at Essent, it is essential to work with innovative start-ups to be able to bring innovation into the company. According to her: *"You have to look at a start-up as a kind of venture capitalist: is there a strategic fit, does the team have the right skills, does the minimal viable product fulfil a customer need and – in addition – can we bring it better and faster to market than they and others?".* (Marcelle Mettes, Essent).

Jan Wohlschiess, Global COO/CFO Wealth Management at Deutsche Bank, also points out the importance of going outside your own environment: *"Employees need freedom and opportunities to familiarize themselves with new technologies, to explore innovations in the market as well as to try new ideas themselves. For this, inspiration from outside the organization is crucial".* At the Deutsche Bank, Mr. Wohlschiess explains that they go to industry conferences or local start-up meet-ups to get to know people and eventually start a collaboration. Finally, Deutsche Bank even dedicated a team that screens all upcoming start-ups in Silicon Valley, London and Berlin not to miss out on eventual potential collaborations of value.

Additionally, partnerships can be a very powerful way to tackle giants and survive when facing strong competition. In Germany, book retailers formed an alliance for the eBook market. Five book retailers (Hugendubel, Thalia, Weltbild, Der Bertelsmann Club), along with Deutsche Telecom decided to join forces to

compete with Amazon. Alone, each of these book retailers did not possess the necessary resources, in terms of investment, IT and know-how. Now the alliance behind Tolino is present in six countries, with 20 different bookselling brands (Book, 2015). [6]

D. OUR CLIENT'S KEY TRENDS SUMMARIZED AT A GLANCE

Customer-centricity; tech-driven innovation and people commitment are the three main focuses of companies in their digital shift

In our interviews with CEO's, COO's, CDO's, Lab Managers of large- and medium-sized international companies as well as start-ups, we asked our clients about their journey towards digitalization and collected 16 testimonies.

The interviewees provided us with insights into the challenges and the opportunities they face through digitalization in their own perimeter.

We have identified some overlapping key trends which concern more than one client. Some of these trends have attracted our attention and we clustered them into seven categories: customers, talents, culture, innovations, technologies, investments and partnerships. In our synthesis of main key trends (figure 4) we provide an overview of the extent to which each interview partner focused on the different categories, showing as well what they are focusing on at the moment.

The most focused category is Customer. As already stated in the previous chapter, adopting a customer-centric approach is the key to delivering a unique and comprehensive customer experience. This trend is not only mentioned by most interviewees and forms

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6. Book, S. (2015). Obtenido de http://www.smartbook-tisp.eu/resources/tolino-the-continuing-success-story-of-digital-reading.

part of their thinking, but it is also mentioned as a key success factor in handling the digital shift. For a quarter of our interviewees, the customer and the customer's needs are at the center of all their trains of thought and efforts. The power of the customer is considered significant and cannot be ignored by our clients.

SYNTHESIS OF MAIN KEY TRENDS
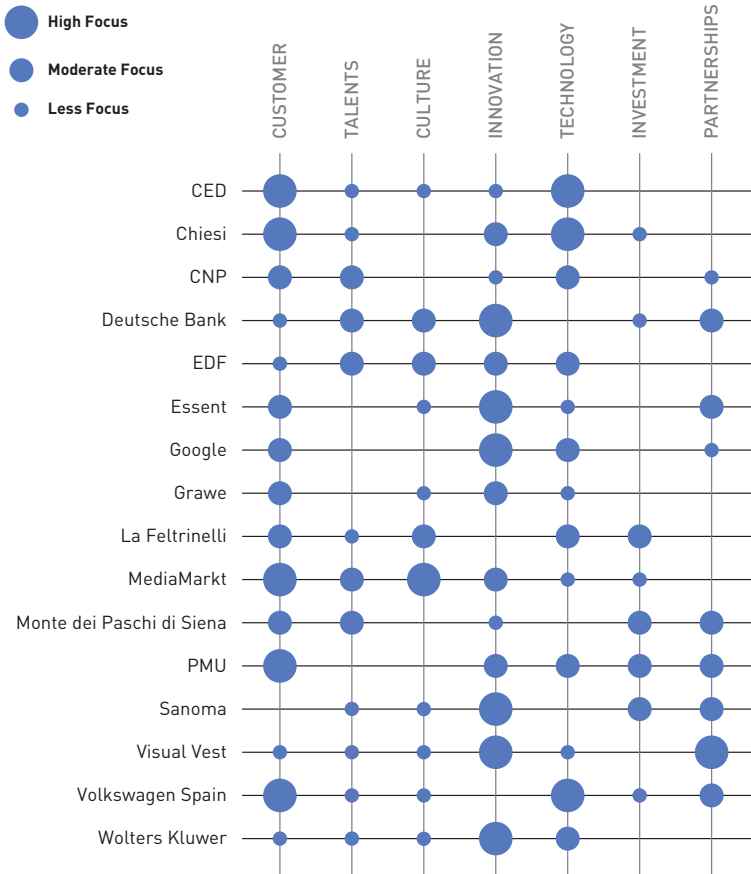
Figure 4

Another major category is innovation: most of our clients noticed that they need to enable and promote innovation in their company. Some of them have established dedicated teams as innovation labs which design, test and implement new ideas. Others encourage their employees to develop and share their own ideas, which will be investigated and, if promising, tested and implemented. The results show that more than one third have a high focus on innovation but as mentioned previously, we noticed also that some clients handle it with care and prefer a more incremental approach rather than a disruptive one.

Technology is a further key category that we have noted and is required to tackle the digital shift: new tools and platforms are used among others to improve internal processes and to optimize the customer journey. Products/Services are adopted by using new technologies to deliver more added value not only to the customer but also to employees and to the whole organization.

Talents not only need to be enabled but also motivated. Without them a digital shift is not possible. You need to accept that work-life-balance is very important for your employees but also give your employees the freedom and help they need to find a sense of fulfilment. Without engaged talents, innovation and new technologies cannot be realized. But to do so, you also need to consider your culture and, if required, adapt it.

Further trends to be considered: agility, data transformation and transformation programs

Further trends, less present in the panel of companies interviewed, but still largely observed on the market, must also be highlighted, and include:

- **Agility:** Most companies are looking for increased agility and test new ways of innovating and delivering products and services, inspired by the pure players of the digital economy. Methodologies such as design thinking or scrum tend to spread, as we set up 'pizza teams' mixing multi-disciplinary profiles: marketing, UX design, IT/ tech, data science, and so on. Some more advanced, new kinds of organizations, such as "digital factories", appear with the aim of industrializing digital products and services. This kind of organization is still at an early stage of deployment, with difficulties in scaling and interacting harmoniously with traditional work organizations. Moreover, most companies face a major challenge in scaling their "Proof of Concepts" up to tangible value or concrete transformation. This scalability challenge has to be faced both on a technical level (the ability to technically handle at scale and at the same time both innovative products and legacy systems), and also from an organizational point of view (widely transforming the organizations and culture with innovations).

- **Data transformation:** "Data transformation" and more specifically Artificial Intelligence is the latest buzz word, and most organizations are looking at it carefully. The promise is huge, either in terms of business and sales development or in terms of increasing the intelligence of the company's process. The impact of data transformation is expected to be very high. However, we are still in a "contemplation phase". Some companies, but not the majority, are proof-testing the impact of algorithms and big data on business and on the business, generally on small perimeters. Very few companies have scaled up or launched large scale AI transformation projects, with the major exception of the giants and pure players of the web.

- **Transformation programs:** As we saw, companies invest seriously and with a large variety of levers (learning expeditions, training/on-line training, digital academies/universities, mentoring/coaching, excubation programs, intrapreneurship, and so on) in the acculturation, training and mobilization of their people, to make them aware of the digital shift at stake, and get them committed to the digital transformation of their companies. These crucial change management programs are often part of overall digital transformation programs based on dedicated digital transformation organizations. The feedback of these transformation programs is quite mitigated: on the one hand, they concentrate all digital initiatives, and give an overall picture of what's going on; on the other hand, they are often criticized for their lack of underlying business vision, their insufficient budget and they are often more perceived as "communication driven" than "business and transformation driven". The trend is to reorient these programs towards more business impact and delivery: the projects with less business potential get stopped, and a selected number of prioritized projects get more intensively financed, up to their delivery and scalability. The related role of the CDO in these transformation programs has also shifted in recent years. The latest trend is to appoint CDOs with business, marketing and IT/tech skills, often coming from the world of delivery, and often also having large IT/tech delivery teams under their direct responsibility.

The difficulty of industrializing, the challenges of scaling-up

As shown in this chapter, many companies have recently launched a large variety of initiatives and projects to intensify their leadership, in the digital age, and take business advantage of the opportunities offered by technological innovations. This myriad

of initiatives and projects, and their related feedbacks, must be considered as a guidebook for companies who intend to depend on their digital presence. Actually, there is no magic recipe, only lessons learnt from comparable companies that can be helpful to build up once the company owns tailored-made plans related to its own context and challenges. Above and beyond all the business cases studied, we identified a trend common to all of these companies: the difficulty they have in industrializing their innovative business models. After a "proof of concept" period, the main challenge for companies is now to scale-up their digital business and create tangible value out of their innovations.

V. SEVERAL RECOMMENDATIONS TO SCALE-UP DIGITAL BUSINESS AND ENTER THE AGE OF THE 'DATA DRIVEN' ENTERPRISE

As we outlined in the "trends chapter", companies have recently tested and implemented a large variety of levers to accelerate their digital shift. But they haven't found a way to scale-up massively their digital business and innovations. After a period of "proof of concepts", which followed a period of "hype initiatives", companies now need to enter a period of "scalability". For us, this requires in-depth challenges to corporate strategy and a radical shift in the operational models of companies. Moreover, this challenge of industrialization and scalability takes place when entering the age of the 'data driven' enterprise, which is going to be the next-generation transformation of the digital age.

Our recommendations are structured around two challenges major non-pure digital player companies face: how to industrialize and scale-up digital opportunities in a 'web augmented' enterprise, and at the same time prepare for the 'data driven' enterprise.

A. DESIGN SMART STRATEGIES FOR A DIGITALIZED ECONOMY

Structuring the discussion

When discussing digitalization, the term itself covers so many different subtopics that people easily get lost in the discussion. Being able to discuss the topic and separate one thing from another is a key factor for starting any digital transformation, and a model for everybody is needed. To keep discussions structured and to support the separation of topics two dimensions might help to identify an easy approach for everybody.

On the one hand we have topics covering things like IoT, Connectivity, Agile, Scrum or design thinking. All focusing on specific technical or methodical topics, solving a very specific problem, leading towards a product or the creation of a product. Those topics can be described as new tools in the toolbox of an organization. On the other hand we have topics such as new value chains, new services, virtual platforms or new business models. These describe more how complex multi-component systems, like companies, should work together to create a certain value and revenue.

As this simple model still might not offer enough separation it is possible to add an internal and external dimension. Internal digitalization covers topics which focus on optimization and efficiency, such as automation (e.g. robotic process automation). The external dimension focuses on the way the company interacts with the market or customers, for example chatbots or digital product platforms.

Using these two dimensions, a matrix can be built which is used to classify and locate every topic within a discussion, showing its approach and the main goal it aims for.

Select an efficient strategy for a digitalized economy

Our first recommendation is to start by affirming a corporate vision and a corporate strategy, in a digitalized world, which is much more than a "digital strategy" or a strategy with "digital inside".

Of course, this strategic exercise has to be held with an accurate understanding of how to navigate in a digitalized economy: shortening of business cycles, the importance of the user experience, the aspirations of new generations of 'connected' consumers and workers, the way to scale a digital business model, the impact of disruptive technologies and radical innovation, the importance of ecosystems, the opportunities offered by big data, the uncertainty regarding next-generation technologies and innovations, and so on.

When it comes to digitalization there is no "one size fits all" approach. Strategies for digitalization are always tailored to each company's needs and strength. There is no need to be at the top of the list for each and every topic of digitalization. It is more important to integrate those digitalization topics into the existing business strategy which are relevant for the current or planned new business model. Don't keep it on the theoretical level. If there is no roadmap defined on how to implement all of those new ideas the change will never happen.

Embrace Technology

Treating technology as a playground for specialized "nerds" is a major mistake. The business side needs to understand new technologies a lot more so it can judge its relevance for the company. The potential business impacts of disruptive

technologies and trends such as blockchain, AR/VR, IOT are not only a threat but an opportunity as well.

As time to market becomes a more and more critical factor in the age of digitalization, a flexible IT landscape and infrastructure is an important basis for the future development of your company as well as data-driven business.

Smart transformation

Based on a vision and a strategy, "scalable projects" can be prioritized, among all initiatives and "Proof of Concepts" that companies usually handle. This prioritization can be done regarding the maturity and business impact of the projects, and with a strong will to industrialize and scale them up. The related human, financial and organizational investments have to be in line with this ambition, thus implementing strategic "digital business delivery planning" and agile resources allocation. Moreover, there is no need for long term planning, as it's hard to predict what disruptive technologies will be, on a long-term basis.

Digital businesses can be implemented through smart transformation programs, driven by some key principles such as: people-centered leadership (vs command-and-control), the high degree of autonomy given, continuous and progressive delivery, ability to rotate, fail fast-succeed faster, growth hacking, and so on.

B. TURN BRANDS INTO EXPERIENCES

It's all about the customer

The truth is customer-centricity is seldom found in sales. Sales departments are fantastic at developing products and convincing the customers that they are cool. But this relationship has drastically changed. Today, customers tell you what they expect

from the product, such as more flexibility, being more individual or other needs. Understanding the real problems and constraints is key. You need an organization that brings the customers to the developers, developing a full omni-channel strategy which allows feedback from your customers and embraces them in the development process instead of locking them out.

The ultimate Customer Experience

Successful digital businesses all have a major interest in providing the highest suitable user experience possible. One can consider that if there is a pain point in a customer journey or experience, then there is room for a business which will empower this customer experience. Designing desirable experiences starts with a deep understanding of the quality of the experience perceived.

Several approaches can be deployed for customer discovery from a customer perspective, to catch customer voice, or to get permanent feedback from the use of the products and services. Design thinking has become a must: the approach has shown its efficiency to design and implement suitable products. The combination of competencies in design and technology is a key success factor for any business.

CX-driven transformation

Big data will allow us to go a step further in customizing customer experiences: in the near future, every experience will be able to be 'data driven' and customized at every customer level.

Actually, design thinking and UX design is not only a question of design or an approach, but a mindset and a driver for an 'end to end' corporate transformation. Marketing, Sales,

Customer Relationship Management, Supply Chain, etc. have to be reshaped from a UX-driven perspective, and will be even more from a 'data driven' UX one. This is a radical shift for organizations structured from a product perspective, which are mainly organized to deliver products in markets.

Indeed, it's a great challenge to develop a full user-centric omni-channel strategy which allows feedback from customers and embraces them in the development process instead of locking them out. To this extent, a "Chief User Experience" can be helpful.

C. THE ENTERPRISE AS A PLATFORM

Ecosystems are strategic assets in the digital economy

The digital economy, globally connecting people and in the end everything by design (via the communication network), allows the fast development and spread of innovations and technologies of all kinds. Some start-ups, which may yesterday have been based in a garage, can, in just a few years and with a small team, scale to a global level, with a very high speed of growth, acquiring clients by the million.

It's difficult to predict what the next generation of disruptive technologies will be. It's also difficult to find the right path through the forest of innovations and potential partners. It's risky to put all your eggs in one basket. We believe that, in the digital age more than before, there is great value to capture from the ecosystems surrounding every company. Ecosystems are a strategic asset and partnership strategies are crucial.

Innovation is hard work not a mystery

Too many times, we have seen innovations in companies failing or even worse, being processed even though everybody knew it

wouldn't be successful. Don't lie to yourself. Many times we see weak decisions, followed by discussions in which people try to convince their own company and us that it could work somehow. Part-time product owner, investing a little, always offering a safe way back and many other actions are cosmetic approaches instead of seriously game-changing. When judging one of those new ideas again ask yourself: if this was a real start-up – outside your company – would you invest your private money in it?

Stop believing in folkloristic things and instead in your own strengths. "Garage feeling" and young guys in hoodies are not enablers.

Your competence is still the decisive factor in innovation and the development of products and business models. Don't let your innovations only be led by technological competence, which is often widely available but keep in mind the competence to execute as an end-to-end solution provider.

Don't be afraid to think big. If you are used to preserving innovations on existing product portfolios, it might be difficult to think in a disruptive way but always ask yourself if you were a competitor, what would be the quickest way to eliminate your company from the market.

Enterprises should become platforms

There are different kinds of relevant organizational models to build up valuable networks and efficient partnerships with eco-systems: research programs, open innovation programs, intra-preneurship programs, open-source strategies, management of incubators, the setting up of communities or co-working spaces, corporate venture, M&A activities and the like. There is

no unique answer, and all these devices will be needed together to tackle the issue globally.

The above vision is of the enterprise as a platform: ecosystems can empower every one of its members through effective co-operation and collective intelligence, beyond the barriers of the structures in the ecosystem. The enterprise becomes a platform, assembling value from all its stakeholders. This concept is not only an organizational concept, as it also includes the set-up of the underlying technological platform, which allows the interop-erability of the services to form inside and outside the company.

Invest, be patient and look for partnerships

Having the right network at the right time can be crucial in the complex world of digitalization. The field of digitalization is still unexplored in many regions and nobody is an expert in everything. Shake off old protectionism and look for partners. Winning the race and getting fifty percent is still better than losing it all. If you can't find a network to match your problems and desires, it's the best indicator that you need to create your own community.

Be ready to lose money. The digital transformation is no guarantee of success. Some projects will fail and sometimes you might lose money. Never forget that it takes time and money to establish a certain transformation.

D. AGILITY AT SCALE

Agility is an operational enterprise model

From a big organization perspective, agility (also called 'design thinking', 'scrum', 'acceleration', 'lean start-up' and so on) is often perceived as a mindset and a methodology used successfully by start-ups, and big organizations want to adopt it. But it's not that

easy to get agile when you are a large organization, with your process, organigrams, power games, comitology, risk management, procurement rules, quality and security standards, compliance rules, investment committees, and the like. Actually, it's not that difficult to be agile at project level but it is difficult to scale agility, and moreover to stay agile at scale. Large corporations that want to increase their agility need to think agility as a global organization model rather than a project methodology.

To this extent, we recommend some new forms of organizations to industrialize digital business models:

- Radical innovation houses including: technology prospective, prototype development, start-up incubation, venture capital, digital academies, and the like.

- Digital factories, mixing all the profiles required to industrialize digital products and make them work altogether in integrated 'feature teams', following agile principles: marketing and business profiles, agile coaches, UX designers, developers of all kinds, datascintits, digital marketers, architects and IT profiles, and so on.

- Data Factories built on the same principles as digital factories but with the aim to industrialize data-based products

- Support functions also need to be adjusted in the agile enterprise model: finance and budget, staffing, legal, procurement and supply, and the like.

Finally, we also believe in the "hybrid company". This means making coexist industrial and digital organizations, V cycle (should it be agilified) and agile.

Architecture is politics

To make agility at scale possible, companies must set up an IT and technological architecture that allows 'end to end' agility, from ideation, to prototyping, and up to delivery. In our mind, architecture is a top management level concern. Defining the right scalable architecture is strategic to compete in the digital age, even though it's not that easy to drive discussion at an executive level on topics such as cloud computing, cybersecurity, bimodal IT, microservice architecture, API, development frameworks, open source, dev-ops/ no-ops, and the like: all kind of topics that need a high level of investment with no predictive return on investments.

Changing the organization

Many seem to forget that the current set-up of organizations and processes are just tools and operating systems, conducted to achieve a certain goal. As with the strategy, there is no specific good or bad organization or process that makes it more difficult. The approach is different; we have to let go of the old to create the new. If we try to apply our existing and known operation system to something new and different it is very likely we are going to fail.

Joining forces by adjusting the organization, changing existing or creating new processes and creating new roles like the CDO is important to get enough critical mass for change. New concepts like "Enterprise as a platform", bimodal IT and improved cooperation between business and IT are important steps towards the digital transformation.

Specialized roles like the CDO are one way to focus the energy of a company but don't guarantee success. Even as the concept of a CDO is recommended in many discussions, the massive

activities so far have not shown the desired outcome. No unicorn has been born yet in a corporate start-up activity. In the end, this means the CDO might be burning money. Even if you decide to bring in this role, it doesn't need to be a permanent role. The focus for a CDO needs to be on the delivery of real business. He or she needs to curate the right tools and inputs for their organization, define the right operating system for newcos (newly founded companies) and to protect the still fragile digitalization topics and foundations from the existing business.

E. UNLOCK MANAGEMENT

A new culture

The culture of new digital companies differs significantly from existing ones. "Fail cheap and early" is the new motto and must be incorporated by the company. An open and well developed feedback culture, acceptance of failure combined with a learning strategy are extremely important. CDOs must be strong enough to cut through old beliefs and protectionism and help to establish this new culture. Be sure no board asks why project XYZ burned €500,000 two years ago: instead they should ask why you didn't have something earlier.

Bridge digital innovation and innovation in management

We believe that the major challenge in the digital shift is not technological but human and managerial.

Indeed, disruptive technologies and their impact on the economy and society are not always so obvious as to be taken into account by people and managers in companies. This move needs to be supported.

Digital not only disrupts business, it also disrupts management.

With digital, new forms of organization are possible. These organizations are more flat, more transparent, the information is widely and instantaneously shared, the intelligence is collective and even exceeds the boundaries of the company. Digital impacts strongly on management and the exercise of the power.

At the same time, the expectations of younger generations also challenge the mainstream management models of large corporations. They expect inspiring leaders and challenging organizations; they hate routine and want to handle lots of challenges at the same time.

All in all, we recommend companies launch management innovation programs at the same time they launch technologically driven innovation programs. In this context, cognitive neurosciences, behavioral sciences and emotional design can give key insights to better understand human motivations and define attractive interactions, be they digital or not, between humans and machines.

Agile Change Management

Innovations often remain at the door of large corporations and this is not only because they are not welcome in a social or managerial body that they radically impact. It's also because the traditional "top/down" instrumental models of change management reach their limits. We believe change management has to be reinvented and we promote an agile change management approach. Agile change management consists in applying agile principles to change management. In agile change management, innovation is co-designed at scale (engaging all future users), change is continuous along the innovation process

(implementing permanent feedback and interaction with target users), and change is experiential (using digital workshops and collaborative platforms). Agile change management leads to more people engagement, more sustainable change, and faster and less expensive implementations.

