

# .experience

## Big Data – Buzzword or Business Booster?

A magazine by ERNI since 1999.  
Issue 1/2021



# Contents

4  
How can Big Data  
improve the customer  
experience in a health-  
care ecosystem?

26  
Often there is  
a lack of a uniform  
data view

3  
Editorial

20  
How to increase  
competitiveness  
in Banking

30  
Big Data  
in Numbers

## The big potential of big data



Andreas Gisler  
CEO, ERNI Global

Dear Readers,

There are companies that are sitting on a large treasure trove of data, but don't know what to do with it. And then there are those who make smart business decisions from the right data. Where do you stand? How do you use your data?

We know from our experience: Every company has a treasure trove of data, and everyone knows the buzzword Big Data. But what is Big Data actually and what is it not? Every company has different expectations. These range from innovations to improving the customer journey to major cost savings. However, there is often a lack of talent internally or security issues blocking the next steps.

One thing is already clear today: with the right approach, big data is significantly more powerful than the analytics of the past. Decision makers can make better predictions and take more intelligent decisions. Evidence instead of gut feeling.

In this issue of .experience, we take a look at the various possibilities of Big Data and show some best practices from our experience in customer projects.

We wish you an interesting read.

Andreas Gisler  
CEO

# How can Big Data improve the customer experience in a healthcare ecosystem?

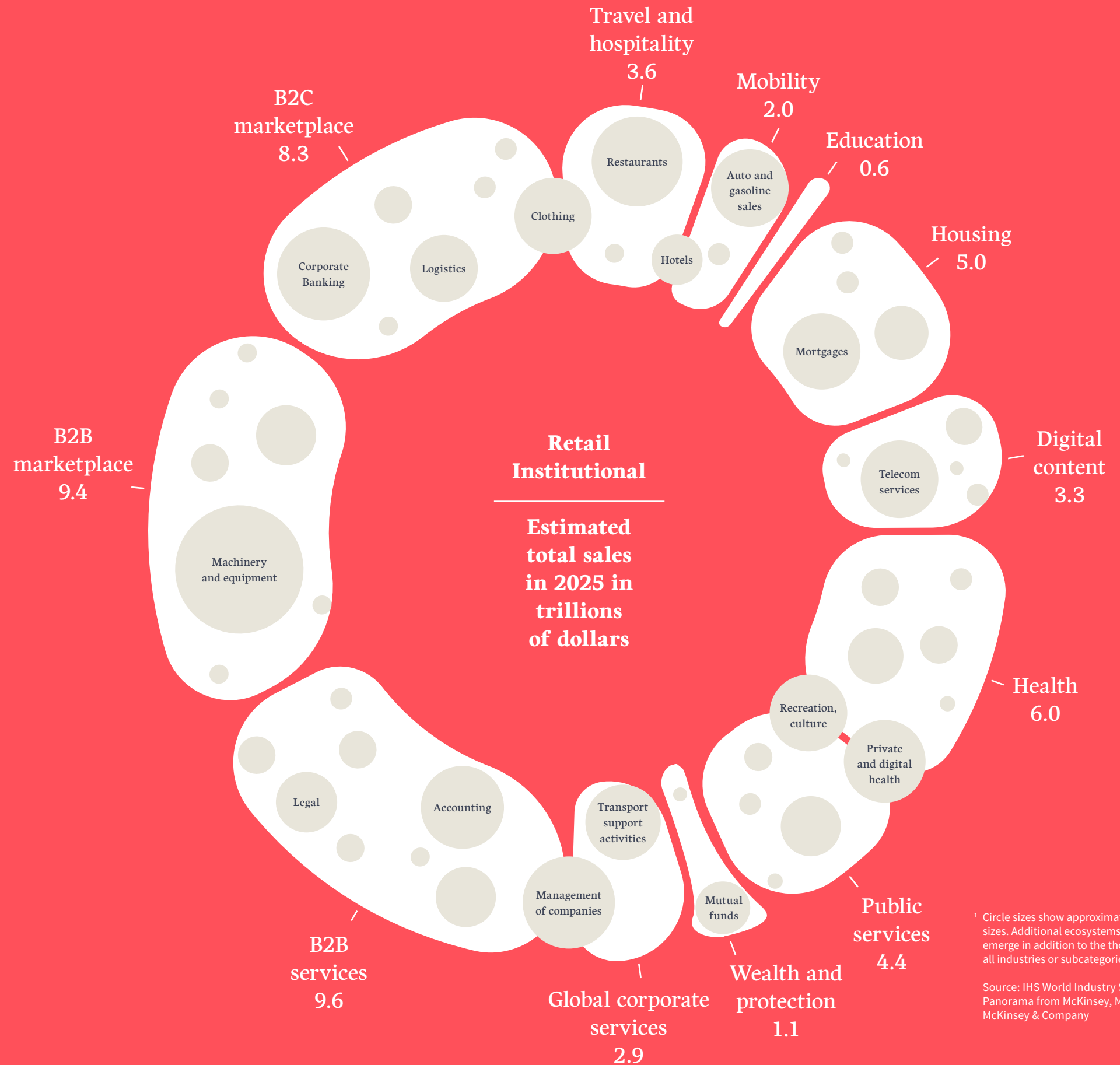


by Patrick Wilhelm and Nicolas Neuwirth