It's all about people, talents and attractiveness

No matter how innovative, disrupting and futuristic your new idea and technology might be, never forget that a company is mainly made up of humans. Your employees are your number one success factor and deserve to be treated as such. Ensure proper change management to guarantee that everybody is ready for the change and helps to develop the company further. Therefore digitalization is a good opportunity to attract and embrace the new generation as well. You will need talents to achieve your goals and well-designed digitalization projects are a good way to attract younger employees and give them a chance to show their skills. Find out what this upcoming generation is expecting from an employer and try to adjust as the talents will decide upon the future success of your company. The war for talents has already begun.

Unlocking management and releasing organizations

Some recent forms of organization intend to empower managers and employees, and decentralize decision-making. This is the case for models such as the freedom-form organization, holacratic organizations, or even several forms of autonomous team organizations.

These organizations are still unusual or experimental but we believe that companies tending to unlock management, initiative, creativity, entrepreneurship, and collective intelligence have

a future in the digital age. They look appropriate to generate adaptive organizations, in a hardly predictive economy impacted by multiple innovations.

F. GET READY FOR THE COMPETITION IN A 'DATA DRIVEN' ECONOMY

We believe that the 'data driven' enterprise will be the next generation of business and organizational model: every business, every process in organizations will soon be data driven and more smart. Artificial Intelligence, with which we can solve business problems, is in a process of spread out, thanks to advances in mathematics (machine learning, deep learning, neural networks, and so on), information technology (high-speed computing, big data treatment, and the like) and the massive growth of available data (the quantity of which has drastically developed with the internet).

With AI, you can: make a medical diagnosis; customize marketing (price, product, promotion, and so on); predict sales, maintenance, supply chain or production; trade and detect frauds, develop artificial personal assistants; and the like. Healthcare, automotive and financial services are already undergoing radical transformation, due to advances in artificial intelligence.

The potential of AI for business is unexplored so far. We recommend 'testing and learning' what AI can do for each business and organization. To do so, dedicated protocols can be efficient, such as: large scale acculturation and people empowerment; systematic process review to find out the more relevant use cases; use case development and implementation. Data factories are new organizational models that can contribute to AI industrialization inside companies. Data factories mix all competencies (business, data Science, IT, and so on) and assets

(methodologies, platforms, tools, and the like) required to deliver AI solutions, to solve problems and tackle the challenges companies face.

VI. CONCLUSION: PORTRAIT OF AN ULTIMATE COMPANY IN THE DIGITAL AGE

Every business is or will be in danger, in the age of the digitalization of societies and the economy.

Every business is or will be deeply impacted, in the soon-coming 'data driven' business world.

Companies and business models have to be radically adapted or reinvented to be sustainable in the digital age. They have to take a new kind of lead.

To do so, we have identified several success factors for a company:

- Reinforce corporate strategies including technologies, rather than technology-driven strategies.
- Provide high-quality and seamless experiences to customers, rather than being 'product push' on the market
- Engage massively people in the shift, unlock management, free collective intelligence and unleash organizations
- Be agile at scale, and radically transform operational corporate models into hybrid "phygital" models
- Be part of flourishing innovative ecosystems, and capture their value as platforms
- Master Big Data and Artificial Intelligence challenges

Finally, surviving the rising 'digital tsunami' is quite simple: it's moreover a question of mindset, of culture and of managerial will.

TRANSVERSAL EUROPEAN PERSPECTIVES

INNOVATION LABS AND INCUBATORS, THE WAY TO FACE DIGITALIZATION?

LASSI KURKIJARVI
Innovation Lab director

ABOUT SANOMA

Sanoma Netherlands is a subsidiary of the Finnish Group Sanoma. This cross-channel media group is the biggest in the Netherlands. Created in 1913, the company started out in magazine publishing. The emergence of the Internet disrupted the sector, and Sanoma began to edit digital content. Today, online sales represent its second largest source of revenue. Thanks to its large media portfolio (TV and magazines) and its presence in digital innovation, the company keeps in direct contact with users and is able to collect data.

How did you become innovation director for Sanoma?
After working for different media companies, and after founding some start-ups myself, I was eager to find out how large corporations innovate. That's why I seized the opportunity to start as a digitalisation manager for Sanoma. I started on an international mobile development programme, launching mobile solutions, servicing several countries from our Budapest development offices. And then I was offered the chance to go to Amsterdam to create new start-ups that use the running business' assets.

What was the innovation lab's aim?
At first our aim was to stimulate intrapreneurship, working on three aspects: culture, skills and new business lines. We wanted to change the culture from 'ask for permission' to 'ask for forgiveness'. Using modern technology, it has become very easy to develop and test new concepts. By the time you finished your PowerPoint presentation to convince management to go ahead with an idea, you could have validated the idea already. Stop planning, start doing, that was our motto.

And what kind of skills are necessary to stimulate intrapreneurship?
We wanted people to get hands-on with digital: using modern technologies such as Heroku (a cloud-development platform) and Unbounce (a landing page platform), social media and so on. To give you an example: a marketing manager, 45-years old and dedicated to printed magazines her entire career, started to create a new online service, using video and social media to do direct ecommerce. She became one of our biggest supporters and intrapreneurs.

What were the results you obtained with your innovation lab?
We started over 20 internal start-ups that were in line with Sanoma's strategic goals. It became apparent that providing them

with funding and telling them to go ahead was not enough. They needed more support. Therefore, we set up an internal network of experts, providing legal, supply chain and market-specific expertise. We also created a core support team, providing technological, business growth and digital design skills. We also trained them in start-up methodology best practices.

Can you give examples of start-ups that were created in the lab?
One of the best-known examples is Spot'n'Shop, a shopping community that helps members to find spotted fashion items. Also Listr, an online learning platform, was successful: its founders have taken over ownership through a management buyout.

So, you had two different entities: 'make' and 'buy'?
The innovation lab was focused on creating innovations from inside the company. There was a separate entity, Sanoma Ventures, which invested in promising external start-ups. Creating two separate entities for 'make' and 'buy' worked quite well. Investment Director Herman Kienhuis and I were both in the management team, giving innovation more weight.

How was the innovation lab governed?
For any innovation lab, you need an executive-level champion. If a lab is isolated in one business unit, its budget is constantly under pressure and it cannot operate beyond the existing organizational structure. Fortunately, Sanoma Group's CEO was a great supporter. In fact, there were several supporters on the board.

How did you organise the roles in the lab?
My responsibility was to handle what I call the shit-umbrella: facing corporate politics, which are a fact of life in any large organisation, and the outside world. Essentially creating a setting

for start-ups to flourish and acting as a matchmaker to create a balanced team. The start-ups each had a founder and co-founder, usually a combination of creative and technological skills. The lab would look internally for expertise, sometimes hiring external help. The experts were usually involved in several start-ups at once, since the start-ups' needs differed according to their development stage.

How did you decide on which ideas to proceed?
We set up a small investment committee that would select ideas, decide on more funding after the first market validation and on real investments to really launch the product. We used a simple, but clear investment thesis: does Sanoma have an 'unfair' advantage in making the idea happen compared to the market at large?

What do you mean by 'Sanoma have an unfair' advantage in making the idea happen?
What does Sanoma have that outpaces those well-funded start-ups out there? One major plus for Sanoma is its relationships, both with consumers and advertisers. We wanted to use this network to our advantage. Our relationship with retailers opened the doors for Spot'n'Shop, to give an example.

How did the running business respond?
I really had to hustle: we wanted to use the running business' assets, without having to report to them. We wanted to profit from their relationships, but introduced potentially disruptive innovations. Fortunately, they understood that it was good for the running business to work on innovation as well. Sanoma Learning, for example, was able to explore new options for the future, prepare for possible disruptors, and understand changing consumer behaviour through Listr.

Why did the lab stop?
You may remember the major cost-cutting programmes Sanoma implemented starting in 2014? It was clear that the lab would have to cut its budgets too. No hard feelings, but I'm not the person to perform cost-cutting operations. I'm better at the growth side of business. So that's why, in combination with a desire to start my own business again, I decided to leave Sanoma.

Do you think cutting costs on innovation was a smart thing to do?
It's very understandable, but also short-sighted. Take Airbnb, for example: it started in 2007, received its first funding in 2009 and made only 200 dollars per week in the first period. In 2010 it started to make its first major revenues. Which large corporation would have the stamina to hold on to Airbnb?

So what is your advice for large corporations?
Be patient! Some innovations are disruptive and potentially very profitable, but will only generate a decent return in five years. Others will already be profitable within two years. If you create a portfolio, similar to venture capitalists, successes will come eventually.

What do you expect from the future of Sanoma?
I'm now Vice President of New Business for Solita, a Finnish consulting organisation focused on digital transformation and I'm working with Sanoma again. Sanoma has many consumer touchpoints and many partnerships. We could create a data ecosystem that gives advertising a whole new meaning, stepping away from the broadcasting-type advertising we're accustomed to.

You are optimistic for Sanoma, then?
Only slightly concerned that success doesn't come overnight. Will Sanoma have the stamina to push on?

So innovation is not about the right ideas, but about perseverance?
No matter what company you are and how innovative you have been, you need to work hard. Consumers and technologies move so fast, new entrants can shake up any market at any time. The market even hits a company like Apple.

What makes working in innovation so exciting?
I've been fascinated by innovation since my childhood: I remember the arrival of the Internet as teenager. It was mind-blowing to suddenly have worldwide connections from my small Finnish hometown. The way we live our lives is so different from five years ago, even last year. I love to see new patterns emerge and to rethink what direction a business or even our lives can go. ▮

HOW FINTECHS CAN MAKE THE MOST OF THE DIGITAL SHIFT

DR. OLAF ZEITNITZ
Co-founder Managing Director

ABOUT VISUALVEST

VisualVest is a young and innovative FinTech start-up, focusing on private online investment and portfolio management by using digital technology. The company was founded in January 2015 and is a wholly-owned subsidiary of Union Investment, one of the biggest investment associations in Germany. It offers 17 portfolios covering seven different risk categories, which are compiled in collaboration with experts of Union Investment. The portfolios consist of ETFs, actively managed funds and sustainable funds. In 2017, VisualVest was awarded "Best Robo Adviser 2017" by the internet platform BankingCheck.de.

I. KEYS TO FINTECH SURVIVAL WITHIN AN EVER-CHANGING DIGITAL LANDSCAPE

A. Agility

The strengths of one side are usually the weaknesses of the others and reasonable cooperation can be beneficial for all parties concerned. Today's financial world and FinTechs can therefore complement each other as part of a mutually beneficial dynamic. On the one hand, today's financial world has established structures, a brand name, customer trust and economy of scale. On the other hand, FinTechs are agile, have new ideas and products and offer new user experiences.

To be successful, companies need to be agile and, in particular, open to new ideas and opportunities from non-bank financial services and from abroad. Additionally, they need to be flexible, since innovations are often driven by the speed of implementation and they have to think outside the box, if necessary, in order to get decisions made.

They need to be more agile to accelerate the digital shift. The culture of companies is hugely important, constantly changing and steadily developing.

B. Innovation

The most important roles for FinTechs in business today are as:
- Innovation drivers in research and development ("being ahead of the market")
- Platform operators for parent companies
- Laboratories or "trial fields" for new methods

The key to success for companies is being open to new insights and ideas, being innovative with new objectives and being will-

ing to change. Furthermore, new customer-centric ideas need to be developed and it is important to be the first player in the market. Thinking from the customer's point of view means pinpointing their needs and offering exactly the right solutions.

C. Partnerships

a). Creating partnerships between major companies and the start-up ecosystem

In order to develop more operational relationships with the start-up ecosystem, major companies must establish and conduct continuous market monitoring and timely reporting. Companies may not carry out their activities within the borders of their own countries, limiting their international links. They need to do it worldwide. Also, companies must establish direct communication, open exchange, and processes of understanding and problem-solving with the start-up ecosystem.

b). Improving relationships between public institutions and financial structures with digital players

Public institutions and financial structures must establish and promote the open exchange of opinions and ideas to improve their relationship with digital companies and players. Overall, cooperation with digital companies and players must be characterized by an intensive and open exchange. It is also essential for leading local players to foster exchange between national and regional digital parties, and across countries. The key to success is to set up an international network and close content-related exchanges with key digital players.

D. Talents

Digital native talents can be attracted and retained to work in companies thanks to a flat hierarchy, with rapid decision-making processes and clear responsibilities. Providing profession-

al and extensive cooperation and advice to staff and on-the-job learning is an additional plus.

II. BUSINESS LEADERSHIP OF THE FUTURE

Small, flexible and agile companies, which develop creative and innovative ideas for daily products, such as accounts and loans, are role models for the future.

In addition, large companies which nevertheless have a very high level of innovation (at least in some areas) such as Amazon, are also role models. ▮

INNOVATION COMING FROM INNOVATION LABS AND PARTNERSHIPS?

MARCELLE METTES
Director of Innovation

ABOUT ESSENT

Essent is the largest energy company in the Netherlands. They have 90 years of experience in generating, trading, transmitting and supplying electricity. In 2015, its 2.5 million customers in the Netherlands and Belgium generated €4.1 million in turnover. For every energy company, digital is a key success factor in the new market. It provides clear customer insight, especially for the supply of electricity and energy savings.

WHY DID ESSENT START AN INNOVATION LAB?
The energy market has become very competitive and energy transition is going full speed. The margins within our core business, energy delivery, are under high pressure due to increasing competition. In addition consumers and businesses tend to use less energy than before since they are able to produce energy and appliances have become more energy efficient. To secure our competitive advantage in the future we have to innovate in our service offering and provide more than just electricity and gas. We develop new solutions, with which our customers experience added value and keep choosing for us.

HOW DID ESSENT INNOVATE BEFORE THE INNOVATION LAB?
Innovation was previously dispatched over various business units. We turned it around: we don't think of organisational silos anymore, but rather network organisation. In addition, we developed a lot in the past ourselves, which took time. To gain more speed and get outside expertise, we now work with innovative partners, like start-ups or larger players who already have a "minimal viable" product that we can bring to market with them.

HOW DO YOU CHOOSE YOUR "INNOVATIVE PARTNERS"?
You have to look at a start-up as a kind of venture capitalist: is there a strategic fit, does the team have the right skills, does the minimal viable product fulfil a customer need and – in addition – can we bring it better and faster to market than they and others?

WHAT DOES ESSENT BRING TO ITS CUSTOMERS?
Our customers are our most precious asset. We can offer them access to the market. By being in constant dialogue with our customers, we are able to develop relevant solutions and not just product or technology-driven innovations, as we did in the past.

SO IT DOESN'T MATTER WHAT THE INNOVATION IS, AS LONG AS IT FULFILS A CUSTOMER NEED?
We have formulated focus areas in which we as an energy company – and this goes for all of RWE – have a reason-to-play. Smart & Connected Homes or Buildings, Big Data, Urban Concepts, but also Disruptive Digital. Because the Uber of energy is coming. We prefer to develop this ourselves before new entrants or competitors do.

HOW DO YOU EXECUTE THE INNOVATION PROCESS ITSELF?
We collect a lot of ideas, but with which idea do you really work? Over the past two years we've learned how we can quickly test ideas in the market – rather than trying to convince each other with PowerPoint slides. The sooner we validate ideas with customers, the sooner we can collect facts to go into the next phases of development. And the more ideas we test in parallel, the more options we create. It's the 'fail fast principle', so we know where to invest quicker.

WHAT ABOUT THE BUSINESS UNITS, ARE THEY NOW COMPLETELY OFFSIDE?
No, over the last year we have been working more closely again with the existing business. Business leaders indicate which ideas they find interesting and want to work on. In this way we embed the innovation department step-by-step. And we are focusing more on incremental innovations, which are closer to the business, rather than disruptive innovation, where our business does not directly take advantage of it. We pick up these disruptive innovations at international RWE-level.

IS THE AIM TO HAND OFF INNOVATION TO BUSINESS UNITS?
Yes, but it is best to work with multidisciplinary teams from the very start. People from the innovation team develop and test

ideas along with people from the business units. And of course with legal, risk and finance experts to assess the impact and risks of the idea. The sooner people are involved, the easier such a process is. We take the lead on the velocity of the process and the scouting of suitable development partners.

HOW DOES THE BUSINESS TAKE OVER THE IDEAS TESTED WITHIN THE INNOVATION LAB?
If an idea has already received some market feedback – that is, the idea development phase has been successfully completed – a pilot proposal follows. How many months do we want to test certain assumptions? What are the goals, costs and the team required?

We work in a multifunctional team, so the marketing or sales expertise will be immediately included in the market pilot. We also look for a business owner who, when the pilot phase has been successfully completed, will take on the cost to further scale up the solution.

HOW ARE COSTS DISTRIBUTED?
The cost for scaling innovation is generally a cost for marketing and sales. The innovation budgets are mainly used for obtaining consumer insights, development and testing.

HOW LONG DOES IT TAKE TO VALIDATE AN IDEA AND TRANSFER IT TO THE BUSINESS?
It takes 9 to 12 months to validate the potential of an idea in a pilot. When we started two years ago we worked on ideas that were not closely enough related to the business and considered not suitable to scale up. We were able to hand over the innovative self-learning thermostat Nest to business more quickly. Now we establish ideas together, they pass through a pilot cycle much faster. This makes the transfer to business easier.

DOES THE TYPE OF INNOVATION MAKE ANY DIFFERENCE TO THE ACCEPTANCE BY THE BUSINESS?

Innovations in which the business is convinced that existing assets can be used to market the innovation went most smoothly. It becomes more difficult when a lot of changes in marketing and sales channels are required. In this case, a lot about the existing method needs to be changed, while the result remains uncertain. You don't know exactly what comes out of innovation.

DON'T YOU RUN THE RISK OF LIMITING YOUR OWN IDEAS IF YOU KEEP TO YOUR EXISTING ASSETS?

You have to choose very consciously. We always ask ourselves which ideas directly strengthen the existing Essent brand and what ideas should rather be developed in parallel to the existing organisation. In the second case, we also choose to have a separate brand with a separate form of organisation, such as, for example, a joint venture. Together with Tamoil we signed a joint venture to enter the emerging market for Compressed Natural Gas. With a new brand "OGO" we launch stations for durable and cheap fuel. In June, we opened our fourth station in Den Bosch.

Essent has found out that innovation is a long process of trial and error. The company now seems to have got the right mix. Marcelle indicates that the learning process is not over, but that for Essent in the Netherlands incremental innovations conceived close to the business have a greater chance of success than disruptive innovations. ▪

IS IT POSSIBLE TO INNOVATE WITHIN A 200-YEAR OLD MULTINATIONAL?

JASPER BAGGERMAN
Ecommerce & Innovation Lab Manager

ABOUT WOLTERS KLUWER
This Dutch company was founded in 1838 as a scholarly publishing house. The company grew thanks to its mergers with Noordhoff in 1968 and Information and Communications Union in 1972. Today, the group is specialized in publishing and information for professionals. Its mission is to provide its customers with all documentation (law, software and services) necessary to make important decisions securely. Wolters Kluwer's strategic plan includes accelerated cloud solutions for its customers.

IS IT BECAUSE INNOVATION HAVE ALWAYS BEEN A FASCINATION THAT YOUR STARTED AT WOLTERS KLUWER?

My whole working life I have been fascinated by innovation. I managed to sell lots of product ideas and helped colleagues and companies to organise innovation. In 2004 I wrote a book about innovation and did a lot of readings. After a while I wanted to innovate myself again, instead of talking about it. Then I spoke to the COO of Wolters Kluwer, Johan van Campen, about its innovation issue.

WHAT WAS WOLTERS KLUWER'S INNOVATION ISSUE?

For years, even centuries, Wolters Kluwer has been a content-supplier for professionals: traditional print products – law books and folders with jurisprudence. This is now mainly done via a content-platform, for which you take out a subscription on a digital bookshelf. But nowadays there are more and more (free) alternative ways of accessing content. Why would professionals still buy the complete bookshelf?

IF WOLTERS KLUWER SHALL NOT KEEP SELLING COMPLETE BOOKSHELVES, WHAT SHOULD THEY DO?

Maybe Wolters Kluwer should not be selling complete bookshelves, but searching for alternative ways to add value. To investigate that, we set up the innovation lab. A team of two fresh tech-savvy guys and two Wolters Kluwer-veterans, who had to explore how Wolters Kluwer could successfully transform to a sustainable digital earning.

WHEN YOU HAVE AN INNOVATION LAB, WHAT DO YOU LOOK AT FIRST; HOW DO YOU MAKE IT TO WORK?

In an existing organisation it is best to look at the assets first: what value do you already have? Wolter Kluwer has valuable content, an impressive author network and beautiful niche markets.

We took those as our main assumptions. How can you, thinking about all these new technologies, help professionals in those markets? And in such a way that it fits Wolters Kluwer and gets money on the table? We developed a framework for this, helping Wolters Kluwer to go through their digital transformation. The framework consisted of eight innovation pillars, and for each pillar we developed a proof-of-concept.

WHAT KIND OF CONCEPTS CAME OUT OF THE INNOVATION LAB?
A simple example is personalisation. Wolter Kluwer has a lot of customer information in different databases. How can you use these to improve your service? To demonstrate that, we manually collected the information from the different databases (webshop, content management systems and the user database) and created tangible profiles including LinkedIn profile pictures. It is fascinating to see how much extra customer insight arises as soon as you see these profiles in front of you. Everyone on the board immediately saw the opportunities.

HOW WOULD YOU SWITCH TO A NEW BUSINESS MODEL?
It is an illusion to think that Wolters Kluwer can suddenly switch to a new business model. That is one step too far for the organisation itself, but also for the outside world. I call it the innovation stretch. Each organisation has a certain extensibility; internally, but also in relation to its customers and suppliers. With too big a change you risk not bringing them along. That's a risk factor for your credibility, which impacts on the existing business.

SO, YOU MUST AVOID GOING TOO FAR IN CHANGING YOUR BUSINESS MODEL?
You have to work step-by-step on the ingredients of your master plan. At Wolters Kluwer that is the shift from content to relevance. Whereby Wolters Kluwer gives the professional an an-

swer instead of giving them the bookshelf to search for the an-
swer themselves. That is quite a shift. It's obvious that you need
content to produce that answer. But who that content belongs to
is not so important anymore. It could also be from the bookshelf
of your competitor.

HOW DID YOU CREATE SUPPORT FOR THIS SHIFT?
We communicated with the organisation in all possible ways: a
road show through the organisation to explain the framework,
proofs-of-concepts to demonstrate the different pillars and a
movie regarding a day in the life of our future customer – to
show the end result. To include the organisation, we opened up
an online suggestion box, in which all employees could supply
their ideas. Well, it exploded! There were tons of ideas from the
people working there.

HOW DID YOU SELECT THE IDEAS TO WORK ON?
The ideas had to fit with one of the eight pillars. Also, they had to
use the assets of Wolters Kluwer. So the idea, for example, has
to make use of our author network or our expertise in one of the
niche markets. Creating new content did belong there. That is
one of the things Wolters Kluwer is really good at, but that won't
help us towards a new way of earning money. We selected the
good ideas in collaboration with the innovation managers of the
business units.

**HOW WERE THE RESPONSIBILITIES DIVIDED WITHIN THE
INNOVATION LAB?**
The innovation lab was responsible for a well-filled innovation
funnel. From this funnel came validated business plans. These
plans were transferred to the innovation manager of a business
unit, who was responsible for realisation, market introduction
and who eventually had to earn money with it. This was not com-

pletely my ideal picture: innovation blossoms with shortage and focus. There shouldn't be too many people talking: I'd rather have only one innovation manager, with ultimate responsibility at board level. That was missing at Wolters Kluwer, it made it really hard to get priority for innovation at top-level.

WHY DID THE INNOVATION LAB CLOSED?
No, an innovation lab is, in my view, by definition a temporary department, responsible for driving innovation, exploring new possibilities and developing a new direction. After a while, you want the existing organisation to take over these responsibilities and to anchor it throughout the organisation. For Wolters Kluwer the innovation lab achieved a lot. Now it is time to execute the plans that came out of it.

SO, ENDING AN INNOVATION LAB IS NOT A SIGN OF WEAKNESS?
I don't believe that. I have spoken to a lot of co-lab managers at other companies and I concluded that a lab is a typical instrument for organisations that have not decided where to go yet. These organisations get stomach ache when they think about the future and suggest: 'we have to do something with innovation'. That's when such a lab is set up to experiment and to go on discovering. Once you know where to go, you don't need a lab anymore, then you just create a plan and execute it.'

WHAT MAKES INNOVATION IN CORPORATE COMPANIES SO DIFFERENT?
Corporate organisations have a high risk of losing what they have. There are serious revenues at stake. There is an image to incorporate, an existing organisational structure to navigate in, internal politics and multiple stakeholders to please. That is completely different for a start-up that has nothing to lose.

SO, "DISRUPTING YOURSELF " IS NOT THE SOLUTION?
I hear innovation managers of corporate companies say 'we will disrupt ourselves', cool talks for cool boys. But it's questionable if that is really smart. The running business is paying their salaries. You can better anticipate disruption: understand where it can go to and get ready to strike when someone makes a move. It is a waste to destroy your own profit. Aim to set up new businesses which create additional profit. That is hard enough for a corporate organisation.

WHICH CORPORATE ORGANISATIONS ARE DOING IT RIGHT THEN?
3M is still doing really well. They secured innovation at top-level by agreeing that 30% of the year's profit comes from products that did not exist four years ago. That helps to seriously organise innovation. I asked for targets at Wolters Kluwer, but did not receive them. You cannot live up to that, they said. That doesn't give you any trust, and that shouldn't be the case in boardrooms anymore. If you don't believe in innovation, it will not fly.

HOW DO YOU EXPLAIN THE LACK OF TRUST TOWARDS INNOVATION?
Put yourself in the shoes of the director of such a company. How can you face the reality of losing your current business? And that you are responsible for doing something about it when you haven't figured out the solution yet. Bite the bullet? Or sleep on it? It will not come that fast ... Looking at bonuses, sleeping on it, is the best choice most of the time. I feel kind of sorry for them.

Is it so much fun innovating in a corporate organisation then?
In an existing organisation innovation is complex, you have to keep your head in the game. Where are we going? What do we have to change? How do we get there, without throwing our running business over board? That is much more interesting than starting from nothing with a good idea. ▮

THE DIGITAL REVOLUTION IN THE AUTOMOTIVE INDUSTRY IS THE BIGGEST IN HISTORY; HOW TO FACE DISRUPTION THAT IS IMPACTING ALL YOUR BUSINESS KEY AREAS?

LAURA ROS
Managing Director

ABOUT VOLKSWAGEN

Europe's leading vehicle manufacturer, the Volkswagen group is a global benchmark, with famous brands including Volkswagen, Audi, Seat, Skoda, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Scania and Man. This German company is well established in Spain thanks to Seat, the Spanish brand it bought in 1986. Digital innovation is a key success factor for the automotive sector. The Volkswagen group is focusing its development on self-driving systems and e-mobility. In its "Transform 2025 +" plan, its overarching vision is to become a world leader in sustainable mobility. In addition, the Group plans to develop its own digital platform in order to be closer to its customers. In its latest forecasts, its sales revenues from services related to networked vehicles will increase rapidly to €1 billion per year by 2025.

I. WHAT ARE THE CHALLENGES AND THE OPPORTUNITIES BROUGHT BY THE DIGITAL SHIFT IN THE CAR INDUSTRY?

Digitalization is, along with shared mobility and electrification, the main mega trends that will redefine how we see mobility. The car is facing the biggest transformation in its history, and the next 10 years will see more changes in our industry than the previous 100.

Digitalization will greatly disrupt the business model as we now know it. We're talking about digitalization in the broadest sense, applied not only to the product, but to the entire purchasing process and to the ecosystems that manufacturers are developing around the vehicle.

A. Challenges

The challenge for a company like Volkswagen, which has demonstrated excellence in the manufacture of automobiles, or what we would call hardware in the technology jargon, is to become a highly competitive software development company.

Our vehicles feature a lot of connectivity, sensors… The safety and driving assistance systems that we offer are very smart. Now we have to get these sensors to talk to one another and, through artificial intelligence, to talk to the driver too, so that we can offer information to users that not only helps them drive, but with their everyday life too. This process takes us to the connected car, and in the future, to autonomous driving.

Digitalization is also altering users' buying habits, and this entails changes to our sales processes.

B. Opportunities

One thing will radically change the rules of the game, it's the digital ecosystem that will grow around the automobile, something that most experts agree will generate more revenue in the future than the sale of the car itself.

It provides value by letting us learn more about our customers, their likes, needs and preferences. By the year 2025, there will be over 600 million connected vehicles all over the world. The car will be the greatest generator and processor of data in what we call the internet of things, and this will allow for real-time communications between the manufacturer, car and user.

A good way to add value for customers and offer them customized experiences is to take advantage of the vast amounts of data that both the automobiles and their drivers will generate. These data have to help us get to know our customers better so we can build loyalty.

But what really matters is for this whole digitalization process to help us make our customers' lives easier. These days every new business model starts off from that premise. What succeeds is whatever makes our lives easier. More safety, new services, entertainment and better time management are some of the benefits that digitalization is bringing to customers. Vehicles with assistants to make driving safer, with systems that let us know the condition of the vehicle at all times and communicate directly with the shop, and with entertainment systems that make life behind the wheel more comfortable.

But the biggest impact on society will come with autonomous driving, which will radically change the way we view cars.

A driver spends an average of 90 minutes a day behind the wheel. We spend 4.3 years of our lives in cars; that's almost 550 hours a year that, in an autonomous car, we can devote to other activities.

II. HOW A WORLD LEADER OF THE CAR INDUSTRY, SUCCESSFULLY HANDLES DIGITALIZATION?

A. Digital culture

It's essential that we implement a digital culture within the organization, a culture that must be present in every link of the value chain. Technology by itself is not enough, though naturally it has to support this new corporate culture.

B. Investment in R&D and partnerships

In the case of the automobile industry, the success of this digital transformation will be conditioned to some extent by the amount invested in R&D, since the development of these new connected and autonomous-ready vehicles, the creation of the digital ecosystem and the implementation of new mobility services all require significant investments. In our case, we have the advantage of belonging to the Volkswagen Group, the world's leader in R&D investment, ahead of innovation giants like Samsung, Amazon and Google [according to a PwC report, R&D investment in the Volkswagen Group totaled 13.2 billion dollars in 2016].

Over the past year, Volkswagen has made very important decisions to successfully face the challenges posed by this new area of competition. In December we announced that in the next three years, the Volkswagen Group will hire over 1,000 IT experts from the videogame and advanced research industries.

What's more, the Group is continuing to expand its partnerships

with strategic partners. For example, it's working with NVIDIA to develop a cockpit with artificial intelligence that will be launched in the near future. This concept will entail a significant reduction in physical controls and user interactions, and will rely on a digital assistant that is able to learn and that will anticipate the driver's needs. In an effort to develop autonomous driving solutions, we have a strategic alliance with Mobileye, a leader in the field of automated image processing. And we've reached an agreement with Hubject, the leading digital platform for connecting electric vehicle charging stations in Europe.

C. Customer-centric approach

This new environment demands having an entrepreneurial, innovative vision and being able to lead the change quickly and efficiently, putting the customer at the center and getting every party involved.

At Volkswagen we are working to make our customers' shopping experience more digital, without ignoring the most exciting part. We have customers who put a lot of importance on our brand image, our exciting models and our leadership in innovation, and these attributes have to be present not only in our range of vehicles, but in the entire buying process.

In Spain we have an agenda of over 40 projects that we'll be bringing out over the next few months and that we're working on very closely with our network. Most of these projects have to do with some part of the sales process.

Last year we improved our network, which is often a customer's first point of contact with the brand. Now we have a website that features the latest in responsive technology, that optimizes browsing from smartphones and tablets and that makes

for more intuitive browsing. This digital experience has to be transferred to our dealerships. Of course, it's essential that the customers' experience with the brand be unique, regardless of the channel they use to get information or finalize the purchase. This requires advancing in the digitalization of the facilities and transforming the technical abilities of the staff at our network of dealerships. We are going to great lengths to train all of our dealerships. Naturally we want to undertake this transformation hand in hand with dealerships and accompany them throughout the process.

HOW CAN YOU STAND OUT IN THIS NEW ENVIRONMENT? WHAT PLAYERS DO YOU THINK WILL COME OUT ON TOP?
Those who know how to offer customers a unique buying experience and who are able to make their lives easier. ▌

"EVERYTHING HAS TO CHANGE,
SO THAT NOTHING CHANGES"

MAGALY SIMEON
Director of Social Protection and Services Business Unit

⊕

ABOUT CNP

CNP is a French insurance group founded 160 years ago.
Number one in life and creditor insurance in France, CNP
is the fourth largest personal insurance company in Europe.
It manages €335 billion of assets in Europe and Latin America.
Since both the French government and Caisse des Dépôts are
shareholders, the group is closely involved in the public sector.
CNP launched "Open CNP" in 2016 to fund innovative and
expanding startups in sectors such as eHealth, fintech and
insurance to the sum of €100 million. This French insurer is
investing in digital activity to grow in flexibility and develop in
new markets through new distribution channels. It created an
internal social network to improve the flow of information across
the company and to share good practices. The Brazilian subsidiary
has launched the first 100% digital insurance company.

The notion of "disruption" is slowly finding its way into the insurance sector. It is based on the belief that new players and technological innovation will redefine, if not reinvent, the insurance sector.

Proponents of the "disruption" concept believe that all insurers offer the same services. However, they also see that a new world is being built, relying mostly on the North American model, where companies like Google or Walmart are authorized to sell insurance products. Actors as diverse as dealers, phone operators or internet providers are starting to offer insurance products.

"Disruption" supporters further advocate that it has numerous advantages: specific competencies could be opened up, products and services could become more accessible and personalized and managed by users (self-care), costs and prices could drop and new markets opened.

However, "disruption" is no new concept. It has been driven by technology, the arrival of new players, new legislations or new market requirements. Insurers have always known how to integrate new public realities because our profession is eminently societal.

Contrary to popular belief, insurance has always been agile and disruption does not have to be a problem. However, it can be for some insurers who have lost touch with on-the-ground realities. This renewed interest in disruption comes from the overlap of three major changes in the insurance sector:
• A business evolution
• The transformation of organizations and the way they operate, which has an impact on all types of enterprises
• The role people play

I. A MORE AND MORE COMPETITIVE AND NORMATIVE SECTOR

a. An exogenous sector

The insurance field is naturally exogenous (disasters, losses, accidents, illness, risks, and so on). It is even one of the few fields where client and provider want to see each other as little as possible, proving everything is well.

Insurance contracts have been greatly improved in the past years, but even if these contracts become more agile, user-centric and adaptable thanks to technological progress, the challenge lies not only in forms and means alone. It is rather about the vision insurers have of insured persons.

Let us be more positive and reassuring. Let us move from the insured subject and suspect to a partner who needs us in a difficult moment. Let us be available throughout this person's whole life. Here lies the real challenge. It is up to us to show that insurance is first and foremost a service rendered that should provide safety, comfort and betterment.

On the other hand, insured persons expect more concrete solutions rather than simple reimbursements. They are shifting from a compensation logic to a support logic. It is up to insurers to respond to that.

Never has insurable matter been so diverse, substantial and changing. Insurance application fields can be as varied as nanotechnologies, cybercrime, insurance against terrorism, climatic risk, well-being, legal protection, and so on.

Expectations – regarding responsiveness and realization – are rising as well. People expect their insurers to be a trusted

third-party and provider that reimburses and supports them alike, during their whole life. Moreover, insured persons expect their insurers to do this in the simplest way, at the best possible price and as quickly as possible.

In this complex economic, financial and technological context where normative and competitive pressure is reaching levels never seen before, insurers have to become more customer-oriented and proactive. CNP Assurances, for instance, has, besides its digital transition, adapted its contracts by offering additional services such as unemployment guarantees that offer innovative solutions to support people and help them return to employment. By creating Lyfe, our digital services platform, we want to simplify life for our insured persons who, for instance, need to make urgent appointments with competent health professionals.

b. Towards more and more packaged products

So what exactly does the insurance business look like in this new context?

Creating and managing new insurance products is not really a problem. However, these products are becoming more and more packaged (comprehensive insurance) and more importantly they are becoming more and more heterogeneous. Haven't insurers thus, de facto, changed profession? Indeed, insurers now have to establish the link between "payers", "solutions providers" and "beneficiaries".

Furthermore, they have to be able to promote their offering using the right channels at the right moment and in the right way. How can they maintain their level of excellence in the three main pillars of the value chain that are product creation, management

and distribution? Each insurer will have to make strategic choic-
es regarding partnerships, unions, specialization, and the like.

Within this context, the insurance sector is undergoing an iden-
tity crisis further heightened by four other realties:
• Technology and consumer behavior are pushing towards in-
  dividualization and customization, while the keystone of in-
  surance is mutualization.
• Paradoxically, these same technologies are fostering net-
  works, feelings of belonging and communities. New group
  phenomena, joint purchasing and innovative forms of mutu-
  alization are seeing the light of day.
• Time scales are conflicting: what seems long for the insur-
  er is not necessarily compatible with short time scales of
  insured persons whose environment is often constrained,
  uncertain and fluctuating.
• Finally a lot of legal, fiscal and normative uncertainties that
  define today's societies render forecasts more difficult.

II. TRANSFORMATION OF ORGANIZATIONS AND COMPANY OPERATIONS

Insurers are companies that have to face technological disrup-
tion and business model evolution like any other. Three of these
evolutions represent a real challenge.

a. Collaborative economy

New technologies and digital platforms have brought together
offerors and users. The economic context pushes private indi-
viduals to look for additional revenues. Auto-entrepreneurship
is flourishing. Goods and infrastructures are underutilized. New
behaviors like responsible consumption are emerging. All these
factors have favored the development of collaborative economy.
And the trend is not marginal anymore.

For private individuals and companies alike, the collaborative economy touches upon all life aspects such as housing, transportation, equipment and materials, services, education, and so on.

Nowadays, a single insured person can be a company's employee, auto-entrepreneur, rent his apartment to tourists, lend his material to another person, travel by car pooling, buy products through a joint purchase, and the like. Traditional boundaries between free and paid, professional or amateur, or private and professional products and services are blurring. This holds true for our insured persons but also for our employees.

At CNP Assurances, we are dealing with these new realities. Our know-how can be of great interest to diverse partners. Corporate functions such as marketing, research, communication, sales and legal could benefit associations, company founders or even private individuals. On the other hand, a lot of our insured persons, employees and partners have know-how which could benefit us. We are trying to bring together these universes. Our health and well-being platform Lyfe for instance supports people who face difficult situations. We also created an innovative extranet that lists our competencies and can be of use to our partners. The goal is to enlarge this collaborative space to more users so that anyone can present, offer and use competencies. Collaborative economy is thus becoming a reality of everyday life.

**b. Blockchain is an essential tool to face successfully
the Digital Shift**

Although different in nature from collaborative economy, blockchain technology follows the same logic. It is based on a secured IT system shared by different users, which enables validation, storage and transmission of information and

documents. Entries are protected against tampering or alterations through storage nodes. Intermediaries become dispensable.

For insurers, blockchain technology has direct consequences. Here are three examples:

- It enables the creation of new systems managing insurance policies and insured persons' claims in an automated way. Verifications, compensation and so on are done automatically. This reduces structural costs while accelerating the decision process.
- It fosters the development of smart contracts which are "computer programs" that are generated automatically without human intervention.
- It eases the cooperation between different parties for a same project by disrupting blockchain technology to create a truly collaborative system.

The unavoidable use of blockchain within the insurance sector will call for investment, rationalization and transformation efforts. The challenge will not only be to generate and manage contracts but to reinvent the client relationship. In this respect, blockchain could trigger the next big transformation of the profession. Insurers thus have to prepare themselves in order to better know, assess and use this technology. In view of its client relations expertise, CNP Assurances wishes to be a vigilant and responsible actor for the concrete implementation of blockchain.

c. Relationship management

Insured persons do not think in terms of "insurances" but "needs". And those needs can be met by solutions which are not necessarily insurance-related. For digital natives, insurance products remain largely misunderstood. Over half of them consider insurance policies to be too complex.

At the same time, clients are taking a more active role in their relations with their insurer. Thanks to social media and new tools, they can not only consume but also question, criticize, share or recommend. The top-down logic is shifting to a horizontal model, putting insurers under pressure to keep their engagements. That is why CNP Assurances is implementing active survey and research policies and innovative initiatives regarding customer satisfaction.

By listening actively, it becomes possible to identify risks and recognize opportunities. The goal is to connect with clients, to support them throughout their life and be at their side for important events. It is thus indispensable to relentlessly improve client knowledge and customer experience.

New challenges arise. The internet of things for instance opens the gateway to new types of actors, such as pure players. Data, this new intangible asset, has become of utmost importance. Questions about its storage, ownership, protection and use arise. And to answer those, insurers will have to partner with multiple other vertical or transversal players.

CNP Assurance for instance, has bought into Lendix, the leading French loans platform. It enables French SMEs to borrow up to €1M, directly from private, corporate or institutional lenders. CNP Assurance actually is among the 50 leading institutional investors worldwide in the unlisted field and one of the leaders in France.

III. THE IMPORTANCE OF PEOPLE IN THE INSURANCE SECTOR
New organization models impact on all the players: directors and employees, clients and prospects, partners and suppliers. Knowing the extent of these impacts is indispensable for insurers as they affect insurable matters to a great extent.

a. Generation gaps between employees

According to the observatory for the evolution of insurance professions, 17% of France's 143,661 employees in the insurance sector are over 55. These baby-boomers represent a larger group than generation Y (people under 30) which is at 14.3%.

Generation X (30-55 year olds) is thus the largest population. While this group has multiple profiles (accountants, computer scientists, financial officers, and the like), generation Y is more focused around sales and digital functions.

Contrary to current beliefs, the departure of baby-boomers will not be fully compensated by new recruitments. Insurers are reducing their workforces. Recruitment mainly focuses on sales, digital and actuarial positions.

Feminization rate remains very high (60%) and distribution inequalities are subsiding as 47.9% of newly recruited senior executives are women. However, they still remain underrepresented within executive committees.

b. The new role of employees

One of the greatest challenges facing today's insurers will be to reinvent their ways of working and their relations with their employees. They often represent an intangible asset that is too little-known and underappreciated.

New work organizations led by digitalization, specialization, new norms and so on have a major impact on employees (new working forms, new profiles, new jobs, teleworking, and the like).

New generations have new expectations and work habits that are very different. Slashers cumulate jobs and the lines between

work and personal life are already blurring. They are colliding with a world whose mindset has remained "administrative".

Diversity is the watchword, be it in terms of working forms or generations working for companies. CNP Assurances promotes the recruitment of seniors and youngsters alike. We have one of the highest work-study contract rates in the profession.

Each leader and manager should anticipate this change and start trying, testing and applying new working methods. If insurers are agile enough to adapt to markets and their environments, they have to prove that they are also able to do so in terms of organization and functioning.

CONCLUSION
The insurance sector is naturally disruptive and innovation occurs permanently, even if it is not spectacular and covered by the media. The profession's challenge will be to maintain this mindset while some rules and norms work against it.

Our profession has to remember that our value and legitimacy emanate from our ability to bring trust to our insured persons and simplify their lives. Insurance cannot exist without care and respect for others. Succeeding in the insurance sector will require vision, ethics and commitment.

The insurance sector will evolve in the coming years more than it has in the past century. An exciting chapter is being written. Men and women will build a new form of this profession which is the only one present in all professions.

Tomorrow's insurance will, like today's or yesterday's, stay true to its calling: serve the insured. Is it not a wonderful calling?

BRANDS HAVE TO KEEP THEIR UNIQUE IDENTITY TO COMPETE WITH PURE PLAYERS IN THE DIGITAL AGE

ALBERTO RIVOLTA
Managing Director

ABOUT LA FELTRINELLI

Founded in 1954, in Milan, this publishing company is
better known as "La Feltrinelli" in Italy. It set up a holding
company in 2005 to group its various activities: physical
stores, online sales and television (La Effe channel).
From a digital point of view, 2007 was considered
to be the launch of a new era with the creation
of an online store as an additional source of growth.

Digital shift has two main effects in the retail chain, particularly those which produce and distribute items and goods based on information and other similar content (books, CDs, etc.):

• Increase and development of the e-commerce channel;
• Dematerialisation of the contents (traditional books vs e-book).