The **healthcare ecosystem** is expanding towards including new types of data, new methods for collecting and **analyzing** them, and including new players. The future of healthcare is likely to be driven by **digital transformation** enabled by interoperable data and open secure platforms. Health will likely be about maintaining wellness rather than responding to illness. According to McKinsey, **30% of global revenue will be attributable to ecosystems by 2025**. It is expected that **12 distinct** and massive **ecosystems** will form around basic human and organisational needs.



In the healthcare industry, the various sources of Big Data include hospital records, patient records, examination results, and devices that are part of the Internet of Things. Biomedical research has also generated a large amount of data related to public healthcare. This data must be properly managed and analysed to provide meaningful information. Otherwise, finding a solution quickly through Big Data analysis is like looking for a needle in a haystack. Each step of Big Data processing comes with various challenges and only the use of high-end computing solutions for Big Data analysis can overcome these hurdles. Therefore, in order to provide appropriate solutions to improve public health and to generate and analyse Big Data systematically, healthcare providers need to be equipped with proper infrastructure. Effective management, analysis and interpretation of Big Data can change the rules of the game by opening up new paths.



<sup>1</sup> Circle sizes show approximate revenue pool sizes. Additional ecosystems are expected to emerge in addition to the those depicted; not all industries or subcategories are shown.

Source: IHS World Industry Service, Panorama from McKinsey, McKinsey Analysis, McKinsey & Company

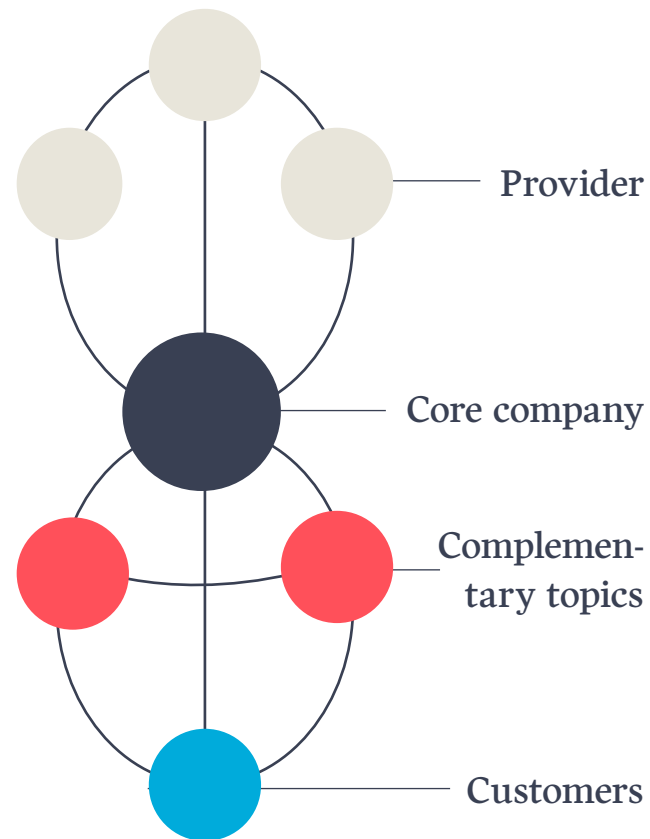
What is a business ecosystem? A business ecosystem relies on three pillars to exist and grow: sustainability, self-regulation & evolution. In detail, this means that resources are efficiently used and reused in a symbiotic relationship between ecosystem participants without external influence. Based on a common set of rules & norms defined mainly by competi-