The main risks/threats for the company related to e-commerce development are mainly:

• The possible "disorientation" of the consumer when he or she approaches a brand like Feltrinelli which has both a digital and physical connotation;
• Decrease of offline business which could have a direct impact on the selling structure and the whole technology system that supports the network. Considering the possible increase of selling volumes on digital channels, it would be very hard to reabsorb resources and move the current retail technologies toward digital channels. Resources are required to develop utterly new competencies (relational and analytical oriented) while those kept on the physical side could turn out to be outdated;
• Lower profit margins compared to the physical channel;
• Need to develop new and different competencies for the consumer relationship. Customers who buy in a shop (bookstores) are different from those who buy online. As a matter of fact, on the one side, the staff's smile, hospitality and courtesy are key factors. Conversely, on the digital side, CRM, marketing and algorithm knowledge are the priority. This implies a necessary definition of specific and customer-tailored solutions which can help the company keeping its clients and traditional selling channels. Thus we are moving from a relationship focused on method to an algorithmic and analytical one based on CRM and e-commerce;

- Concerning content dematerialisation, the growth of e-books is a very sensitive problem for a retail company. However, in terms of books alone, the threat from the growth of e-books is not as much a threat as it was only few years ago. In English-speaking countries, where there are more e-readers than in the southern part of Europe, we noticed a decrease in digital-book selling volumes for the first year in a long time. This confirms that traditional reading provides a different feel to e-books. Most people, "digital natives" included, still prefer reading paper books.

I. A BI-MODAL BUSINESS: TRADITIONAL AND DISRUPTIVE AT THE SAME TIME

There are other reasons why traditional books are still unique, such as:

- Contents impossible to digitalise; books for kids, for instance, are illustrated and/or colourable. These things cannot be offered by an e-book.
- Many students, the younger included, still prefer traditional books for studying since they can take notes on the side or underline important sentences. Moreover, they make learning sustainable and more effective.

The music and movies markets are more on the line than the books market. New services like Netflix and Spotify will have a continuously bigger impact on the sale of these products, which risk in the medium term to be items bought by collectors and no longer wanted for their specific content. Concerning the opportunities, it is clear that the digital channels allow contact with a wider range of consumers easier and faster, with an inevitable overcoming of territorial boundaries and enforcing of the providers' presence wherever there is no suitable material coverage. Another opportunity related to the digital shift is

the chance to change the brand's profile and image, giving it a modern connotation thanks to a digital offering of the "values" customers give to the brand. Of course, this is more complicated if it is supposed to preserve the traditional offline retail distribution channel.

II. DIGITALIZATION AS A COMPLEMENTARY OFFERING TO E-COMMERCE

Here at Feltrinelli we ought to think about digitalisation that can be complementary to our e-commerce offering. For instance, inside shops and stores there could be an improvement in cash management thanks to digital systems. I mean, for example, a system that could help us manage consumers during very tough periods such as Christmas, when queues are exceedingly long causing possible client loss. Selling support tools (self-payment systems, etc.) may also be very convenient solutions.

Moreover, technology may help the company collect information about consumers thanks to the presence of suitable tools ("totems", facial controls that can help understand the degree of a customer's satisfaction). This could be a key success factor for future retail channels.

Lastly, technology can give support in terms of more effective and faster processes and of information collection/sharing.

III. DEVELOPING A BOLD STRATEGY TO FACE COMPETITORS

A. A unique strategy

The retail sector offers important development opportunities in terms of digital development, both in the digitalisation of processes inside stores and the improvement of digital selling channels (e-commerce and others). Even though digitalisation

is not consolidated at all, Feltrinelli did promote different digital initiatives and develop digital assets which the market can easily recognize like Felitrinelli.com, a book e-commerce leader in Italy. It is also interesting how the other competitors are following different strategies in terms of digital development. One of the main competitors has just signed a joint venture with Amazon, creating a new website managed and designed by Amazon itself and using the Amazon device as an e-reader of reference. It is a very different choice from the one taken by us; we believe that the creation of our own asset on digital channels/e-commerce may represent a very important choice over the coming years. However, it can turn out to be the futuristic choice of those who believe that Amazon is too strong as a competitor in digital channels and that it is not a good idea to make investments that may not give any return. It is very hard to understand which would be the most convenient and advantageous solution.

Multi-channel and integration are very important, however very few operators manage to create real synergy. At the moment, operators are clearly divided between classical online and offline. Offline operators hardly ever also succeed in digital distribution channels; however even the "pure players" that succeed on digital channels can't extend their success in other distribution channels to all national and international territories. I think that we have to work a lot to exploit the possible synergies between channels; for example, the possibility to gather information from a channel and purchase from the other or provide our e-commerce structure with a more effective and faster distributive model through network on territory.

I believe that a winning strategy could be one consisting in working on the brand, regardless of the channel. When a customer thinks about the Feltrinelli brand they should also think

about the same values (quality, seriousness, competency, and so on) both in the online and offline channels. Then the customer would choose the most suitable distribution channel in terms of his/her own necessities and requests, which either physical or e-commerce would meet properly. This means that the online channel will be the one chosen by those clients who need a wider selection and cheaper price while the offline channel will be chosen by those who look for eye contact, assistance, sociality, comparisons and experience. I believe that it is quite unlikely that a single client would look both on offline and online channels for two different products. Thus, it is clear that we need a single image for customers who must perceive online and offline Feltrinelli as the same thing.

B. A unique brand

At the moment there's no retail operator able to compete with those like Amazon on the efficiency of its operating models (delivery systems, distribution costs, etc.) that Amazon and the other few big players can achieve thanks to their economies of scale and very specific structures.

Another problem concerns the possibility for traditional retail companies investing in digital innovation. This problem comes also from a distortion in the approach usually adopted to assess the value and real economic condition of the company itself. For example, a traditional company is evaluated by its KPIs (EBITDA, NFP, profits, etc.) while e-business companies can make losses for years even when their stocks keep gaining in worth. It's the classic debate between economics and finance, since you have to do business according to economic rules while pure digitals players can exploit financial rules; this means that if Amazon were assessed by classic economic indicators nobody would finance it. Thus you find yourself competing with

very big companies based on native digital business models and able to attract many investors. It's a very complicated competitive environment.

I still think that we should invest in a rational way; not investing at all is out of the question. You can renounce investing if you offer services but you can't if you sell products. You have to find your own way to invest in digital innovation and manage your ideas and finances according to your goals and possibilities, considering all the alternatives and attracting the public's attention through dynamics different from the most typical in e-commerce and the digital world in general. You must offer the customer something different. But what? Your brand's values. For example, Feltrinelli can exploit its own network of bookstores and authors which can be differentiated only if consumers know Amazon's algorithms cannot ensure the same values that Feltrinelli can.

IV. INVESTING IN THE DIGITAL SHIFT
All retail companies are behind regarding investing in the digitalization. I believe we don't need to increase investments in digital innovation, but just make the right choices. Of course nobody can afford a non-digital innovation; it is necessary to find your own solution according to your internal characteristics.

I think that the priority in investment is CRM. It should be different from the pure player's CRM, ensuring higher value for the brand and experience in this environment. Even marketing plays an important role: the first incomes come from the websites and research engines on the Internet. Thus, obviously, no company can make choices that do not take into consideration the marketing side, CEO and SEM which support both e-commerce and offline channels. Being recognizable and making the mar-

ket notice you're moving on the right path are things that must be developed through digitalisation which can also help physical retail, even if retail operators are not keen on investing in marketing and other advanced and digital communicative solutions.

CONCLUSION

In my opinion, all companies can deal with digitalisation developments very effectively since there is not a big shortage in this regard. It is clear how important it is to have people in your staff who know proper digital codes and languages; this type of resource is not difficult to find on the market. What makes the difference is the extent to which the company is in favour of digitalisation and focused on it.

It must follow that a common digital culture can make digital-related areas work perfectly in coordination with the rest of the other companies' business areas. This means that the brand and digital strategies must be aligned with those of the companies in general. It is then necessary to exploit all the advantages derived from economies of scale. Big operators like Feltrinelli and Mondadori exploit advantages derived from being publishing/editorial brands while Amazon is "generalist"; you must distinguish yourself as an expert in that area. Concerning logistics and technical capabilities, you can try to compete with Amazon, however there will always be a gap between you and a company which uses drones and robots to deliver products and exploit very advanced algorithms for the CRM. You must play with other cards otherwise Amazon will always win. ▮

HYBRID ORGANIZATIONS ARE A NEW MANAGEMENT SYSTEM TO ADOPT THOUGH DIGITALIZATION

SIMONE BRUSCHI
Head of Digital Transformation

ABOUT MONTE DEI PASCHI DI SIENA

Founded in 1472 in Siena, Italy, Monte dei Paschi di Siena
is the world's oldest bank. It took advantage of the Unification
of Italy to extend its business throughout the country. The bank
and its subsidiaries are involved in traditional banking, but also
insurance and investment banking. It was the first Italian bank
to diversify its activities into life insurance. Monte dei Paschi
di Siena has been listed on the Italian stock exchange since 1999.

The first business priority is to digitalise processes in branches to optimise the network. The second business priority is to understand the behaviour of the customer in order to satisfy his or her needs.

Algorithms are fundamental to define and develop the customer's value. The last business priority is to define service models dedicated to easy recognizable customer segments that have to be the service excellence models. Moreover, they have to be service models aimed at optimising not only the bank margins but also the service level provided to customers because it brings loyalty, redemption and repurchase.

I. HOW TO BE A SUCCESSFUL BANK THROUGH DIGITALIZATION

A. Key success factors for European banks

There are three key success factors:

1. The banks have to change the way they look at technology because technology is the business. Algorithms could be key success factors, but could also determine the bank's failure.

2. Investments and technology have to be divided in the following manner: 50% back end (technology to develop algorithms necessary to define and develop the customer's value and to predict their behaviour) and 50% front end in the business. The business should manage and change the technological front end part to make it suitable for the customer's requests.

3. Management of the customer contact system is critical because the system is totally passive at the moment. It has to become an active system, reactive inbound, that solves customer problems and offers a next-step action. It must also

become a multi-channel system; the customers could either contact or be contacted by the bank through different channels in a symmetrical and synchronous way.

B. To better care about the customer relationship

• Via a different management:

The strength is the bank network, a structure stretching out across the territory; its aims are commercial management, consulting and contact with customers. The network is deeply rooted in its territories so it is able to manage different kind of customers, both corporate and private (upper value customers). The weaknesses are once again the network and technological innovation. The first because branches are overwhelmed by operating activities such as loan management or bank account openings. The branch staff has to manage a lot of documents which requires time and resources.

The opportunity is to create remote relations with customers with assets up to 100k-150k which do not need to have a direct relationship with the bank; moreover, the bank does not gain a lot from this kind of customers. The branches are expected to have no cash desks anymore since they will be just a touch point for consulting, marketing and distribution.

Another opportunity is to remotely manage some activities: this implies that a lot of non-profitable activities will be done by automatic tools and not by employees.

At back end, the opportunity is to use some Fintech methods to optimize relations with customers. The bank trend is to introduce CRM (Customer Relationship Management) concepts to use some customer behavioral analysis mechanisms to sell

them profiled financial products. The other stimulus is the management of ¨junk¨ products: the bank has to be clear with customers investing in junk stocks.

The last motivation is credit management: it means identifying which are the toxic credits that could be processed by the bank and which could be sold to third parties.

The threat is the emersion of some Over the Top specialized in some types of offers which are highly targeted at customer satisfaction and overlaps bank services. The greater OvT impact is on segment values (assets up to 100-150k) which, not feeling interested in themselves from the bank, rely on the OvT. Another threat is payment systems like peer-to-peer payment or small money transfers by messaging.

• Via different channels:

The most effective channels are telephonic reactive inbound, chat or video chat reactive inbound and social networks. The last ones have no trade capacity but could be used to reduce damage to the bank's brand caused by customer complaints expressed on social networks.

An emerging trend is to prevent and manage possible negative comments from customers on social networks by creating tutorials or self-assistance on the basis of segmentation, expressed needs, requested information and detected problems.

The aim is to solve customer problems in remote mode; only the never-occurred cases should be solved by call centre operators. Blogs and forums are not effective to spread products or to help them.

II. IT SEEMS DIFFICULT TO CHANGE THE MINDSET OF THE BANKING SYSTEM REGARDING DIGITALIZATION

A. A sector behind the others regarding the Digital shift

Investment is insufficient. There is a lot to do. My bank invests 10 million dollars and investments of our biggest competitors are 15 times higher than ours. Thus over the next three years there will be an important competitive gap between banks.

Some of them will invest just the minimum, others a lot of more, since investment in digital innovation is considered the key success factor because what is important is the algorithm, no longer the product.

The banks should adjust their organization. They need two fundamental organisational systems: the first to define structurally the investments with the support of business cases, something unusual for the banks because they have always had ROI (Return On Investment) guaranteed. The second fundamental organisation has two different tasks: one is technological to understand customer behaviour and the other is dedicated to managing ways to contact the customer.

B. The diversity of the employees background is essential to manage successfully the digital shift

Talent management in banks should be more effective. Before hiring people specialized in digital, there is a need to introduce people with different backgrounds and specializations in order to change the bank's point of view regarding technology.

To invest in online banks is a peculiar topic. The difference will be the type of activity and not the customer type. We will not need a physical card to withdraw money, we will use smart-

phones while commodity services will be executed in remote mode, not inside branches.

CONCLUSION

All Italian banks are reducing the number of branches because customers are decreasing. The reason is that labour costs are too high. However, the presence of the network in territories is fundamental for a bank, but the branch's functions must be just consulting, advertisement and distribution. To be profitable, a branch has to be chosen correctly and with the right type of customers.

The synergies/convergences are to bring complex and value-adding services into every single branch.

There won't be disruptive events over the next few years or threats from big digital players (Google, Facebook, Amazon) in the banking sector. Google, Facebook or Amazon already have a specific use. ▮

"USAGE" DISRUPTIONS AND THE PART TECHNOLOGY PLAYS IN THE ADVENT OF A NEW INSURANCE MODEL

RAPHAEL RIVIÈRE
Digital Expert

PHILIPPE VICENS
Head of Finance

ABOUT GOOGLE

Google is an American multinational technology company specializing in Internet-related services and products created in 1998. These include online advertising technologies, search, cloud computing, software and hardware. Rapid growth since incorporation has triggered a chain of products, acquisitions and partnerships beyond Google's core search engine.
It offers services designed for work and productivity, email, scheduling and time management, cloud storage social networking, instant messaging and video chat, language translation, mapping, video sharing…
The company leads the development of the Android mobile operating system, the Google Chrome web browser, and Chrome OS, a lightweight operating system based on the Chrome browser.

In 2013, Google launched a service to compare the cost of car insurance in France. The company took no commission, but used the information customers had entered. People were able to buy their policy directly with the insurer. The service was actually run by the British firm BeatThatQuote.com which was bought by Google in 2011. Although the firm is registered in the UK, this service is targeted directly at people wishing to take out car insurance in France. However, the experience was not profitable enough so Google decided to close this service in 2016.

I.   PARADIGM SHIFT THROUGH USAGE DISRUPTION

Nearly two decades after their emergence, it is wonderful to see to what extent search engines have become the digital pulse of reality. Through their web queries, users express their thoughts and intentions, be it for information, entertainment or even buying purposes.

These are all opportunities for us to observe society's evolution and more particularly the impact of digitalization. Digitalization has indeed massively shaken up the status quo. Today, everyone can access international news in real time and research any topic. Life would be unthinkable without it. The changes are countless, but all draw on two fundamental usage disruptions that have been shaped throughout the last ten years. These disruptions are game changers in the business world, and more particularly in the insurance industry, and will redefine the rules in the sector for the coming years.

A. First usage disruption: Smartphones

Since 2007 and the commercialization of the first iPhone, everyone can literally access the internet with their fingertips. In France 40% of Google searches are made via smartphone. In the insurance sector, the figure is 30%. We estimate that

in 2018, over half of insurance-related searches will be done via smartphone.

Customer journeys are getting more and more digital. In France, for instance, in the course of each quarter of 2015, eight million insurance product subscription journeys were made on-line. Thirty per cent of those used at least two devices (mostly computer + smartphone). These trends created new customer expectations. Customers want to access simple and extensive information about products, pricing and guarantees, from any point of contact during their journey. They also want to be able to subscribe from any channel in a transparent and effortless way: 30% of prospects for instance expect to find online appointment booking or web call-back functionalities.

Since 2007, a gap has developed between these expectations and the digital value proposition of insurers. Product websites are often too complex and unappealing, sometimes they do not even exist: some insurers offer customer journeys exceeding ten clicks, whereas the most effective post their product web-sites just one click from the homepage. Online subscription is too often synonymous with low-cost. Insurance products are of-ten inflexible and offers are not sufficiently customizable. Step by step, this gap is being bridged, mostly thanks to digital na-tives. After comparison websites, FinTech players like Inspeer in France, or Oscar in the US are now emerging. And their influ-ence is growing.

B. Second usage disruption: Data

The emergence of Facebook in 2004 marked the end of Web 1.0. The dynamic of social networks converted web users from simple spectators to contributors. Every day in 2016, we are creating as much data as was produced from the beginning of

mankind to 2004. And this data comes in many forms: photos, videos, GPS data, web searches, social connections, cookies and so on. This trend will even be heightened with the Internet of Things. This data explosion and the control of advanced algorithmic methods such as deep learning have two major consequences for the insurance sector.

The first one is the opportunity for insurers to enjoy increasingly detailed insight into the risk profiles of their customers. Machine learning algorithms make it possible to rapidly exploit data sources. However, such technologies are still underused in the insurance sector. The only observable progress traditional players have made is within the automotive insurance sector, where semi-dynamic offers increment premiums according to drivers' behavior.

The second one is the systemic reduction of insured risks through main products (...). Driverless cars will be fully operational in the coming years, drastically reducing accident risks. Smart water or gas pipes, able to diagnose or anticipate a problem themselves will become an industrial priority. The quantified-self is an important research lever, be it in the startup ecosystem or for traditional players.

II. WHAT ARE THE RISKS FOR THE COMING YEARS?

The insurance sector will have to face these changes in the coming years. For us, three perspectives are possible:

A. First perspective: insurance will not change, but its value will decrease

This is the direct consequence of insurers not reconsidering their value proposition. Their offering is still based on the mutualization of risk between insured parties that are numerous and very different from one another.

Systemic risk reduction directly leads to a decrease in premium amounts. This poses a threat to profitability. Indeed, in these market sectors, combined ratios are already close to equilibrium, as the fixed operating costs are often substantial. In this instance, digital natives have a significant advantage: fixed costs within their business models are far lower than for traditional players as they have few employees, few physical structures, controlled information systems, use marketing strategies that are inexpensive or even costless, and so on.

The challenge for traditional players will thus be to reduce their fixed costs, while retaining their physical assets and improving their value proposition. This could for instance be achieved by developing new products or expanding their customer service offering.

B. Second perspective: individualization of insurance

At a second stage, the market logic could evolve from risk mutualization to offer personalization.

Being able to control data and dynamically integrate more and more signals within actuarial models makes it possible to quantify the risk level associated with a contract individually and in real-time. In the short term, this does not mean that mutualization will completely disappear: it will only be applied to better-qualified and, especially, less numerous profiles.

This could pose a real threat to traditional players: abandoning large-scale mutualization is not in their interest. New, vertical actors will probably come into play though. Automotive OEMs for instance already have access to manufacturing data. Combined with data related to the use of their vehicles and the user itself, they can evaluate – better that anyone else – the risk level associated with each model and even do so in real time.

The same logic can be applied to energy operators who will be able to evaluate housing risks in real time. Fraud detection, accountability and even accident prevention will be simplified. Steps have already been taken in this direction: numerous partnerships have been built between energy operators and connected object producers, like Direct Energie and Nest. This also holds true for property managers that could do the same for property assets.

For these players, the insurance of a good and the value it adds through the service are more marketing-related than a real source of revenue. The difference between the low financial value of this insurance type and the service value the customer perceives will have the expected leverage effect that will present a competitive advantage over traditional players.

C. Third perspective: Insurance oligopoly

Following, or parallel to this individualization, we could witness the emergence of insurance oligopolies. Take the example of driverless cars. One might imagine that whole vehicle fleets of driverless cars used for car sharing would be managed by a unique artificial intelligence, which could learn from each car's use.

In that case, what will become of the cars' insurance contract? And who should be insured? The current B2C market could evolve into a B2B market where customers would be software developers and which would be limited to 5-10 per country. Considering this, having the largest fleet would guarantee the market's leader position.

Reducing the number of insurable objects, combined with a systemic risk decrease could lead to a significant drop in business volume and thus a consolidation of potential players.

This perspective could be extended: once the risk can be trans-
ferred from a person or legal entity to software, other sectors,
such as professional insurance, could be impacted.

III. TOTAL RECONSIDERATION OF THE INSURANCE MODEL?
The possibilities for usage disruption are plentiful. However, we
consider them rather as opportunities than concerns for insur-
ers whose expertise, particularly in risk management, is still
unmatched on a worldwide scale.

As an actor in the technological sector, Google is always faced
with potentially disruptive innovations. Our experience enables
us to understand the key success factors to face future chal-
lenges. We have identified three axes.

A. First axis: Know your customers. All over again.
Customer behavior and journeys have been particularly impact-
ed by digitalization and the use of multiple devices.

By analyzing these journeys, we came to understand that there
is no one standard journey anymore but that each customer is,
through his/her experience, situation and desires, unique. How-
ever, we identified four major customer experience moments on
their journey:
• Web search: About two thirds of all the "leads" use Google
  during their journey to subscribe to insurance products. And
  those who do use Google are about twice as prone to convert
  as others.
• Comparators: Especially for non-life or property/casualty
  insurance products, comparators represent between 25%
  and 33% of all traffic generated by insurance subscription
  journeys. The challenge here lies in positioning. Should in-
  surers fight against comparators to improve their customer

relationship management or consider them as a way to make more business?

- Digital assets (web sites, mobile sites, applications): The key topics are: user experience and omnichannel. Customer journeys on web sites and applications should be easy and short and give customers the choice to continue their journey through any channel in a transparent way, online or offline.
- Physical assets (agencies, call centers): Even if most of the subscriptions take place in agencies, their role has shifted. 65% of the French go to an agency knowing which product they want to buy; 52% even take a competing offer with them to negotiate and 66% of them succeed. Negotiating skills are thus becoming more important for agents.

B. Second axis: Redevelop internal competencies and become more flexible

The emergence of unicorns redefines the time scale of traditional sectors. The transportation sector for instance had its time scale cut from 5-10 years to 3-6 months in less than two years. This has been the natural consequence of Uber constantly innovating, fighting "clones" off the market and having to attract and repay investors who think in terms of "growth" rather than "turnover".

C. Third axis: Be innovative, be fast, be disruptive

Digital is constantly redefining norms and challenging the status quo. Everyone has to take part in the innovation marathon and challenge. For competitive intelligence, but also for a competitive edge, it is vital companies disrupt themselves before others do. They can do so by promoting internal development and innovation, creating "Innovation labs" like AXA did or capitalizing on external growth and co-development.

When it comes to innovation throughout the insurance value chain, and particularly for prevention, major digital players, such as Google, can become partners of choice. Several insurers are already using home automation systems and connected objects like Nest smoke detectors to improve their offer for housing insurance.

CONCLUSION

Upgrading one's technological, human and methodological means in order to work on these three axes is the best way to take the digital highway and bridge the gap between customer expectations and the insurers' value proposition on the one hand, and having a definite competitive advantage when new usage disruption disrupts the business world on the other hand. ▪

DIGITAL SHIFT, AN OPERATION TO OPERATE WITH CAUTION AND STEP-BY-STEP

PAUL SWOBODA
President

ABOUT GRAWE

Grawe Romania Asigurare was established in 2000 when the majority shareholder of the company, the international financial group Grawe, brought to the Romanian insurance market its experience built-up over almost two centuries.

In its 17 years of existence, the company has diversified its product portfolio, adding property, goods, health and accident insurance policies to its existing life insurance products. Starting in 2017, Grawe also entered the automotive insurance market, thus providing a complete range of insurance products. The company offers modern products, well-structured and tailored to specific local needs.

The essentials for developing an insurance product are an understanding of needs, fair pricing and competitiveness. Grawe Romania is one of the country's leading life insurance companies and has enjoyed balanced development, its growth being secured by safe and efficient investments.

I. TWO PERSPECTIVES TO CONSIDER TO MASTER THE DIGITAL TRANSFORMATION: EXTERNAL AND INTERNAL

A. Support from the customers

There are two perspectives to be considered when discussing about the digital transformation.

The first one would be the external perspective. It' safe to say that the clients support the digital trend, expecting from the Company to go more digital. But the digitalization in this case goes untill a certain degree as the sales processes are requiring also consultation with the clients, including thus communication and human interaction. Also when we think about sales processes, there are restrictions imposed by the market regulator.

The second perspective is the internal one. Company processes were subject of digital transformation initiatives and currently these are more digitalized.

Overall, the industry of insurance cannot be seen as 100% as a pure digital player, rather requiring interaction between consultants and clients. Definitely some products can go 100% digital like MTPL but most of other products would require an active communication between the consultant and the client. One of the obstacles regarding digital transformation is rather company external, the market regulator. Current regulations are rather preserving the traditional business model, as for example regulator requires specific documents to be on a hard copy support.

B. The top management of the firm should be leading the digital transformation

Several roles might lead such transformation but in case of Grawe Romania, a chief digital officer position is not the best

solution, given the size of the Company. Overall, strategic direction can be set by C level suite but daily management should be performed by business process owners.

II. TO APPREHEND THE DIGITAL TRANSFORMATION STEP BY STEP

A. To choose evolution over disruption

It appears to be much efficient to choose rather evolution over disruption. A radical change of the business model won't be appropriate. Business model would be rather the same, but improved.

Digitalization is a way forward for cost saving and creation of more efficiency. These initiatives should produce added value for the Company, blending short term and long changes and benefits. On a condition to go step by step.
Manual data entry should be reduced in the future. Local workforce is overqualified, thus it might be more efficient to delegate them to support more complex processes, to be responsible of more sophisticated tasks in the processes. On the other side, becoming more digitalized on specific tasks implies the risk that people will lose the capability of seeing "the big picture" of the process, but only parts of it.

B. To give the priority to build a strong relationship with customers

We are not considering our company to become a pure digital player, but rather benefiting from digitalization. People are needed for customer support and sales processes and customer experience is always the most important when it comes to build a long term relationship. Some risks might be decreased through digitalization; others may increase (e.g. impact in up-sales), but the way to go will be always step by step.

III. TO FOSTER A DIGITAL CULTURE AT EVERY LEVEL OF THE COMPANY

A. To introduce the digital culture to every employee of the firm

Millennials have the skills to be part of a digital transformation, but the challenge is to motivate them to take part to it. The question raised is if they want to be in a leading position for such transformation. I believe that business process owners should support digital transformation, acting as change agents.

B. To use the right supporting technologies

Mobile technology is adopted at group level, but for the moment Romania is in development stage. I would say no for the use of Cloud, for security reasons and data regulations reasons. As for the internet of things, it may be the case in the future (e.g. house insurance). We can definitely say that extensive usage of existing data to analyze sales and service client potential, is something to work on in the near future in Romania.

CONCLUSION

It's obvious that companies are not well enough prepared to define and implement by themselves the digital transformation programs. The combined model, consultant & client, is the optimum one to reach interesting goqls. The consultant should focus on analysis; as a facilitator; potentially challenging proposed solutions/ ideas. Internal involvement is required as well at the business process owner's level, to facilitate change in the organization and undertaking responsibility for the outcome. ▪

HOW CAN LARGE CORPORATIONS TACKLE THE DIGITAL SHIFT WITHIN THE BANKING SECTOR?

JAN WOHLSCHIESS
Global COO/CFO Wealth Management

ABOUT DEUTSCHE BANK AG

Deutsche Bank provides global banking and financial services all over the world, and is considered as a benchmark for investment banking. Located in Frankfurt, it is the leading bank in Germany, and enjoys strong positions in Europe, North America and Asia. More than 10,000 employees work for Deutsche Bank in some 70 countries.
In 2016, Deutsche Bank opened its own "Digital Factory", where 400 developers and financial specialists work together to develop digital products and services. The bank wants to drive digital innovation, for example by contracting partnerships with the MIT. They focus on digital innovation for private and business clients.

I. THREATS AND OPPORTUNITIES FOR COMPANIES IN THE DIGITAL SHIFT

In general, large companies seem to have significant advantages over individuals or smaller companies when it comes to innovation in the digital age. Being established organizations already, they have access to clients, talent and capital – strong advantages compared to individuals and startups, who usually start from scratch with just an idea and need to work hard to get sufficient access to resources. As a result, companies are able to develop digital business models at a much higher pace and with a stronger impact – in theory. The flipside of the fact that operations and processes are set in a certain way is that they do not allow for much flexibility or speed, which is required to operate in a rapidly shifting environment. In addition, mindsets and approaches are often much more focused on more traditional performance indicators like efficiency and process compliance, while rarely providing incentives to truly think outside the box and challenge existing assumptions. The resulting challenge for companies is to avoid losing track of their good ideas within their large organization and structures. To summarize: the resources available to companies give them a significant advantage, but they need to learn how to utilize them in order to unlock innovation and creativity to enjoy a better starting position.

II. KEY SUCCESS FACTORS FOR SUCCESS IN THE DIGITAL AGE

A. Digital culture

As our Chief Digital Officer Dr. Markus Pertlwieser often highlights, digitalization does not succeed if it is limited to selective projects and initiatives – it needs to be a natural component of both corporate strategy and culture. Of the many cornerstones of innovation which need to be reflected in a comprehensive digital strategy, the most important one is the focus on the client

and the question of which of the client's problems to solve and in what ways. In traditional companies, innovation is often driven by ideas from inside the organization on how to enhance existing products, but not from the perspective of the client.

B. Talents

The key success factor for companies is to attract the right talent for the company. Attracting and retaining talent for digital innovation requires a different hiring and incentive scheme than for traditional corporate jobs. At the core, there needs to be funding as well as a governance structure available, in which the digitalization efforts can be embedded. The working environment should ideally be free from steep hierarchies and bureaucracy in order to give enough space for innovation. In addition, new talents should be enabled to grow – both personally and financially. Rewards-based payment schemes or equity stakes can serve as attractive incentives, while on a personal level, having tangible responsibilities and being provided with challenging tasks to learn something new every day are compelling opportunities for new talent. With the right talent available, companies have a solid chance to succeed in the digital age.

C. Innovation and agility

A parallel approach can enable companies to drive innovation while staying on track with their ongoing business. I believe it is crucial to drive innovation with a small team in what I call an 'unconstrained environment' – away from their day-to-day jobs and responsibilities, without lengthy reporting and internal decision-making processes or steep hierarchies, so that they can fully immerse themselves in the new challenge. Focused investment in selected ideas or business concepts accelerates the process and helps to bring new solutions to market more quickly.

III. BETTER PARTNERSHIPS BETWEEN PUBLIC INSTITUTIONS, STARTUPS AND COMPANIES

A. The importance of going outside your own organization

Unlocking innovation is equally important for an IT organization. Employees need freedom and opportunities to familiarize themselves with new technologies, to explore innovations in the market and to try new ideas themselves. For this, inspiration from outside the organization is crucial – active collaboration with technology firms and startups may yield joint development for new products or services and at the same time enable mutual learning for all parties involved. Deutsche Bank, for example, conducted a Hackathon recently, where bank employees worked alongside young startup teams and innovators to define and develop new digital business models. The event not only delivered tangible results and first prototypes within a very short period of time, but also had a strong impact on the corporate culture within the involved teams.

B. Better relationships between major companies and the start-up ecosystem

There are many opportunities to develop relationships with startups, but this is rarely achieved from behind a desk in a corporate office. Industry conferences or local startup meetups are just two examples of settings in which it is possible to meet people from relevant startups. Companies can also get involved in the startup industry. Deutsche Bank has a dedicated team that screens upcoming startups in its Labs in the Silicon Valley, London and Berlin and fosters strong relationships between the bank and relevant startups. Moreover, we foster active collaboration with Axel Springer Plug & Play, which provides us with strong connections to lots of disruptive startups and innovators. We also opened our Quartier Zukunft (Deutsche

Bank's branch of the future) in Berlin last year, which serves as a further touchpoint for this audience.

C. Improve the relationship of public institutions and financial structures with digital companies and players

Regulators and governments are particularly important stakeholders for banks when it comes to defining and implementing corporate business models and operations. At the moment though, there is still a variety of new business models which are not yet formally regulated, such as P2P models which are strongly driven by multiple startups in Germany and abroad. In order to provide incumbent banks with these opportunities and to further encourage innovation, these stakeholders need to be open to change through new models just as much as the companies themselves. A shifting regulatory landscape, on the other hand, also creates new stimuli for innovation, such as the regulations around PSD2 – a new regulation on payment services for Europe effective from 2018 onwards – that enables unprecedented business models for the financial services industry. All in all, it is crucial to maintain a constructive dialogue with key public institutions and regulators.

D. Development of leading local players on a global scale

The key challenge here is to attract clients on a global scale. Looking at Millennials in particular, their characteristics need to be taken into account, and the ways strong client relationships are built are challenging, but not vastly different across the globe. To start with, solutions need to be tailored to the client to build trust and engagement. Having existing client relationships or a physical presence in target locations across the globe is also a major advantage.

WHO WILL BUILD THE ECONOMIC LEADERSHIP OF THE FUTURE?
To build economic leadership in the digital age, in a highly com-
petitive market environment, a little luck obviously goes a long
way. To succeed, we need to ensure close and constructive col-
laboration between a selection of innovative startups and com-
panies with their powerful industry starting point. ∎

PEOPLE ARE THE KEY CHALLENGE OF THE DIGITAL REVOLUTION

JEAN-CLAUDE LAROCHE
Chief Digital and Information Officer

ABOUT EDF

EDF is a French energy company created in 1946 in the wake of the Second World War. It is the leading energy company in France and the world. In 2011, for example, EDF produced 22% of European electricity. The company spans a range of specialties, from production and retail to the distribution of electricity. It generated a €71.2 billion result in 2016, thanks to its 154,845 employees worldwide. The company is majority-owned by the French State, although 15% of EDF's capitalization has been on the stock exchange since 2005. From a digital perspective, EDF endeavors to value data and experience and to support the digital transformation. Customer services could be improved by taking advantage of existing information. Indeed, digital technology has a key role to play in decentralized electrification.

I. DIGITAL: OPPORTUNITY OR THREAT? KEY CHALLENGES

Digital is impacting every industry and the energy sector is no exception, with every electricity-related field undergoing tremendous change. However, this should be considered an opportunity to transform and improve our organization rather than a threat. Below, we discuss three concrete examples of the many opportunities now open to us.

A. In the sector of energy, operations can benefit hugely from digital solutions

Firstly, let's consider the engineering phase. The energy sector is a very capitalistic industry, and as such its major challenge lies upstream, within the generating fleet. As EDF is mainly a nuclear player, its future challenge will be its ability to build nuclear plants in a competitive way. One way to do that will be using digital technology. Companies like Airbus or Dassault have already shown how digital can empower engineering services. They have for instance integrated fully digital systems or use factories that are completely digital. This has enabled large aircraft industries to directly launch serial production without building a physical prototype first. Everything had been simulated virtually beforehand. Working on a digital prototype also has the advantage of allowing several teams to work on it simultaneously. This makes it possible to control product lifecycle management by guaranteeing the coherence of activities and validating that it meets all business requirements.

Another area that can hugely benefit from digital solutions is operations. Digital simulation for instance has become a vector for operations optimization. With new tools, 3D representation and automation, the entire maintenance process can be optimized. Employees can be trained on virtual models; robots can take over in situations that are dangerous for humans, and so

on. EDF is already using drones for maintenance work. The next step will be to use augmented reality.

Finally, we are experiencing the same type of disruption downstream, notably for customer services. Just recently {Oct 2016, editor's note}, an EDF subsidiary has launched a new service offer called "Sowee", a platform for connected objects focusing on comfort. Here, digitalization operates on several levels. Firstly on the technological level as this offer is focused on home automation and cloud technology. Secondly in the way this offer was created. The original challenge was to set up a Customer Relationship Management program within a year. With traditional working methods, this was an impossible task. Everything had to be rethought: cloud technology, agile working methods, subcontracting, and the like. EDF had to disrupt the way it worked. And so, a small team of intrapreneurs was set to build up this offer in an agile and flexible startup way.

B. The consequential challenges due to new norms and regulations

The use of new technologies and working methods raises new challenges. New norms and regulations for instance have to be set up, especially with respect to data and the way it is treated. This holds particularly true when several parties come into play and when considering the extended enterprise and cybersecurity. Companies have to ask themselves: what data do I have? Who can or should I hand it over to? Should I involve third parties at all? In this light, it becomes essential that companies should know in which way data is treated. This is where certification can play an important role.

This is not only important for companies themselves, but for their clients as well. They should be able to know what infor-

mation the companies have on them, how their data is treated and what is shared. Not only should they be informed about and consent to this, but companies should make sure their consent is informed. Security policies have to be put into place. This in turn implies the application of transparency, internally and towards customers. It is thus vital to implement multichannel consistency.

More broadly, the challenge will be, perhaps counterintuitively, to put humans back at the center. We have just illustrated this for the customer side by asking customers relevant questions and putting ourselves in their shoes. However, this also holds true inside companies, namely when it comes to their employees.

Not only are new technologies challenging because employees have to adapt to them and master new skills, some are even radical disrupters and threaten whole job segments. This is particularly the case when it comes to automation as it has an impact on all jobs and qualifications. The question then becomes: how can we support employees throughout this transformation.

II. HOW CAN COMPANIES MASTER THIS CHANGE?

A. Shift from process logic to data logic

The first thing that has to occur in the context of digitalization and digital shift is a radical mind shift. The usual way of thinking cannot be applied anymore. More particularly, companies have to shift from "process logic" to "data logic". Just like GAFA companies and digital players, enterprises have to view their data as an asset on its own. Data policies become particularly important. As discussed previously, those can only be implemented by asking the right questions within the company: what type of data do I have? Which information is sensitive? Who has access to it?

How? Who manages rights attribution? And this should be done within all departments. Asking these seemingly simple questions can help raise awareness to a significant extent. However, it is also vital to see it through and dedicate people to it. The nomination of a Chief Data Officer is essential.

B. Innovate – from the bottom up

There is no way around it: to compete against new players and secure their place in the market, established companies have to be innovative. But how do you push for innovation within the company? It is surprising how often this question is asked the wrong way. When it comes to innovation, the question to ask is not "How can employees help their company?" but "How can the company help its employees".

Most of the time, the problem is self-limitation. And this comes from top management. Management has to trust its employees on this matter. Companies have to put spaces into place where employees can express themselves and give them the tools and the means to innovate. As for data, it is essential to have a responsible person for innovation. However, this person should not work on innovation itself, but rather on the means and tools that make innovation and intrapreneurship possible. We live by this in EDF Group CIO office. One of the areas where our Innovation Officer took particular interest was purchasing. When he took office, most of the innovation-related purchases had to go through the internal purchasing process and it took on average 450 days for the purchase to be completed. By establishing, together with the EDF R&D and with the Procurement Division, a contractualization kit for innovation purchases (smaller than €400k), he was able not only to cut the average purchasing time down to 2.4 weeks, but also empowered employees since they now only have to inform the Procurement Division.

C. Aim for diversity

When innovation is made possible and accessible to everyone within a company, new questions arise, such as: "How do you deal with agility while scaling up?" This is one of the more difficult questions to answer. The challenge is to know when and for which topics to be agile. Most of the time, two types of organizational model coexist: the traditional "V-models" and the lighter, agile models with its scrum masters and project approach. A lot of projects can benefit from the second model but not all departments can support this, particularly in established companies. So the real challenge is to find the right balance between those models. And the possibilities are plentiful: subsidiaries, spinoffs, co-creation with external startups, and so on. As to bridging the gap between both models, companies need people who evolve around both and have a data vision.

CONCLUSION

Even if technology is a major challenge, it is not the key challenge. People are. They have to be put at the heart of the digital shift. The central issues are: new competencies, mobility, professional reconversion and assisting and supporting employees along this path.

An important problem to tackle will be the generation issue: between retirement and the hiring of new employees, IT and RH departments will have to work closely together. This generation problem is also being extended to companies as a whole. Traditional organizations often clash with modern working methods. However, we believe that established companies should strive to embrace their tradition to meet the future. Company cultures and stories are an asset, not a liability! In this sense, EDF, as a public service actor, is a trusted party and wants to capitalize on this while embracing new opportunities. ■

DIGITALIZATION BROUGHT THE HEIGHT OF PATIENT EMPOWERMENT

UGO DI FRANCESCO
CEO

ABOUT CHIESI FARMACEUTICI S.P.A.
Chiesi is an international group based in Parma, Italy,
with more than 80 years of experience and a strong focus on
research, development, production and commercialization
of innovative medicines in the Respiratory, Neonatology,
Rare Disease and Special Care Therapeutic Areas.
Chiesi is the leading Italian pharmaceutical company in term of
R&D investments (7th among Italian Companies in general) with
more than 500 resources focused on R&D and annual investments
in R&D usually higher than 15% of total company turnover.
Chiesi already benefits from digital technologies linked directly to
the final consumer. For example, it launched a web documentary
to notify the general public of the risk from asthma.

The impact of technology has been and still is strong and cross-functional in every industrial sector, and pharmaceuticals is no exception. We often talk about it in an evasive way and it is difficult to understand which are the real given opportunities to go towards specific directions of each sector. The main threat is to be overwhelmed by the technologies and to lose the standpoint that it is the company that decides and that technology is only a support.

5 targeted project areas for digitalisation in the pharmaceutical sector:
1) Processes (eg. Receivables fully digitised the past and tend towards "4.0 Industry").
2) Work Space (working spaces configurations and working processes that favor a more cross functional teamwork, smart work principle implemented).
3) Marketing and commercial activities (using the digital channels to interact with the customers and then using the information provided to implement a more focused approach towards all our customers).
4) Big data (being able to have access and process a huge amount of to make orientated choices).
5) Activity linked to the patient (patient centricity), applications to boost the relationships between the doctor and the patient, to optimize the relationships between companies and doctors and to improve the cohesion and the compliance of the therapies. For example, in the next future we could see the launch of "smart medicines", with a microchips that will allow, likely, a better monitoring of diseases and an increase of compliance of therapists. This last point is the one that draws most of the attention in our sector because there are important legal implications to be addressed with existing regulations such as Privacy and Data protection.

I. REGULATIONS IN THE PHARMACEUTICAL SECTOR ARE
AN OBSTACLE TO ITS DIGITALIZATION

There are two or three basic elements. Before the skills, the goal to create a more digitalized organization has to be understood, accepted and sponsored by top management and shareholders. Secondly, the complexity brought by digitalization requires a strong cross functional approach that imply that these arguments have to be faced not by a person only but by a whole team. For instance, the development of a smart device involves clinical researchers, IT, Production, Marketing, Legal, IP and there is the need to have strong project management skills. Finally, to execute and successfully implement the identified projects it could be important to count also on the help of external resources.

Many companies have created specific structures (Chief Innovation Office) that always report to the top management. In Chiesi, we're evaluating a governance model that considers both the presence of a specific office and of an internal steering committee.

The pharmaceutical industry is a little bit late in comparison with the other industries, due to market specificity, regulatory constraints and long term logics. However, there is a strong variability among functions; for instance, in the financial area, we don't speak about a sector being late in comparison with the others. Likewise, the informatization and robotization of some manufacturing processes. But, when we consider activities that are directly connected with patients and physicians, it is clear that the presence and influence of an extremely regulated sector plays a fundamental role in the potential adoption of digital. Indeed, in the marketing sector, we are still at the beginning of the multi-channel process and we still have to go one step further to come to the point of managing every information and

having a one-to-one relationship with the customers and a very developed CRM. Finally, we cannot, however, forget that our industry is, by nature, with a long term attitude; in fact, the research and development of a new medicine requires between 12 and 15 years before being approved and entering the commercialization phase.

II. FROM A PRODUCT LOGIC TO A VALUE LOGIC

The introduction of a pharmaceutical product in the market after its regulatory approval is based on a negotiation with authorities of a specific price to obtain the reimbursement. The trend is to move from a logic which is only product related and to start talking in terms of value brought by a product in terms of clinical outcomes, pharmaco-economic impact, impact on the working life of patients, impact on families, etc.; There's also a theme of fragmentation among different countries: some are in a more advanced stage compared to others and the main objective is, of course, to create a system that can be acceptable for every regulatory body. .