tion & innovation, the ecosystem regulates itself and avoids unilateral control by system participants or high dependencies on outsiders. This clustered area of competition, as in evolutionary processes in nature, forces experimentation within or across the ecosystem, leading to new innovations.

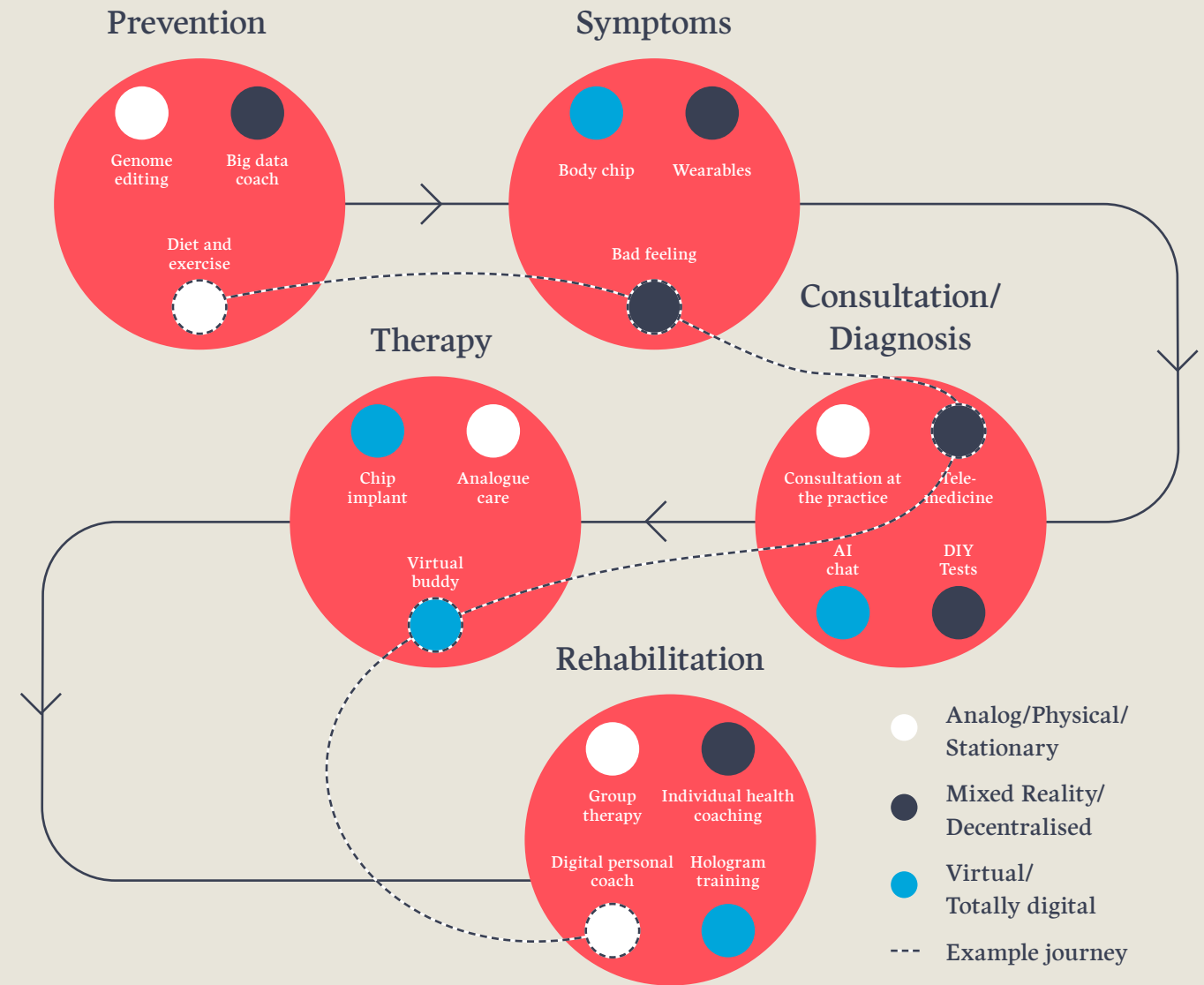
# What is a business ecosystem?