The biggest challenge of big data is to know where the company stands regarding this topic and how other industries from different sectors are managing the enormous amount of data and information they have to understand all customer needs in order to develop innovative solutions that are able to satisfy the needs of every single customer. Without entering into the R&D area, where the big data could help a better and faster development of new products, an example of source of information about the needs of many stakeholders in our sector could be the usage of internet by the people. It is known that most of the web sites with the highest number of visits are the ones about the Health-Care. The visits generate a more significant information about the patient in comparison with before that can be orientated

towards the relationship between the doctor and the company or between the doctor and the patient; at the end it would also increase the understanding by a company of patients' needs.

At the end big data could:
- Be oriented toward a better development of new innovative medicines and therapies with the goal to go more and more toward a personalized approach.
- Be oriented toward patients and customer more in general helping the creation of a closer one-to-one relationship and an increase of the compliance.

The current digital trend seems to be mainly toward the increase of the efficiency of current business models and processes despite 'pure digitals' says that it is necessary to destroy the old business model and to create a new one 'digital based' if you want to exploit at the best the opportunities that digital can provide. This first step, to use the technology to improve or to make evolve the current business model is necessary before moving into a more disruptive approach. An example of a potential future disruptive impact of digital in our sector could be in our relationship with the payers.

Another example of a potential disruptive implementation of a digital strategy is the one from a competitor: these last years, that company has invested in digital activities not related with its products or its brands, but based on general digital contents about health and wellness in order to create a 'digital' community that will be the target, in the next years, of company's digital strategy and initiatives.

When we're talking about the empowerment of the patient, I mean that the patient is now able to influence the access to

the market and also to influence the prospected choices of the doctor because he's in possession of updated information. Our objective is to have a dialogue with the company and we are looking to do it through applications and products such as "smart medicines".

III. TO DEVELOP A DIGITAL EXCELLENCE INTERNALLY TO UNDERSTAND BETTER THE MORE AND MORE DIGITISED PATIENTS

It's absolutely true that patients are more and more digitised and that's also the case for the relationship between patient and doctor. Nowadays, there are doctors and patients who are digital born. It's always about multichannel management. We're living through developments that will change so many things even if we cannot forecast at what speed, since it depends on the level of conservatism in the sector and on the logic of resistance of the people involved.

The best way to identify what we need to do or which approach is best in digitalization is a mix of diverse elements:
1) Confronting ourselves with other industries in order to know and understand what's going on in other sectors. That's what we call "Think Big".
2) Creating awareness inside the company creating specific starting projects (acting on the small things to develop the company).
3) Having the right mix of experiences and digital maturity.

The best approach for us is to have a mix between an internal digital 'excellence' and experiences and skills that can come from other industries.

There's a very high sensibility about this at the top of the company. During our meetings with shareholders, there's a strong

support from them to push on digital to the bottom of the company, at this time, I'm contained by two situations:

1) Identifying specific projects with the bottom-up approach (intern workshop) where there are some confrontations.
2) Managing this first point because it can create expectations that can be easily disregarded. That's why, if this enthusiasm is not well driven, it usually tends to its end.

Currently, companies have found initiatives in the digital marketing area that all have been "pushed" on the market (newsletter, and the like). These initiatives offer an interesting tool to create knowledge inside the market but without understanding if the consumer was actually interested in the product or what his or her preferences were. So it could be useful, for instance, to launch a workshop with opinion leaders, digital natives, internal resources, customers, and so on, in order to understand the needs of the market and what is expected from the company.

CONCLUSION

When we talk about patient empowerment, we mean that the patient is now able to influence access to the market and to influence the doctor's possible choices because he or she is in possession of updated information. The goal is to have a dialogue with the company and we are looking to do it through applications and products such as "smart medicines". ∎

DIGITALIZING THE CUSTOMER JOURNEY WITHIN THE INSURANCE SECTOR

ANDRÉ VAN VUUREN
Operations Director

ABOUT CED EUROPE

CED is one of the largest claims specialists in Europe.
The company operates as the middleman in the claims
process on behalf of insurance companies across every
aspect of property, mobility and vitality. It oversees everything
from damage intake to financial settlements for repair.
CED processes approximately one million damage claims each
year with a total amount of damage of more than €2.5 billion.
The company employs 1,500 people in 14 European countries.

WHAT IS MULTIHERSTEL AND HOW LONG DID IT TAKE YOU TO START IT?

Claims specialist from CED came to realise that damage claims can much more easily be processed in the digital age. In fact, why would insurance companies still ask CED to oversee the claims process on their behalf? So, we created MultiHerstel which is a new business concept. We implemented this new service in three months.

WHY DID CED START MULTIHERSTEL?

Our insurance company clients are under pressure: due to the rise of online insurance comparison sites, consumers are much less loyal and search more on price aspects. Insurance companies have to deliver more added value, both in terms of low costs and higher customer satisfaction. The question we asked ourselves was: how can CED contribute to that? We've always ensured the efficient and proper handling of claims, but we are now taking on the role of contractor rather than simple middleman. In addition, we put customer experience first. Our new system helps employees who want to provide the insured party with the best possible service. It also offers better information to the insured party: they are constantly aware of their status and, if necessary, we are ready to act. It's good for the insured party and good for the insurance company.

HOW DID YOU GET MULTIHERSTEL TOGETHER?

We investigated the damage repair process in cooperation with insurance companies: which are the touch points in the customer journey of an insured party? We concluded that there were too many intermediate steps that required interaction with the insured party. We wanted to significantly reduce cycle time for an insured party, ultimately to a maximum of two weeks. We already recognize the cycle time has been reduced by two to four

weeks. The ideal situation would be to have a repair company investigate the damage in the morning, directly source all required materials and repair the damage in the afternoon. That is why we searched for multi-functional contractors able to repair all damage, and so reduce the interaction required and the cycle time. The shorter the cycle time, the less (knowledge) transfer required and the higher the rate of customer satisfaction.

IS THE CLAIM PROCESS SIMPLER THAN BEFORE?

Yes! For the insured party, it should be very clear what is going to happen. It starts on the phone: we assess the situation as well as possible. Does the damage date from ten days ago or has there just been a burglary and is the insured party in shock? It's up to us to take those aspects into account. Are the children involved? Next, we add teddy bears as part of the solution. Is there a burglary? And then we add a prevention box. Together, we create a full program with our clients to make sure we add real value.

HOW DO YOU COMBINE TECHNOLOGY AND CUSTOMER EXPERIENCE?

Every moment of the process is about customer experience, the insured party knows what they are up to, and it is offered in an appropriate manner. Our employees assess which competences are required to repair the damage during order intake. Based on these competences the new system decides which available repairer should be sent to the insured party. The insured party is informed by means of a text message and email with a picture of the repairer. All repairers work with mobile apps. This works both ways; also their information is directly processed in our platform. In this way, MultiHerstel and the insurance company are able to monitor the process 24/7 and check the latest developments.

HOW REVOLUTIONARY IS THIS APPROACH OF THE CLAIM PROCESS?
Enormously! We operate in a very traditional market; with Mul-
tiHerstel CED has achieved a complete paradigm shift for both
repairers and insurance companies. It is now possible for a
small contractor to repair damage much more quickly than a
large company would have done before. In addition all connect-
ed repairers have been assessed as reliable parties.

HOW FUTURE-PROOF IS THIS NEW BUSINESS MODEL?
´Of course you have to be continuously in advance of the market.
Adding teddy bears, for example, is easy to copy. Other parties
are applying this already. Much more difficult to copy is the plat-
form we have created, by means of which we are also directly
linked with insurance companies. They can track the process in
real time. The bigger the market volume, the harder it is for the
competition to copy us. ´

HOW IMPORTANT IS THE PLATFORM FOR MULTIHERSTEL?
Very important, because with this platform we can easily extend
to other markets like maintenance and private repairs. The basic
model remains the same: schedule, inform, execute and invoice.
On the other hand, we should not be too greedy and take too many
side steps: we have to maintain our high quality standards. Our
added value really sits within the customer experience and offers
price effectiveness to our clients, the insurance companies.

ARE THERE ANY RESULTS WORTH MENTIONING?
We measure our success mainly based on two indicators:
the total amount of damage and the Net Promotor Score
(NPS: the probability an insured party would recommend the
provided services to someone else). The insured party should
be impressed, thus increasing the NPS. The total amount of
damage has to decrease by processing claims more quickly and

efficiently. We have already noticed the total amount of damage has decreased roughly by 9% to 11% per insurance company. It is too early to draw conclusions based on the NPS, but where processes run quickly we recognize a higher NPS.

HOW DOES THE ORGANIZATION RESPOND TO THIS TRANSFORMATION?
It is a complete transition from process thinking to customer experience. For years the process and strict logistics were almost sacred: insured parties were offered solutions in a short timeframe. Whether they were optimal or not. Our contact centre agents now require a better understanding of the repair process and should pay more attention to empathic aspects. At the front office we assess what is required to be done by the back office. The insured party is really helped by means of a qualitative conversation. That is why conversations often take longer than the ninety seconds that were 'allowed' before. Only a few employees have difficulty with these changes and try to process their old way of working in the new application.

WHAT DO YOU DO TO INVOLVE EMPLOYEES IN ALL THESE CHANGES?
We will give them more training and provide coaching by team managers. We hired extra people to focus more on customer centricity. An ambassador program will start soon, in which colleagues are ambassadors of new concepts and improvement plans. In addition, we continuously inform our colleagues about new changes and stimulate each of them to come up with ideas for improvement. A module has been added to the application to facilitate them to share their ideas easily.

HOW HAVE THE NINETY REPAIR COMPANIES YOU WORK WITH RESPONDED?
The repairers have a better source of income, so they are positive. However, they should show more empathy towards insured

parties. Repairers who are functioning well, based on reviews, will be rewarded with extra assignments. In this way, repairers are stimulated to look at their own organisations critically.

WHAT BOTTLENECKS HAVE YOU FACED?
We chose fast time-to-market: the consultants of Magnus built an application within three months and facilitated the process. With this timing we made a quick return on investment, but it required a lot flexibility on the part of all parties involved. That is why we chose to work according to agile principles.

WHAT ROLE DID THE MOTHER COMPANY CED PLAY IN THIS PROJECT?
All business units of CED Group are following developments at MultiHerstel closely. We have already extended this concept to Belgium. Also, a lot of CED business units take on some of our activities, like our training approach and the increased focus on customer experience. We operate as a 'best practice organisa-tion'. Aspects that work within our perimeter are investigated and rolled out by the mother company. Our team is growing and our enthusiasm is almost contagious. The ripple effect towards our colleagues in other business units is manifest. We even have a happy bookkeeper which is an exception in the insurance sector.

HOW DO YOU EXPLAIN THIS SUCCESS?
Passion and a true belief in what we stand for. Every insurance company we visit sees and feels our drive and passion. That works. In the meantime the new business model generates two and a half times more revenue than before and our expectation is to double that next year.

WHAT WAS IT LIKE TO WORK WITH CONSULTANTS AND DEVELOPERS OF MAGNUS?
What was most surprising to me: I did not feel like I was work-

ing with external people. For me, that's the biggest compliment you can get! You truly blend in with the business and integrate directly on the work floor. You have a team of young and enthusiastic employees who are really involved, which is truly special. I feel we share the same passion for completing the project in a successful manner. With every colleague of Magnus, you want to achieve success.

EVERY CONSULTANT WANTS TO ACHIEVE SUCCESS?
I've experienced several implementations, but this is one of a kind. It became a sort of a match. I cannot permit IT to be faster than the operation, and you have the same drive vice versa. We stimulate each other and in that way are able to achieve our joint targets.

WHAT'S THE NEXT STEP?
We want to use data from the system to make the process more intelligent. In addition, we want to extend the concept to other European countries.

HOW DO YOU ENSURE INNOVATION?
We see connected services for repair in and around the house. Think about a web shop where insured parties and other customers can buy articles for house maintenance or are able to plan repair assignments independently of us. It is important to quickly start a pilot and define a strategy based on the outcomes. Ultimately our core business remains damage repair. ◼

ADOPTING A PEOPLE-CENTRIC MINDSET TO ACHIEVE DIGITALIZATION TRANSFORMATIONAL CHALLENGES

ALEJANDRO CODINA
Co-chief Digital Officer

ABOUT MEDIAMARKT

MediaMarkt is a German retail store chain founded in 1979,
specialized in household electronic appliances for the general public.
It is Europe's leading company in its category.
Thanks to its decentralized organization, its 833 stores
are each largely responsible for the chain's results. In
2016, it generated revenues of €21.9 billion. MediaMarkt
has 73 stores in Spain, which makes this country the
third most important after Germany and Italy.
MediaMarkt launched an omnichannel strategy and is digitalizing
its physical stores in order to maximize the customer
experience. This strategy has been developed
thanks to the opening of concept stores.

I. EMPOWER INTERNAL AND EXTERNAL TALENTS TO TAKE WEBSITES TO STORES

A. Turning a vertical organization into one with a single strategic vision

One of the main digitalization challenges facing today's companies is to become customer-centric companies. To achieve this, organizations need people with the right backgrounds, who are able to manage resistance to change and to design suitable procedures.

Another key point with digitalization involves changing from a vertical organization into one with a single strategic vision. Achieving this will require investment in analytical and omni-channel technology and training to create the best customer journey, with the ultimate goal being to take websites to stores (assortment, social, pricing, etc.).

As I noted earlier, one of the main digitalization goals for MediaMarkt involves being able to take the website to stores, as well as guaranteeing an excellent personalized experience. Product, service and loyalty are the main components of customer retention. MediaMarkt currently has over seven thousand employees throughout Spain, and digital transformation plays an essential role in this entire process. Achieving an efficient transformation will require changing the decision process and basing it on data so that teams can be empowered to make fast decisions (self-management and speed).

B. Innovation must come from internal and external talents

Key elements to advance a digital transformation process would be as follows:
• Organization and structures
• How to meet future customer needs (CEM)

- Internalize technological know-how
- Analysis: test and measure so we can take it to the online and offline world (sensors, RFID, beacons, thermal cameras and more)
- We will also have to work with start-ups to develop various digital transformation projects in parallel
- The ERP will also have to be modified to avoid developments and interfaces to simplify the process
- 360° thinking is essential

And they should be used to implement the following initiatives most relevant to mass industry:

- Key digital transformation initiatives being undertaken by MM
- ESL
- Stop & GO
- New organization, as well as training and coaching programs for the entire organization
- Artificial Intelligence: Watson project
- Upgrades and store openings valued at 47 million
- Introduction of new Chief Digital Officer and CEM positions
- Turning stores into fulfillment centers

One of the key principles in any transformation process involves incorporating talent into new strategic creation departments, such as analysis, PMO and project teams.

It's also important to work with external talent to try things out with minimum risk and full independence so as to bring new approaches into the business.

Last but not least, it's essential to add talent with a 360° vision in a spirit of collaboration.

II. DIGITAL AS A TOOL TO BUILD CUSTOMER LOYALTY

A. An omni-channel strategy to offer a unique customer experience at any contact point

Adopting an omni-channel strategy, which is essential to any digital transformation process, will require taking into account the fact that a customer's view of the brand defines their expectations. Our goal for this process will be to create a unique customer experience at any contact point, including services, pricing, products, care, personalization and knowledge.

The players that will come out on top will be those who can integrate omni-channel into their business model earlier and better; those who, based on their knowledge of customers, enter into strategic partnerships with other brands to gain value and build customer loyalty. These players will be able to come out on top.

B. Stores to be turned into fulfillment centers

New demands involving speed, relevance and convenience will have to be placed on the system. The Customer Journey will have to be completely different, with a change in roles and expectations.

By transforming them into fulfillment centers, stores will be more digitalized (virtual catalog), analytical (sensors), experiential (interactive/social) and service-oriented (people with different backgrounds and objectives).

Completing the digital transformation process will also require working in open-space offices to facilitate communication and the exchange of collaborative spaces: start-ups, providers, customer focus groups, etc.

Players that work in market niches and provide a more person-alized experience, as well as the players that make better use of their data are the future of business. They are going to come out on top. ▮

CAPTURING GENERATION Y AS NEW CUSTOMERS WITH A HIGHLY EXCITING BETTING EXPERIENCE

SAMUEL LOISEAU
Marketing and client services director

ABOUT PMU

Created in 1930 in France, the PMU (Pari Mutuel Urbain) is Europe's leading sports betting operator and third in the world. Its mission is to use its revenues to fund the French equestrian sector. Originally focused on horse races, PMU benefited from the opening up of the sports betting sector to competition in 2010 to become a leader on this segment. It also provides poker online games, with 350 tournaments every day. PMU's digital vision is focused on mobiles, which account for 40% of new customer subscriptions. As a result, many recruitment campaigns are run on social networks. But even though PMU is pushing its digital offers, it also wants to consolidate its position in physical selling points.

I. EMPOWERING THE DIGITAL ONLINE AND IN-STORE BETTING EXPERIENCE

A. Low digitalization penetration rate for betting in France

In France, unlike in other countries, more information on horseraces is available on tools other than digital platforms in points of sale, with a shorter transaction delay. Regulations governing digital media are also highly restrictive. This is one of the reasons why the digitalization penetration rate is rather low. In a PMU point of sale, the notions of customer effort and customer satisfaction are measured according to the channel. Surprisingly, customer effort is lower in points of sale than on digital channels.

B. Paradox: non-digital profiles use digital tools in point of sales to bet but PMU was ahead of most companies in digitalizing its points of sale

Online betting only represents around 10% of total betting, which is not enough for a multi-channel company such as PMU. However, PMU digitalized its points of sale very early on: 100% of 13,000 points of sales in France, are digitalized, giving bettors access to key information via tablets and devices. What is unbelievable in this sector is that the profile of bettors at points of sale is absolutely not a digital profile. The average age of bettors is 49 and only 50% of them own a smartphone, whereas 70% of the total French population own one. However, 50% of them use that kind of tool.

Non-digital profiles use digital tools in points of sale for two reasons. First, they are used to it even if they don't have a smartphone in their pocket. Second, we have invested several hundred million euros in devices in points of sale over the last 15 years. These devices are touchscreens that allow users to in-

sert betting checks. This is equivalent to 4 million transactions per day on devices that are simply a way to give bettors information on the jockeys, horses, the performances of horses, and so on. However, they do use the touchscreen to bet. It's a complementary tool because to bet, we need information.

C. Digital by itself does not boost sales

The only thing that helps increase the number of sales is the availability of interfaces since this raises the frequency of betting. It is not digital technology itself that increases sales.

We need to take another factor into consideration: overall, conditions in the horserace betting sector are complex because the attraction of this sport suffers from serious competition from other sports. All betting on sports has increased lately, whereas horserace betting has tended to decrease. It is inversely proportional. In absolute value terms, the growth of sports betting has led to a decrease in horserace betting. This is due to a lack of interest in horseraces. You can have really nice interfaces, but if people are not interested in betting on horseraces, it won't change anything. It is not a question of generations or value destruction. In multi-channel firms, if we want to make a bigger effort to attract customers to points of sale, we have to enhance the quality of the service in order to make it more attractive for bettors to come on site and not at home.

In a market such as ours, without physical transactions, we realize that the point of sale is real, which means that digital technology has not destroyed value. If we compare ourselves with La Française des Jeux, the operator of France's national lottery games, they have not invested as much as we have to date in their points of sale (no touchscreens, no tablets, etc.) so half of sports betting is done online and not in points of sale.

Bettors want to be with a group of people to talk about the races, to challenge themselves and to enjoy the atmosphere. This is why the point of sale offers them added value that they don't find if they bet online at home. This added value fully offsets the fact of going to the point of sale.

Every time we measure the value increment between a mixed and a one-channel bettor, a bettor who bets on different channels brings a more significant value increment than a one-channel bettor. That is why we do everything to encourage our bettors to bet through multi-channels and to use several devices.

We launched a new way of betting. It was a small volume project, with bets via SMS. Why did we do this? Because our market is regulated in such a way as to disadvantage online betting: ratings online are weaker than in points of sale. Bets via SMS were launched to compensate for this. These bets are associated with bets in points of sale.

This obligation imposed by the French Competition Authority hit our profits hard because it makes people stop betting or bet less. We lost around €100 million of stakes due to this separation between online and offline offers. For one race, as an example, €100,000 will be bet in points of sale and only €10,000 online. So a bettor who wants to bet €1,000 will never do it online because the winnings will not be high enough. And for PMU, 15% of our margin is made thanks to big bettors who account for 0.1% of our gamblers.

So this bet via SMS represents 90% of incremental betting because we can bet whenever and wherever we want, but months later it has barely reached 10% of online stakes! The multi-channel generates a significant increment.

II. GENERATING RADICAL INNOVATIONS IN A REGULATED ENVIRONMENT

A. A monopolistic company in the betting sector strongly regulated by the French State

For horserace betting, PMU is a leader in offline bets, and betting online did not increase following the arrival of its competitors, which is a paradox. PMU's market share for online betting is around 85%. These pure players didn't manage to become big competitors. The reason is simple: a mass effect of stakes combined with the PMU brand. Digital or not digital, the weight of the brand is determinative in compensating for all potential risks. The PMU brand is strong in France, it became a household word ("to go to the PMU" means to go to a bar or a pub) and it is so strong that there is not really a lot of competition in this market.

There is also a size effect: €1.5 billion are bet with PMU and we have high-performance back offices. Our competitors are not able to reach this level of betting or this level of information management. The margins are tight because of the regulations: 85% of the stakes have to be given to the gamblers in the sports betting market. In other countries, new major actors are entering this market but not in France because of the regulations and tax policy.

Regulations are really tough because of funding arrangements: subsidies for the equestrian sector and La Française des Jeux are protected due to specific taxation. But it is a success. French horseraces are a global benchmark in the equestrian sector, partly because it is protected by law.

Other actors could enter the market, even if some already have done so, if but they wouldn't respect the regulations, they would be illegal. They exist, they're called "comm Points", with fixed odds. They have a marginal ranking in this market.

B. Digital technology increases interest in horseraces betting via disruptive technologies

Until now, we believed that it we would increase our capacity to take on new customers either through recruitment of online/offline sports betting or from our capacity to teach customers about horses, races, etc.

However the people who don't bet or the people who quit betting are our new target. We want to show these people how easy it is to bet but this strategy is not working. This is why, in June, we are going to launch a simplified betting platform for mobile phones only: hipigo.pmu.fr. There will be fewer offers and fewer races so it won't be necessary to understand every PMU offer. The design and codes will be different, and even the name is different, with a sister brand "hipiGo by PMU". The beta version is already working very well with sport and poker bettors. It is interesting because we launched this project in an agile mode. There used to be a lot of agility at PMU before but only in the IT development sector. Nowadays, we develop it at every level, including marketing, IT, commercial and UX. We initially planned to finalize the project in September 2017 but we launched the beta version as soon as May 2017 by doing things better than we planned. We are doing live testing. The feedback is very productive at the moment.

Digital technology will be decisive in finding ways to interest people in horserace betting. And not only thanks to high-performance websites. We want to offer our customers new ways of betting that will be highly simplified.

The main obstacle on our market is the interest in races. If people don't know anything about races and if they're not interested in them, they won't bet. We created the EpiqE Series, a sort of

Champions League of horseracing, to attract more people to horse tracks and to transform races into a sports show.

The second obstacle is the difficulty of the game. People see it as too difficult to bet, which is not the case. As soon as you have the information, the betting platform is very easy to use. This is why digital technology will change our way of thinking.

Pure players are not launching a disruptive application because the weight of regular bettors (the racegoers) is so strong in this market that it is not possible to invest in recruiting new customers. The same applies to sports betting platforms, which are difficult to use because of the significant number of offers. There is also a brand effect: the PMU brand is so powerful that it is very difficult for competitors in horseracing. We use different brands to reach different targets: PMU for regular bettors and hipiGo by PMU for the new platform we have been talking about. We will promote this new brand even if in value terms, in the short term, the volume is much lower than the average volume of bets for people who are already PMU gamblers. This is why PMU didn't invest in this before. It was better to increase the number of races and offers in order to create more value. The need to recruit new bettors was quite low. The back business volume regarding the number of customers will be significant but not in terms of the turnover. We are now preparing for the future – the stakes in 5 or 10 years' time.

III. DIGITAL AS A STRONG LEVER TO NEW CUSTOMERS FROM THE GENERATION Y

A. Looking for innovative partnerships to target Generation Y

We are very much into innovation. We had a stand last year and this year at VivaTech, a meeting where most innovative start-

ups come together with global leaders to collaborate. It was a great way to be part of innovation, focusing on five main themes linked to our business. We received many more proposals than expected. There were successes, more or less significant, but all of them made by actors who were absolutely not in this market. Innovation is not only efficient, it is vital for our market. One of them, called Weblee, is a smart Wi-Fi project that offers customers in points of sale and at race courses free internet Wi-Fi connection in exchange for collecting some data to send them targeted offers. We won't be able to ask our points of sale to do that.

Digital technology has massively increased the amount of available information which is essential to bettors. The same can be said for the point of sale. This is why the points of sale are still so important for betting. Digital information is available everywhere in points of sale.

Until now, our approach has not been one of fast offers for bettors. Our market is very complex because we are on mutual bets. We have to pay the winnings within 30 seconds after the end of the races and digital technology has not changed this in any way.

However digital technology changes the time-to-market of innovations. Services, such as bets via SMS, can be launched within six months. There are new growth options. Some kinds of offers are easier to develop, where we don't change the offer content but rather their presentation.

B. The future of the sector is to offer a desirable game experience to Generation Y

Once again, there's a difference between the approach taken in France and other countries. We plan to go beyond current in-

ternational developments. We are talking about putting a small GPS device on horses. Thanks to the technology that allows us to follow a horse very closely, this will set up a new frontier between bettors and non-bettors. Indeed for non-bettors and people targeted as new customers, it will allow them to follow their horse during the race. But it will also enable us to use 3D in live or in replay to show the race. We will be able to follow the race on mobile devices (phone and tablets) as if we were on the horse. So the customers will have a new perspective as bettors. It also fundamentally changes replay race analysis.

For Millennials, this kind of video game format changes everything. We don't need to test it to confirm its success, we just need to launch it. This project would give an added value to horserace betting in comparison to other sports betting. Indeed, there are no other sports events that last three minutes. It is a reconstruction of the race and not a live race because the live races do not provide audiences with a good image.

Our internal innovations are also very interesting. We have "idea by PMU", created nine months ago, that allows people to post innovative ideas within PMU's. It really works. It has to be linked to a marketing or strategic plan, of course. For example, one developer suggested creating a special mobile pad to bet via SMS. This pad will be exactly like the interface of the touch-screen in the point of sale. It was developed over three weeks by an IT technician. Furthermore we have the PMU lab to manage open innovations which are external innovations.

The most visible from the outside would be the experience of the races, of the show. I hope it will not be the same anymore. We will do everything to be closer to online video games. We want to offer 3D experiences, similar to video games. This will gen-

erate interest in horseracing among the younger generation. If we consider that our competitors are other sports betting businesses, and if we manage to implement this innovation, we will be a step ahead. It is a real competitive advantage.

The second screen will be a real value-generator, something that is quite rare nowadays except for the media. It will give more information to bettors and it will help us recruit new gamblers.

CONCLUSION

Because regulation encourages us to make cash disappear, we are therefore very interested in working with FinTechs and start-ups that could help us create smart solutions for this issue.

In France betting cannot exist without complying with strict regulations. Succeeding in this sector will require vision, ethics and commitment. The Millennial generation will be the key customers for the betting sector for many years to come. ∎

THE ULTIMATE COMPANY

STUDENTS OF NEXTCONTINENT INNOVATION CHALLENGE AT EUROGROUP CONSULTING, PARIS, JULY 2016

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ABOUT THE ULTIMATE COMPANY:
The ultimate company is an organization that efficiently balances result-driven practices with the well-being of impacted individuals and stakeholders. This balance serves to nurture and promote an innovative environment which fosters creativity and agility, with the long-term mission of tackling the global sustainability challenges of our environment and society.

The digital revolution is profoundly transforming our society and affecting our daily lives, both at a micro and macro level. Disruptive digital innovations are changing the paradigms of most sectors that seemed stable for decades but are now being redesigned, transformed and disrupted by visionary technological innovations. The greatest example of this revolution lies in the banking industry, which is being transformed by well-funded challenger Financial Technology companies (FinTechs).

Progress towards the digitalization of services has been boosted by smaller players such as small and medium-sized enterprises (SMEs) and start-ups. These players surfed the newest technological waves and arrived to challenge the market leaders who are mostly large and complex multinational corporations (MNCs). The size of these start-ups, together with the typically young age of their founders and the leading technology core, contributes to their increased agility and flexibility to adapt to rapid changes over the MNCs. This allows them to scale success in a shortened timeframe. However, does this now represent the defeat of large corporations? How can MNCs reproduce this agility and boost their own innovation without cannibalising current profits or impacting their complex structures?

The digital revolution is now irreversible and company managers need to urgently realize the importance of adapting their organizational design accordingly. The threats from smaller players should instead be leveraged as great opportunities to partner and embrace the digital era. Concepts such as open innovation, innovation hubs, co-creation and talent pools need to become part of the daily business practices of companies. Rigid, traditional and hierarchical structures are out-of-date, constraining and repressing an innovative culture instead of driving it.

This chapter has been written by millennial students drawn from four different nationalities and represents a millennial's point of view of the current challenges and opportunities from digital transformation. The first section will deal with our experiences at the Nextcontinent Innovation Challenge, with a focus on the Hackathon Finale in Paris. The subsequent section will build on the students' findings, learning and success during the challenge. We will discuss the definition of the digital revolution as well as its current and emerging trends.

Finally, an overview and more in-depth analysis will shed light on how this revolution is affecting entire business sectors and companies. The objective is to understand how disruptive innovation impacts MNCs and effective response strategies to reproduce agility and flexibility to boost their own innovation for profitability.

Nextcontinent Hackathon: sharing ideas to foster innovation
Companies around the world have different approaches to meet the growing digitalization trend. Some ride the next growth curve by investing substantial amounts in business process reengineering enabled by digital technology. Others acquire innovative start-ups to roll-out changes across their whole structure, whilst there are those who just seek to outsource everything. Beyond these approaches, there is a better way to address and to be in tune with the emerging digitalization trend.

In May 2016, Nextcontinent – an independent European-originated management consulting network – launched a business innovation challenge called "Design the Ultimate Company". The challenge was open to students throughout Europe to engage and observe the millennials' vision of the ever-changing digital world. The competition was divided into two rounds.

The first round was the "pitch" session where a competition was held at a national level in eight different countries and one winning team was selected by each jury. At this first stage, some successful examples included a team from Solvay Business School who worked on a start-up focused on customized 3D-printed jewellery through a completely virtual business model. Another team from Imperial College London worked on an algorithm job cloud system (Inner-Net) to efficiently match available tasks with the most suitable employee. The active engagement of the teams in the hackathon and range of ideas generated highlighted key areas that millennials are interested in or concerned about.

In June 2016, the eight winning national teams from the first round were selected to participate in a two-day grand hackathon finale in Paris. In July 2016, the Paris-based consulting firm Eurogroup Consulting, a citizen of Nextcontinent, hosted the international hackathon. Participants included 20 students, across 11 different nationalities along with 350 employees, 100 hackers and 21 designers. The main task for the participants was to develop a prototype of their team's vision for the ultimate company of the future, within an intensive two-day timeframe.

After a brief introduction, the eight teams were mixed up and divided into three groups, each working on their own collective vision of the ultimate company. In just 36 hours the teams had to move from brainstorming ideas and designing the initial concept, to delivering the final output with concrete concepts, an implementation strategy and visuals to support the presentation.

In addition, all teams had to develop an ultimate company's manifesto. According to this manifesto, *"The ultimate company is an organization that efficiently balances result-driven practices with the*

well-being of impacted individuals and stakeholders. This balance serves to nurture and promote an innovative environment which fosters creativity and agility, with the long-term mission of tackling the global sustainability challenges of our environment and society". The final output of the teams had in some way to reflect this manifesto.

The winning idea, developed by team 2 was Be your Own Boss "BOB" with the goal of improving employees' work-life balance, whilst at the same time driving an increase in productivity. Essentially BOB was a data-driven digital manager that measured performance, divided tasks, managed the extracurricular activities of employees and thereby disrupted the middle management of the big companies.

The idea developed by team 1 was "Ideamocracy", a process that empowers employees on all levels to take innovation into their own hands. The "idea" part is a process to allow any employee to propose an innovation idea. Whether an idea is accepted or not is decided by a vote on a common platform by all employees, hence the "democracy" aspect.

Team 3 developed Services to Business "S2B", a platform that connects companies to each other and matches requests and offerings based on skills, rankings and transparency. The aim is to integrate sustainable energy technologies such as smart grids and solar panels into residential areas to increase energy efficiency.

These three ideas are illustrated in the next section, together with the explanation of how they align to emerging digital trends. To summarise, this challenge led to an invaluable exchange of opinions and experiences, giving an insight into the next millennials' vision for the ultimate company within the digital revolution.

Digital Revolution: emerging trends and challenges
In the recent past we have seen major improvements in technology which can be applied to a wide array of industries and sectors. Now, more than ever, companies and managers need not only to be aware of the applications of digital tools relevant to their businesses, but they also need to listen to millennials and their needs, in order to make changes in today's digital world and effectively market new services.

Outstanding ideas from the first round (The Inner-Net) and from the Hackathon Finale (BOB, Ideamocracy and S2B) will help us identify two emerging trends that will shape industries for years to come, namely Predictable Disruption and the Platform Economy. The winning "BOB" idea is aligned to the Predictable Disruption emerging digital trend (Figure 1).

Figure 1. BOB Poster 1

Designed by Pierre-Yves Perez; Presented by Amond Kabisov, Nan Lin, Athina Radoslav, Beatriz Figueiredo, Sanne Reus.

The concept of Predictable Disruption is used to describe "the impact of large ecosystems that disrupt previously stable sectors"[1]. Nowadays, such impacts can be observed in the automotive industry, where the self-driving car and Uber are starting to disrupt and challenge the competitive landscape of established markets. It is predictable that the future digital trend is about intelligentization. With the mindset of disruptive innovation, "BOB" was born to de-layer management in a significant way, to help organisations analyse and find the most suitable workforce in the market. Figure 2, 3 and 4 illustrate the key features of BOB.

Figure 2. BOB Poster 2

Designed by Pierre-Yves Perez; Presented by Amond Kabisov, Nan Lin, Athina Radoslav, Beatriz Figueiredo, Sanne Reus.

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[1]Jeroen Nas (2016) Predictable Disruption: Marketing Departments will change completely. http://www.vemt.com/predictable-disruption-marketing-departments-will-change-completely/

Figure 3. BOB Poster 3

Designed by Pierre-Yves Perez; Presented by Amond Kabisov,
Nan Lin, Athina Radoslav, Beatriz Figueiredo, Sanne Reus.

Figure 4. BOB Prototype

Designed by Pierre-Yves Perez; Presented by Amond Kabisov, Nan Lin, Athina Radoslav, Beatriz Figueiredo, Sanne Reus.

It is useful to note that another idea developed by three students from Imperial College London in the first round of the competition also reflects this Predictable Disruption trend. The aim of their concept, "The Inner-Net", is to completely change the way people collaborate and work, through an algorithm. Their job

cloud algorithm system would match tasks and suitable taskers flexibly and intelligently. The team learned that simplified and integrated processes in organisations provide agility, competitive advantage and a higher chance of successful transformation. Through this idea companies could become more effective by avoiding direction-setting meetings whilst improving the employee's satisfaction by motivating them to utilise their full skill-sets (Figure 5).

Figure 5. The Inner-Net, winning idea for the Spain entry in the first round
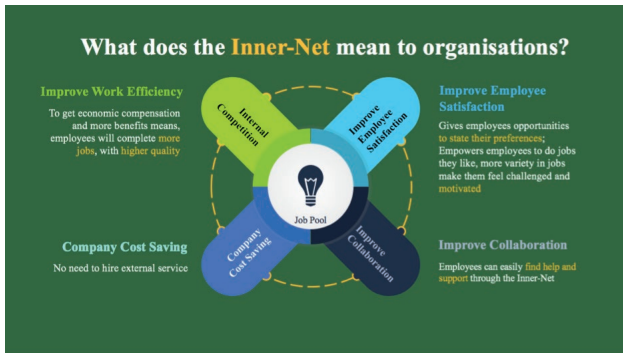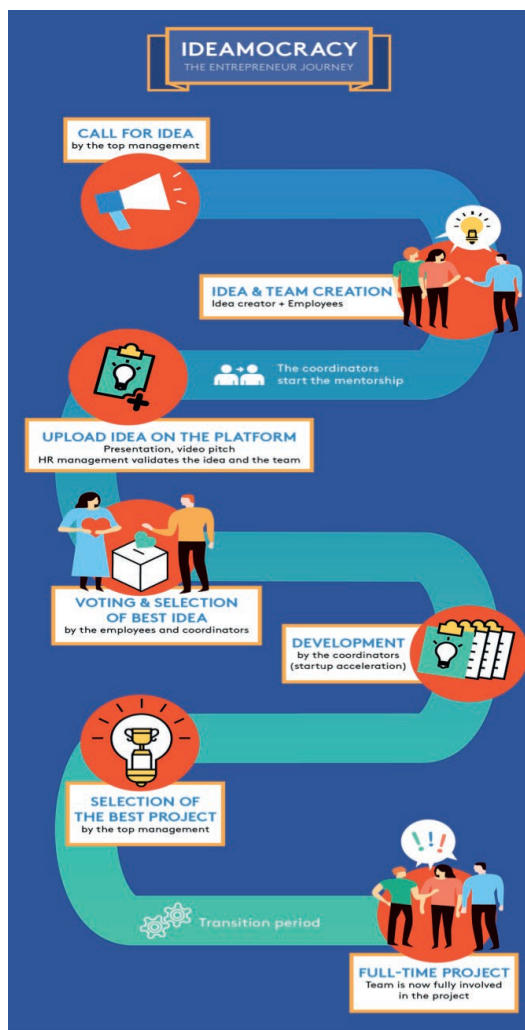

Presented by Han Yap, Nan Lin, Alvaro Robledo Vega

Next we examine the "Ideamocracy" idea which is also developed based on another emerging digital trend – the Platform Economy. This can be defined as "a medium which lets others connect to it"[2]. The rise of the Platform Economy has hatched a series of digital platforms that enable a wide range of human activities such as shopping, booking a hotel and searching for information. Companies using these platforms include Amazon Go, Uber and Airbnb. "Ideamocracy" is a successful example

[2] The Center for Global Enterprise (2016) The Emerging Platform Economy. http://thecge.net/category/research/the-emerging-platform-economy/

of the wisdom of crowds for idea-generation, idea-sharing and idea-selection (Figure 6).

These new types of business models can subvert traditional industries: for example, the digital e-commerce industry has caused a decline in sales via the traditional store-based format. With the rise of e-commerce, consumers spend more time and money on e-retailing websites than in stores. With the collapse of traditional purchase channels and processes, organisations need to find effective ways to analyse and identify consumer buying behaviour across internet and mobile channels. Advance understanding of the key stepping stones in the consumer buying journey and effective digital marketing strategies are required to influence consumers' decision-making. This trend is changing the way that businesses operate in markets and sell products.

Figure 6. Ideamocracy Prototype

Illustrator: Athitaya Hennard; Presented by Aadit Gandhi, Anna Baccarin, Alvaro Robledo Vega, Buket Tillki, Mariana Paula, Henk-Jan van Henten.

The "S2B" idea emerged from the Platform Economy trend. The challenge that this group identified was the lack of energy supply in Africa. To address this, an online platform to match service providers and consumers was proposed for the construction of energy infrastructures.

This platform would foster transparency in the market since it would be easier for customers (individuals, companies and state entities) to find companies who could provide desired services within a defined budget. The platform would also provide clear visibility of demand for supply side companies to identify projects and apply for them through a more streamlined process. The digital platform would facilitate and accelerate the construction of energy platforms on the African continent and thereby serve to close the gap between energy demand and supply.

Figure 7. S2B Prototype: Search engine interface
for potential energy projects
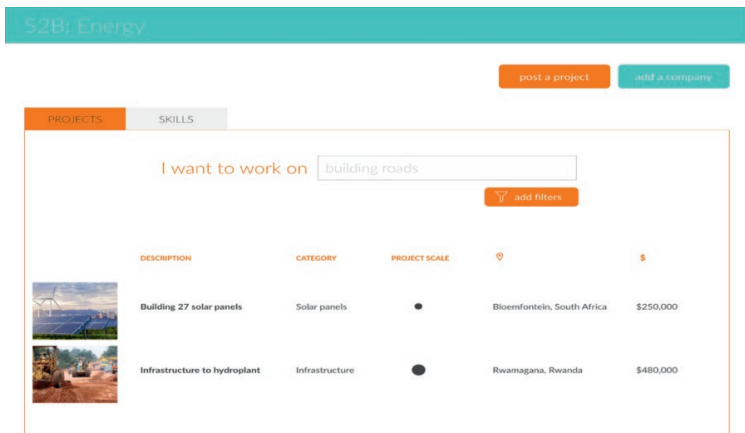
Designed by Thomas Swennenhuis; Presented by Han Yap, Miguel Melo, Pauline Besancenot, Azhar Mambetova, Miguel Santos Pereira, Line van Kesteren.

Figure 8. S2B Prototype: Search engine interface
of the search engine for service provider companies
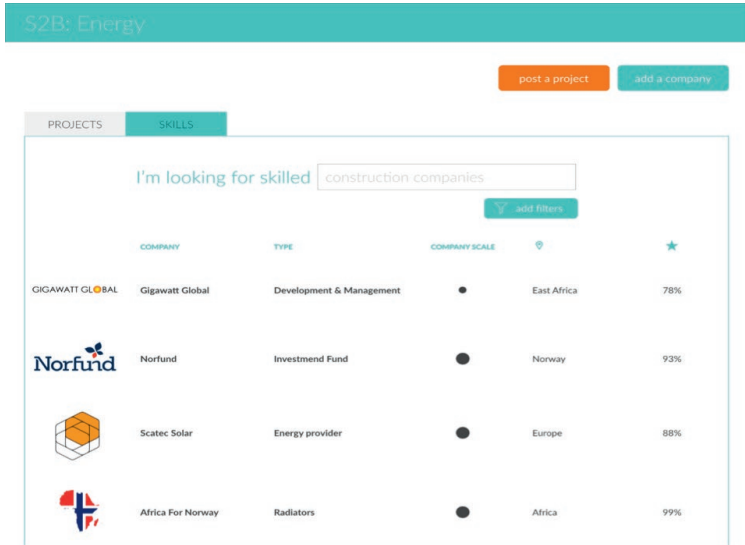
Designed by Thommas Swennenhuis; Presented by Han Yap, Miguel Melo, Pauline
Besancenot, Azhar Mambetova, Miguel Santos Pereira, Line van Kesteren.

We have looked at some of the emerging trends of digitalization
and examples of how companies can respond. The ideas provide
useful insights into how companies can transform to leverage
the new opportunities that technological innovations provide.

**Digital transformation: how companies can turn challenges
into opportunities**
Based on the emerging trends discussed earlier, it is impor-
tant to understand how organizations are being affected and
how they respond. How can companies react both to the digital
trends and to changing customer and employee needs?

How can companies continually innovate and succeed in trans-forming to digital? Many businesses already deploy digital tech-nology to reduce costs, increase revenue and develop new busi-ness models, but is this enough to be successful in the digital age?

To answer these questions, CEOs should be open-minded and dynamic enough to realize the threats and opportunities from digital. CEOs should also foster a stronger interdependence among all the departmental leaders and especially with CIOs and CMOs. The change needs to be driven and supported by the top management team with clear and effective communication. The CEO needs to lead by example and embrace the digital age so that she can lead and communicate benefits to all employ-ees. To do so it is important for the CEO to surround herself with a diverse and creative team, capable of understanding the urge for change.

Business units that are embedded with strong digital knowledge and appropriate Knowledge Management Systems are much more likely to support ideas and innovation exchange through a collaborative culture. Nowadays, many organizations have sub-optimal approaches to knowledge management and re-taining corporate memory. This can be extremely harmful since knowledge should be considered as one of the most important resources within an organization. When properly managed, knowledge can create a sustainable competitive advantage in the digital age. Different digital tools can assist with knowledge management depending on the type of organization.

Most of the time the challenge that organizations face when they want to leverage digital technology is not an intellectual one since they see that change is coming. Usually the problem lies in the structural inertia of the organization, in other words,

how to implement the change within the company and how to foster a dynamic mindset among employees.