## Solution Ecosystems

Have a core company as the orchestrator. Independent vendors & complementary themes contribute to the solution. The customer has an active role and influences the offerings with their buying decisions.



# Business Models

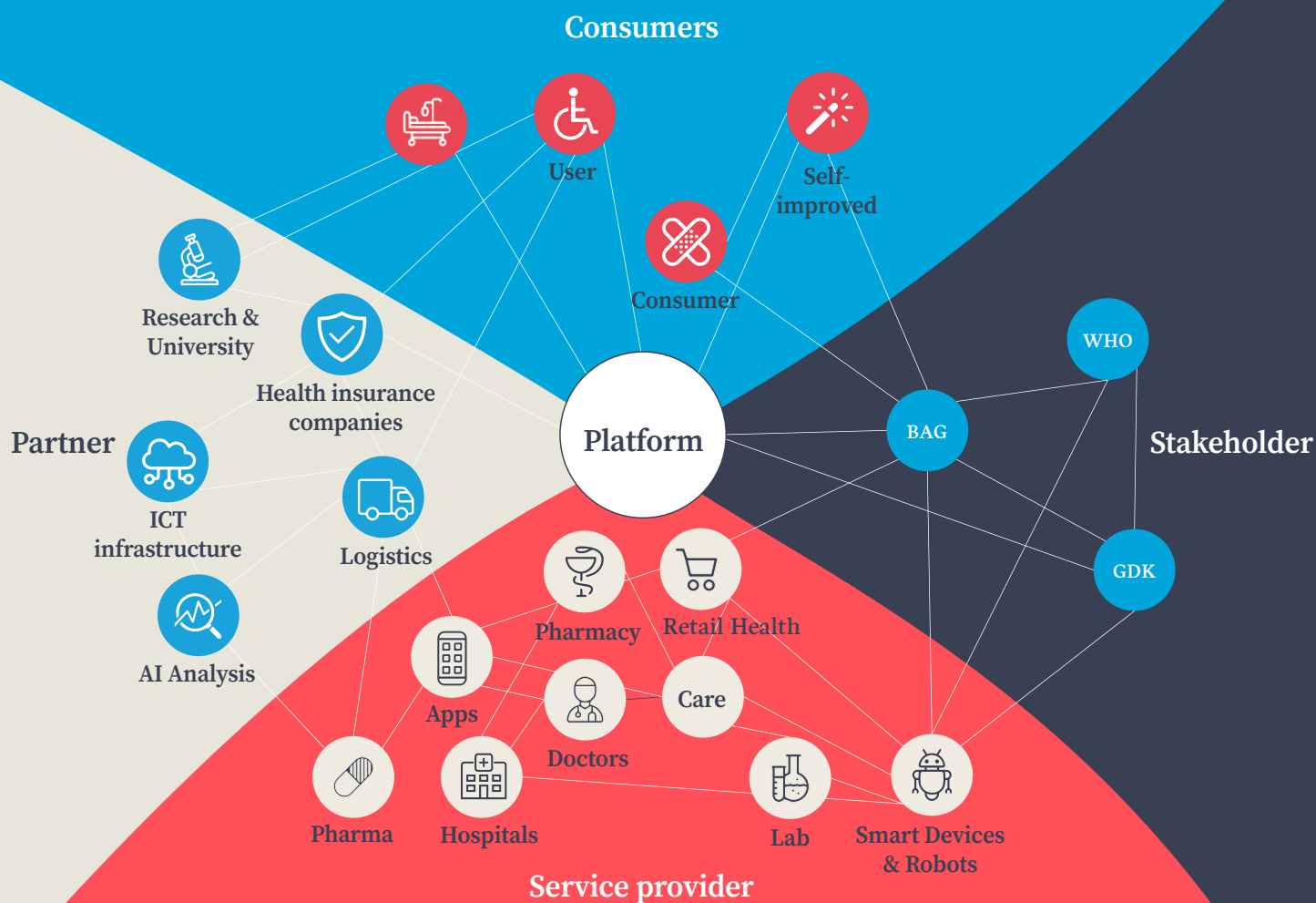


Let us now introduce you to our journey as patients. We have a variety of increasingly digital touchpoints that are combined with different actors depending on our current health needs and treatment phases. This can range from personal diet tracking in the prevention phase to telemedicine consultations by a doctor in the therapy phase, or remote group therapy sessions offered by the clinic in the rehabilitation phase (see details in the figure above).

It can be observed that digitalisation is increasing connectivity between stakeholders and also giving them direct access to the patient. This generates huge amounts of value-added data, redefines current stakeholder roles and activities and generates new business models. All these factors are capable of transforming the entire domain into a healthcare ecosystem with a variety of customer-centric value propositions towards the "prosuming" patient and changing the strategic positioning of participants within the system.



# Healthcare Ecosystem



In recent years, we can observe these phenomena working exemplarily in health insurance companies. Through (digital) collaboration with telemedicine providers, pharmacies and hospitals as well as the use of mobile apps & IoT technology, insurers are starting to transform their business model from a passive service provider to a proactive, value-added healthcare manager for a whole new customer segment & central ecosystem orchestrator. Interestingly, some of the health insurers have implemented their ecosystem strategy as orchestrators with spin-offs to avoid loss of perceived customer experience in terms of neutrality and trust.

Above you can see such an exemplary health ecosystem. As indicated by the many connections between actors, this network offers many opportunities for collaboration, even if these only reflect the direct network effects and not the much wider indirect interactions in the "outskirts" of such a health ecosystem.

This illustration gives a good indication of the scalability and corresponding lock-in effects of such a system, as we can already observe with the large established platform giants such as Google, Amazon or even Uber.

# What are the influential microeconomic trends behind such a healthcare ecosystem?

According to the National Research Council, building on advances in pharmacogenetics and targeted therapy, precision medicine aims to integrate multiple data sources to "tailor medical treatment to each patient's unique characteristics." The evolution of precision medicine is based on the

collection of big data, including electronic health records (EHRs), common clinical measurements, environmental data and lifestyle data, which will also be collected over time via mobile devices and apps. The goal is to aggregate and analyse the data to provide value to the customer.

## 6 trends in the healthcare sector

- 1 **Digital availability:** With better access to health information, diseases & health risks can be identified quickly and treated in a more targeted manner.
- 2 **Health 24/7:** Medical treatment is becoming mobile. It is breaking away from existing forms of use and the classic division of tasks between patient and service provider.
- 3 **From silo to network:** Data volumes and open, self-learning diagnostic tools, such as Human DX, enable knowledge to be linked and extracted like never before! More data, better products, higher customer acquisition.
- 4 **Prevention instead of intervention:** As the focus shifts from the sick to the healthy and chronically ill, the consumer context and associated communication becomes increasingly important.
- 5 **Healthstyle:** Behavioural changes and their digital (self-)monitoring. This type of "digital therapeutics" with smart devices (sleep measurement, pedometer & co.) is increasingly gaining customer acceptance.
- 6 **Ageless Ageing:** Live better without disease. Stop biological ageing and with it all age-related diseases.  
(GDI: Frick, Bosshart, Breit, 2020)

**The perspective from which we look at health insurers is changing.** With the shift to an ecosystem, insurers are transforming from a pure service provider to a health manager that accompanies the patient along the entire customer journey. This, in turn, has a huge impact on the perception of the customer - from the bad guy who doesn't want to pay the treatment bills to someone who helps to manage the customer's wellbeing to avoid future costs. This creates a whole new set of business model opportunities and exponential innovation within the healthcare industry, with

many insurance companies tipped to become such a partner in healthcare.

Accompanying the customer along the entire journey and orchestrating the various touchpoints and stakeholders has many benefits besides changing customer perception. Insurance companies can automate, control costs and create value - extending the value chain along the treatment path. Healthcare is no longer limited to business days and office hours. More and more, it's about 24/7 treatment.

# Examples of exponential innovation



## Hybrid cars

In 1997 - a little more than 3 innovation cycles ago - the first hybrid car was made available to the public. We now have fully electric cars and routinely see autonomous vehicles being tested on the roads in many of our cities.



## Robots in the operating room

In 1998, the first surgery was performed using robotic assistance. Today, robotic surgery is the standard of care for many procedures.



## Digital music

In 1999, the first complete music album by a major artist was made available to download over the internet in advance of its physical release. Today it is hard to remember buying music on physical media.



## Genomics

In 2000, the first rough draft of a human genome was announced. Today millions of people have traced their ancestry through mail-order DNA test kits and are beginning to look at their genetics to identify potential health risks.



## Smartphones

Prior to 2007, smartphones did not exist in the market. There are now 2.6 billion smartphones around the globe, and by 2020, that number is expected to grow to 6.1 billion, or 9 out of 10 people.



# Collecting a lot of data

Along this extended value chain, the parties involved gain and collect much more data than in the past. The insurance company not only gets all the data about what treatments and medications you have had and how much you have been charged but also how much exercise you have in your daily life, what combinations of medications you get and, based on that, how big the risk is that something might happen or go wrong. The insurance model can be tailored for each patient. All data is strictly confidential, even though it's a

challenge to analyse data anonymously to keep everything confidential. Soon there will be a new alternative to the EID law, because the Swiss people have expressed that they do not trust private parties to manage a digital patient identity and rejected this in a vote. Most likely, we will soon see a new attempt to establish a digital patient record, where the state will guarantee the proper handling and confidentiality and will be responsible and in charge of the operation of such a system.

# Promoting interoperability

Interoperable data and artificial intelligence can help consumers in ways we haven't thought of in the past. Data will be at the heart of the future of health. According to a Deloitte study, by 2040 highly trained healthcare professionals will be able to spend more time with patients with complex health conditions. Data and technology will enable patients to treat many routine health issues at home. Imagine the recent challenge with coronavirus infection. Instead of visiting a clinic or doctor's office, a diagnostic test could be used at home to confirm an infection and discuss the results with a doctor remotely. Secure platforms would allow the patient to verify the diagnosis, order medication and have it delivered to their home.



# Data security is a major challenge

As a secure way to handle confidential patient data, there are companies working on **blockchain for secure data transfer**. A pilot project is available in Estonia. A lot of data is being collected there. But the question is, where is the data secure? Data about a particular person's health is considered the most sensitive in terms of security.