But why is it so important and so difficult to communicate these ideas and change the mindset of employees? In practice employees view the challenge from automation as a direct threat to their jobs. To counter this point of view, the management team has to communicate on benefits. In fact, automation will increase the efficiency of some routine tasks and processes and allow employees more time to unleash their potential in more creative and innovative tasks.

The optimization of processes such as the information cloud or communication channels within the company are key to effective change management. Together with critical thinking developed by the workforce there is an opportunity to delegate some decision-making power from managers to employees, who can leverage more reliable and accessible digital data. To summarize, the organization will be able to react faster, and adapt better to changes in the environment and thus be more agile.

These responses to digitalization represent some of the examples of how companies can face the digital trend. Companies that fail to adapt to the digital revolution risk being left on the side lines of the new world economy. It is up to the top management of the companies to help tackle these challenges, communicate with employees and embrace the change.

Conclusion

The Nextcontinent hackathon provides some keys for the design of "The Ultimate Company" identified by our team of millennial students. We have described the experience of the hackathon and summarized the major ideas and insights generated by students. During the hackathon, innovative project ideas and new management tools were developed as new solutions for the MNCs in the digital world.

We have further examined the trends and challenges that were outlined during the brainstorming sessions, namely The Predictive Disruption and The Platform Economy. Finally, we presented the recommendations and the feedback that we, the millennial students, developed for the organizations that need to adapt to the new digital trends. Our findings and recommendation are all encapsulated in our idea of the "Ultimate Company", an organization tailored to the digital world, in which we would like to work and innovate in the near future. ▮

BIOGRAPHIES

JASPER BAGGERMAN
E COMMERCE & INNOVATION LAB MANAGER
WOLTERS KLUWER

Jasper Baggerman is the Innovation Lab Manager at Wolters Kluwer, a large international publisher providing content for professional services (legal, accounting and healthcare, a.o). Jasper is a driven innovation manager with a passion for digitalization. He helps organizations get more results from their innovation efforts by supporting companies in developing a clear digital (innovation) strategy and in translating it into concrete projects, applications and products.

SIMONE BRUSCHI
HEAD OF DIGITAL TRANSFORMATION
MONTE DEI PASCHI DI SIENA

Since 2015, Simone Bruschi has been Head of Digital Banking and Direct Marketing at the Monte dei Paschi di Siena bank with responsibility for Digital Transformation, Business Strategy and Mass Market Cost Reduction.

He has extensive experience in the digital and direct sales value chain within different markets (banking, telecommunications, retail, gambling, media, government and products) thanks to his previous international professional experience at Vodafone, Accenture, Grouppo Editoriale l'Espresso, and other companies. He also specializes in direct marketing, remote/digital sales and customer operations. He graduated from La Sapienza University in Rome in engineering and was then awarded two Master's degrees, one from La Bocconi in Milan and one from Esade in Barcelona.

HEIKO BUGS
COO AND MANAGING PARTNER
SOLIDIANCE

Heiko is the COO and Managing Partner of Solidiance and manages business across offices with full P&L responsibility. His strength is to drive multinational teams and to form strong units, delivering outstanding quality and results to clients. Prior to setting up Solidiance, he worked for seven years with an international management consulting company in China where he built and led the consulting operation across four local offices. Heiko has spent over 20 years in Asia including 9 years in China and 5 years in India, participating in Asia's rapid development as the new economic power house. His experiences and expertise brought him the opportunity to present Asian topics at more than 30 international conferences in EU, US, India and China.

II

ALEJANDRO CODINA
CO-CHIEF DIGITAL OFFICER
MEDIAMARKT

Co-Chief Digital Officer, MediaMarkt. Alejandro Codina started working for MediaMarkt in 2009. Starting as a store director to become regional director in 2014, where he was responsible for Madrid and the Canary Islands; he is now a board member of the company as well as the co-Chief Digital Officer, driving the company's digital transformation. He graduated from the University of Madrid and from Henley Business School in Management.

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UGO DI FRANCESCO
CEO
CHIESI FARMACEUTICI S.P.A.

Ugo Di Francesco has been Chief Executive Officer and Director of Chiesi Farmaceutici S. p. A., a family controlled Italian pharmaceutical company founded in 1935, since 2011. He supervises all of the company's global operations. He has 28 years of experience in the pharmaceutical business. Ugo Di Francesco previously held the position of Executive Vice President and CEO at Sigma-Tau. In this position, he directly supervised all of the European and global business operations of Sigma-Tau. Among other projects, under his leadership the company acquired the specialty care business of Enzon Inc. in the United States. Before that, he served as Vice President for Southeast Europe, Middle East & Africa at the Zug, Switzerland international office of Amgen Corp. (Thousand Oaks, USA). In 2002, based in Prague, he joined Novartis where he served as Managing Director and Country Head of Novartis s.r.o. for the Czech Republic and Slovakia, after which he was appointed Managing Director and Country Head at Novartis Pharma S.p.A. in Italy (Origgio, Varese). In 1998, he joined Bristol-Myers Squibb, based in Rome, where he served as Head of the Oncology Business Unit. In 2000, he became Vice President of the Pharmaceutical Division of the Italian affiliate of Bristol-Myers Squibb Corp. (Princeton, USA). He holds an Executive MBA from the University of Bologna Business School.

II

ANTONIO FOIS
PARTNER
EUROGROUP CONSULTING ITALY

After graduating in managerial engineering from the University of Roma Tor Vergata, Antonio Fois began his career as a management consultant in 2001 at Key Partners in Rome. Building on this experience and until 2006, he worked at Improvance, now Eurogroup Consulting Italy. He then began working as an entrepreneur in the digital sector and as a consultant in another consulting company. He returned to Eurogroup Consulting in 2015, where he is now a partner.

An expert in operations, manufacturing and the supply chain, he has managed major business restructuring, performance improvement and change management projects, building up extensive experience in e-business and digital transformation.

CHRISTOF HORN
MANAGING DIRECTOR
P3

Dr. Christof Horn is Managing Director of the P3 Group, a worldwide consulting and engineering company, which focuses on the automotive, aviation, telco and energy sectors. A key capability of P3 is enabling its customers to develop and produce complex products and processes.

Horn is responsible for the Automotive sectors of P3. With digitalization, connectivity and the shift to mobility solutions being the main challenges of his customers, he is working on the right strategies in business models, technology and organizational skills.

ARJEN KROM
SENIOR MANAGER
MAGNUS RED

Arjen Krom is Senior Manager Digital Transformation at Magnus Red. He has over 11 years of consulting experience in a wide range of direct (advice) and delivery (implementation) projects mainly within financial services, media, energy, manufacturing and retail environments. Arjen is a true all-rounder with a keen eye for customer centricity and customer experience and has hands-on experience with Scrum/Agile projects being a Scrum Master himself.

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LASSI KURKIJÄRVI
INNOVATION LAB DIRECTOR
SANOMA

Lassi Kurkijarvi was the Innovation Lab director for Sanoma, one of Europe's largest media companies. He is currently Vice President at Solita. His goal is to create conditions where people can do awesome things: build new businesses, improve the lives of others and solve problems for a better world. Applying lean startup methods to corporate & startup teams, organizing intrapreneur teams, setting up internal corporate & startup accelerators/incubators, and promoting an all-round entrepreneurial attitude are his key strengths.

JEAN-CLAUDE LAROCHE
CHIEF DIGITAL AND INFORMATION OFFICER
EDF

Jean-Claude Laroche has changed company, but not group or trade. He became the Chief Information Officer of ENEDIS in January 2017, after holding the same position at EDF. Enedis, formerly ERDF, is the electricity distribution system operator in France with 35 million customers, 1.3 million km of power lines and 39,000 employees.

After starting his career as an engineer and consultant, Jean-Claude Laroche joined EDF and RTE in 1993 as a design engineer. Having held different positions at EDF, he became HR Manager and CIO of the EDF Optimization and Trading Division in 2008, and then Group CIO in 2014.

Jean-Claude Laroche's career does not end with these operational functions. He is also a member of the CIGREF Board of Directors, Chairman of its Cybersecurity Circle (since July 2016) and member of the Board of Directors of ECSO (European cybersecurity organization). He is the author of the book "The Energy Challenge: From Resource Depletion to Sustainable Development". Jean-Claude Laroche is also a graduate of the Ecole Polytechnique and ENSTA.

AGATHE LEMAINAIS
BUSINESS NETWORK COORDINATOR
NEXTCONTINENT

Agathe Lemainais graduated in 2014 from Dauphine University in Paris with a Master 2 in Entrepreneurship and Innovative Projects. After a two-year experience as an entrepreneur in the vocational training and tutoring sector in Paris, she wanted to gain international experience in the consulting world. That's why she chose to work for Nextcontinent in Rome where, since October 2016, she has been responsible for co-ordinating and assuring the international expansion of Nextcontinent's network. She works specifically in five industries: digital, energy, consumer goods and retail, and healthcare transport.

CHRISTIAN LEURS
PRINCIPAL
EUROGROUP CONSULTING GERMANY

Christian Leurs has been working within the field of management consulting for more than 17 years. He is principal and head of the Digital Lab at Eurogroup Consulting Germany.

After completing his apprenticeship in a bank, he graduated as a lawyer in commercial law. He worked in private and corporate wealth management at an international bank for many years. Before starting his career at Eurogroup Consulting Germany in 2007, he worked for two international consulting companies within the financial services sector.

Since 2012, his main duties and responsibilities have included consulting and support for major banks, asset management companies, private banks, specialist institutions as well as state banks. He is an expert in strategic realignments, digitalization and digital transformation, the optimization of business processes and large-scale project management. Christian is also a certified Change Manager.

II

SAMUEL LOISEAU
MARKETING AND CLIENT SERVICES DIRECTOR
PMU

Samuel Loiseau is an expert in marketing and digital, and has extensive experience in these fields. After graduating from ESSEC Business School, he started his career in the consumer products industry at Kraft Foods France in 1997 for the chocolate brands Mika and Cote d'or. In 2000 he joined the Casino group as a Customer Marketing Manager where he launched the group's e-commerce website, which was one of the first such websites to be launched globally. After two years at Casino, he joined SFR to improve their marketing strategy, which included developing subscriber loyalty as well as defining and implementing new packages. After five years he became the new Marketing Director of SFR and three years later he was appointed as SFR Brand Market Research and Retail Director. Samuel Loiseau occupied this position for five years before joining PMU in 2015 as the Marketing and Customer Service Director, in charge of the digital transformation of the company. He is also part of the PMU executive committee.

MARCELLE METTES
DIRECTOR OF INNOVATION
ESSENT

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Marcelle Mettes is Director of Innovation at Essent, one of the largest energy producers and suppliers in the Netherlands. Having occupied previous positions in innovation and marketing development at large broadcasting and telco firms, Marcelle is a seasoned expert in the field of innovation in larger corporate organizations.

II

VALENTINE MUTZ
BUSINESS NETWORK COORDINATOR
NEXTCONTINENT

Valentine Mutz is responsible for coordinating and ensuring the international expansion of Nextcontinent, specifically for the banking and finance, digital and automotive sectors. Before joining Nextcontinent, she worked as Consumer and Market Insights Assistante for Unilever, within its European headquarters. In parallel to her work, she is also a PhD candidate, researching a promising new field of study, "Transformative Service Research". She previously graduated from NEOMA Business School and Nankai University in China.

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MIRELA POPESCU
MANAGER
ENSIGHT MANAGEMENT CONSULTING

Mirela Popescu has 12 years of experience in management consulting and 13 years of experience in IT services and IT project management. Prior to her appointment to the position of Manager at Ensight Management Consulting in 2005, she held leading positions in pharma, consulting and the public sector. During her years in management consulting, she conducted over 30 different consulting missions for companies in telecoms, the automotive industry, financial services, oil & gas, retail and professional services. Mrs. Popescu was awarded Project Manager Professional (PMP) certification by the Project Management Institute (PMI), and ITIL v3 Foundation and CISA (Certified Information Systems Auditor) certification by ISACA, and has a BA in Economics from the Faculty of Management, Academy of Economic Studies, Bucharest.

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RAPHAEL RIVIÈRE
DIGITAL EXPERT
GOOGLE FRANCE

Digital Expert, Chief of Staff to the Deputy Director General, Google France. Raphaël Rivière is an engineer and a graduate of the Ecole Centrale Paris. From 2008, he worked for several years for Oliver Wyman and The Boston Consulting Group, as a consultant to the group's Directorates-General in a wide range of sectors, including finance, telecommunications, mass distribution and media.

In 2011, he joined the Rocket-Internet incubator in France, to found the start-up Westwing, specialized in the sale of lifestyle and art objects, which now has a presence in 20 countries. In 2013, he participated in the development of advisory services at Deloitte and worked with mid-cap companies in difficulty and with investment funds, to assist them in their strategic and operational activities. Raphaël Rivière joined Google in 2014, as a digital expert in the financial sector. His role is to advise Google's major accounts on their digital transformation. In 2015, he extended his scope to the telecommunications, media, entertainment, pharmaceutical, public sector and energy sectors. He also works with the entity [X], formerly Google X, in the development of industrial partnerships for the futuristic projects of the Alphabet group (including Loon, Makani, and the Self Driving Car).

ALBERTO RIVOLTA
MANAGING DIRECTOR
LA FELTRINELLI

Chief Operating Officer at Feltrinelli Group and General Manager at Feltrinelli Retail, Alberto Rivolta has extensive experience in management consulting at MBS Consulting (an Italian consulting agency based in Milan), where he was a member of the management team from 2010 to 2014.

He is an expert in development, strategic change and change management. He led complex projects for major companies in the publishing and media industries dealing with insurance and asset management. Since January 2015, he has been responsible for all of the business activities of the Feltrinelli Group and is the General Manager at Feltrinelli Retail.

He graduated from Politecnico di Milano in management engineering.

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LAURA ROS
MANAGING DIRECTOR
VOLKSWAGEN-AUDI

Francisco Pérez Botello, CEO of Volkswagen-Audi Spain: *"Laura Ros has been part of the team that has led Volkswagen to market leadership"*.

Laura Ros has extensive experience within the Volkswagen Group. Since joining Volkswagen-Audi in 1997, in the product sector of the Volkswagen brand, she has held various management positions in the company. In 2001, Ros was named marketing director of ŠKODA, a brand she was linked to, until 2009, when she returned to Volkswagen as Head of Planning. In 2011, Ros took over the Volkswagen After-Sales department, and in 2013 she was appointed Marketing Director for the brand, a position she currently occupies.

After graduating in Business Administration and Management from ESADE, Laura Ros began her professional career at Nissan Europa, where she worked from 1994.

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MAGALY SIMÉON
DIRECTOR OF SOCIAL PROTECTION
AND SERVICES BUSINESS UNIT
CNP

Magaly Siméon is a graduate of the Ecole Supérieure de Commerce (ESC) of Toulouse and the University of Paris VIII (psychology and coaching). She joined CNP Assurances in 1989 in the Customer Audit Service before moving to Specialized Financial Institutions. In 1999, she joined the Gras Savoye group where she held several functions, including project director for Strategy and Transformation (2011-2012). In 2012, she was appointed director of Personal Insurance and a member of the Executive Committee.

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ALEX SIXTO
PARTNER
NEXE THE WAY OF CHANGE

Alex is a partner and business director at Nexe The Way of Change. He was previously Director of the Consulting Area, with responsibility for leading the design and implementation of the "Acceleration of Change" methodologies, directing technical support to sales, leading resource planning, Nexe operations at corporate level, as well as talent recruitment and development. Alex is an expert in marketing and sales with more than 16 years of experience in the business and people consulting sector. He has led several consulting projects in the areas of strategy, marketing, sales and operations, for clients such as Volkswagen, Banc Sabadell, MediaMarkt, Telefonica, Gas Natural, Catalunya Caixa, Fluidra, FCC, Sogecable and Port Aventura. Alex graduated from ESADE Business School, where he was awarded a Bachelor's Degree in Business Administration and Management as well as a MBA. He also graduated from Brandeis University in International Finance.

PAUL SWOBODA
PRESIDENT
GRAWE

Paul Swoboda started his career in the insurance sector in 2003, as project manager at Grawe. In 2007 he joined the Romanian team as a member of the Administrative Board. In 2010 he became a member of the Board of Directors, supervising the company's financial and control activities. In September 2012 he was appointed CEO of Grawe Romania and soon after, in 2015, he was appointed President of the Grawe Board of Directors following the introduction of corporate governance.

Paul Swoboda has a Master's in Business Science and a Master's in Philosophy and was awarded scholarships from the universities of Paris, Sofia, Zagreb and Novosibirsk. He has a passion for languages, his recent one being Romanian, and he speaks fluent English, French, Russian and Bulgarian.

SAMUEL TUATI
PARTNER
EUROGROUP CONSULTING PORTUGAL

Samuel Tuati has been working in consulting for the last 20 years, after a seven-year period in the banking sector and two years lecturing in Games Theory at university. Since 2013 he has been a Partner at Eurogroup Consulting Portugal, leading the IT Advisory and Digital Transformation practice.

His academic background includes a degree in Applied Mathematics, an Executive MBA and several Executive programs in various establishments, including the London Business School, the Indian Institute of Management of Ahmedabad, and the Ross School of Business at the University of Michigan. Before joining Eurogroup Consulting he worked for 16 years for Capgemini Portugal, where he was Vice President and Executive Board Member for 12 years. Samuel is an expert in digital strategy, digital transformation, IT strategic realignment, IT relationship models, strategic sourcing, risk sharing and pricing models and has successfully helped large corporations in the utilities, manufacturing, finance and retail sectors transform the IT function and launch their digital transformation journey.

JAN VAN LAER
FOUNDING PARTNER
ARCH

As founding partner of ARCH, Jan specializes in transition management. His passion is to produce lasting results, especially if this entails rolling out new (digital) strategies, improving business processes, building new ICT solutions or reforming organizations to accommodate new challenges. During his 30 years of experience in consulting and program management, he has built up extensive experience in many different market segments (government, utilities, industry, services, finance, distribution, transport and logistics) and in various fields, mainly in support processes.

ANDRÉ VAN VUUREN
OPERATIONS DIRECTOR CED REPAIR
CED EUROPE

André van Vuuren is operations director at CED Repair within CED Europe. CED is one of the biggest financial claims specialists in Europe but also provides repair services. André has been the product owner for the development of a state-of-the-art back office system in combination with mobile applications for repair service providers which have significantly disrupted the Dutch insurance/repair market.

II

PHILIPPE VINCENS
HEAD OF FINANCE
GOOGLE FRANCE

Holding a degree in industrial engineering from Georgia Institute of Technology and an MBA from Harvard Business School, Philippe Vincens has been Head of Banking and Insurance at Google France since February 2015. He began his career at Google in June 2014, as head of Mobile Solutions Business Strategy Southern Europe, Middle East and Africa. Previously, Philippe Vincens was an entrepreneur in Paris. He launched a social network for co-travelers in the sphere of the collaborative economy. He was also a manager at McKinsey & Co and managed the supply chain at Whirlpool.

GRÉGOIRE VIRAT
PARTNER
EUROGROUP CONSULTING FRANCE

As partner at Eurogroup Consulting France, Grégoire Virat is responsible for developing the digital activities at a national and international level. He is also a leader of the digital business community of Next-continent. His work also focuses on the agile transformation of large companies and of public organizations in the digital age. He specifically works on challenges related to the launch of new innovative business models and new forms of collaboration between large firms and external eco-systems. Furthermore, Grégoire is also responsible for the partnership with La Javaness, a start-up and digital innovations accelerator of Eurogroup Consulting France. Gregoire holds a Master's in Applied Mathematics and Social Sciences as well as a Degree in Strategic Management.

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JAN WOHLSCHIESS
GLOBAL COO/CFO WEALTH MANAGEMENT
DEUTSCHE BANK AG

He is currently a managing director with particular responsibility for the digital bank of Deutsche Bank AG. After graduating from the University of Augsburg with a degree in Business Administration, he worked for different companies in various fields. From 2006 to 2010 he worked for the UniCredit Group in Munich and Italy and became Senior Vice President and Head of Products and Advisory Private Banking Group in Italy. As of 2010, he has continued his career at Deutsche Bank AG in Germany. As a managing director, he has a mandate to create digital (banking) business model(s) complementary to the digital transformation of the core bank. Among other things, he is responsible for innovating and developing a portfolio of concepts for digital business models as potential ventures. Furthermore, he gives papers at specialist conventions and at the University of Augsburg on the subject of industrialization in banks.

II

DR. OLAF ZEITNITZ
CO-FOUNDER & MANAGING DIRECTOR
VISUALVEST GMBH

He is co-founder and managing director of VisualVest GmbH. After graduating from the universities of Karlsruhe and Mainz, he was awarded a PhD in high-energy physics at the University of Mainz in 1995. He has also earned a degree in Business Administration from FernUni Hagen. He started my professional career as a project manager at SGZ-Bank in various areas such as risk management, e-commerce and securities transactions. In 1999, he became Head of Electronic Banking and was involved in the European VISA pilot project "SET", aimed at enabling secure payments by credit card on the Internet. As of 2000, he was responsible for IT systems in the Union Investment division of Union IT Services GmbH. Furthermore, he was one of the managing directors of Union IT Services GmbH until 2016, where he was responsible for projects and IT systems in the market/depot sector.

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nextcontinent

PRESENTING NEXTCONTINENT

We are a new generation of management consulting network. Cross-border organizations are faced with specific challenges and major shifts. They need to adapt constantly to their fast-changing environments. Servicing them "as always" with a unique consulting mindset is no longer enough. We have felt the need to build a new consulting territory.

We believe in the specifics of local markets as key drivers to handle globalization.

We have the size and adequate footprint in our countries of operation to help our clients to make change happen in a complex world.

THE NETWORK

Since 2006 our **multi-local consulting network** enables our clients to implement efficiently their transformation processes while paying special attention to multidimensional issues.

- We cover 11 **sector-oriented Business Communities:** Banking and Finance, Energy, Automotive, Transport, Pharma Healthcare, Digital, Retail and Consumer Goods…

- With **1.200 consultants in 29 countries worldwide** we make sure they can be mobilized quickly to meet your needs.

- Our business-focused consultants are **active leaders on their local market,** culturally aware of both local and worldwide markets, through permanent cross-border stimulation.

- Our strength is the combination of engineering and technical expertise, project management skills and strong change management agility.

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