## What's next?

Many companies operating in healthcare, as well as other sectors, are already making strategic investments that will shape the future of healthcare. Stakeholders should prepare for the disruptions and consider many aspects:

- Build new businesses. The incidence of major chronic diseases is likely to decline dramatically. In response, healthcare organisations should adapt their business models to remain competitive.
- Forge partnerships. Technology giants and startups will drive change. What they lack is healthcare expertise, regulatory expertise, a targeted customer base and existing partnerships. Disruptors will likely be more willing to partner with established big players.
- Stakeholders should develop tactics to effectively engage with consumers. They should also work to gain their trust and demonstrate their value.

# Challenges of the customers in the health care sector and our offer

- 1 Business model strategy - What are the trends? What should models look like? How do we test them? How do we develop them?**
- 2 How we evaluate partners - coverage analysis, architectural review, we look at Partner A.**
- 3 Expansion of the core business and physical implementation**
- 4 Process analysis in order to have a smooth flow along the customer journey**
- 5 What do we offer, an app? A device like a smartwatch, or something else?**

# ERNI as an enabler in the development of ecosystems

An ecosystem is huge. It's the wrong approach to think you have to build a whole ecosystem from the beginning. There are different stages that you can adopt as a goal. For example, a company like ERNI can help you create a blueprint for the different stages of building an ecosystem. We can define

interfaces, establish secure APIs or lend a hand in creating the overall system architecture concept. It's all very individual and depends on how mature the healthcare topic is. Business innovation or business strategy model consulting. Strategic consulting is also our expertise in this area.

# How can Big Data improve the customer experience?

Different partners come together in one ecosystem. We can offer to build customer journeys and seamlessly connect the partners' systems so that data flows into one pot. From this common pot, we can generate insights and analyse and use the data. When you know the circumstances of the customer,

the patient, you can offer them tailored products and deliver tailored messages that better appeal to them and pique their interest.



# Dynamic UX approach

New challenges in the healthcare industry are accelerating the development of healthcare innovations. When it comes to digital user experiences, the healthcare sector is one of the most complex environments

you can find. Despite all the digitalisation efforts, UX is often undervalued in healthcare ecosystems. The fact is, high-quality UX design can help healthcare providers deliver a better patient experience.



## Telemedicine

A typical telemedicine appointment looks like a traditional visit to the doctor, with the only difference being that the doctor is consulted remotely. Video conferencing and remote health monitoring apps are the most popular tools that medical organisations use to deliver clinical services remotely. Software in this area is designed with different patient populations in mind, so the personas concept applies in this area as well. UX designers should consider characteristics such as the age, mental state, and technical skills of users.



## Health Wearables

Most regular smartwatches and fitness trackers can monitor basic metrics like the person's heart rate, steps, and sleep patterns. For a successful UX design for a health wearable, designers should put information first. A device should be simple and intuitive.



## Electronic health data

Before creating a UX design for HER software, designers need to examine how medical staff interact with a system. What does the doctor's sequence of actions look like? Which fields are mandatory and which are not? What information is inevitably required? The solution must be user-friendly and effective.

# Personas in healthcare ecosystems

Using personas and mapping their customer journey to complete specific tasks is a powerful way to look at real pain points and create solutions. The experiences that healthcare providers offer in the digital space need to address the concerns and pain points of the target audience. Before investing in creating a

solution, every provider should create healthcare personas. Personas help you discover and focus on your target audience. They reveal your audience's motivations, challenges, concerns and behaviours - the things that underlie healthcare decisions.

### Template: Persona Profile [Name + Type]

<b>Background to the persona:</b> Job, career, education, family — What does a typical representative of this group look like? — Which profession do they have? — What is the family background? — What is important to the persona in their life?	<b>Demography:</b> — Age — Gender — Location	<b>Photo:</b> What does the representative of the group look like? 
<b>Identifiers:</b> — What makes the persona? (hobbies, interests, etc.) — How is their performance? — What channels do they use for communication? — What is their information behaviour? (online, offline, what channels) — What is the shopping behaviour? (online, offline) — Who influences the persona? (friends, colleagues, role models)		
<b>Expectations, targets and emotions:</b> — What does the persona want to achieve by making a purchase? — Which pain points does the persona want to solve? — Which benefit do they want to obtain? — Which emotions accompany this? — Which fears could be involved? — What could excite the persona?	<b>Challenges:</b> — Which challenges come up during the shopping process? — What does the persona fight with? — What is difficult for them?	
<b>Ideal solution:</b> — How can we help the persona to solve the challenge? — How can we exceed their expectations? — With which emotions can we reach the persona? — How do we support the persona in reaching their goals?		<b>Frequent objections:</b> — Why would the persona not buy our product? — Which arguments against buying the product could come up? — What could make the persona insecure?

How do you select healthcare personas? It all starts with data. Who are your top target audiences? Where are your key growth opportunities? It may be tempting to limit yourself to service areas: primary care, orthopaedics, heart, cancer, etc. But it's often better to look

at people. When they come to your website, app or campaign, they have specific needs for information, for the tone in which it is delivered and for how each step in their journey connects. Generally, three to six healthcare personas work best – never more than eight.

# Case Study

## Customer Journey and personas for a research company

Our client, a company that has been active in the field of market and social research for 60 years, is contacted by clients who, for example, want to enter new markets and need to analyse, structure and process the relevant data for this purpose into a report that is to serve as the basis for a market entry strategy. This is also a good reference for other sectors, such as healthcare and insurance, as the challenges and principles are almost the same. Insurance companies are also trying to target younger customers and we help them to better understand personas in general and digital natives in particular. The project started at the beginning of April, as a cooperation between ERNI and eMarket. It is another one of our reference cases that took place completely digitally, from the first contact to the result.



### Challenge

A management buy-out and a reorientation for the future were necessary. The owners realised that some customer groups could not yet be reached optimally. For example, people without a university degree who often do physical work. So far, these groups could not be reached, perhaps because unsuitable channels were used or no appropriate approach was made. The company therefore turned to eMarket to better understand its customer segments and send the right messages to the target groups.



### What we did

We prepared various workshops and developed personas to give the target groups faces. We asked ourselves questions like: How old are they? Where do they live? What is their profession? What are their preferences and problem areas? In the next step, we created customer journeys with 5 elements: What grabs their attention, what supports consideration, what triggers decisions and what increases loyalty. We did this for all previously defined personas. Then we thought about the value proposition for the customer. We also analysed the status quo and took a snapshot. The task that made everything a little unusual was the need to reach not only customers but also people to be addressed in the survey.



### Result

We provided the customer not only with a summary but also with an action plan to achieve their goals. We presented this at a meeting with the customer to get initial feedback. Now the plan is for eMarket to support the client in achieving their goals.

# How to increase competitiveness in Banking

by Andreas Sommer

**The Swiss Banking domain is facing a change.** There are factors and economical and political framework conditions which banks are exposed to. These conditions are making their existence a challenge, and if nothing changes, the financial institutions will lose their revenues and contact with the clients. The market has recently been based on low interest rates, although until now banks got their revenues from interest trades. This does not apply in the given sense. A second factor is the cross-border market access, which makes it increasingly more difficult for Swiss banks to acquire markets abroad. A certain level of protectionism is present, which means that it is becoming very difficult for a Swiss bank to enter the market in Germany or France, for example.



## The financial regulators/regulatory institutions revealed some further risks recently:

- If there were a crash in the real estate and mortgage market, it would have huge effects on the banks in Switzerland.
- Potential cyber-attacks also pose one of the challenges/threats. Banks have to protect customer data by all means and invest a lot in the newest technologies.

# Trends

**Generally speaking**, if a company makes a product easily replaced through the use of data, it can have a negative impact very quickly. Data creates new opportunities rather than poses as an imminent threat.

Optimising the potential of data is the alpha and omega. Today, with the digital affinity on the rise, financial institutions face the challenge to fill the niche that emerged due to global trends. Digital banking increases transparency and thus creates a pressure on margins. Moving away from traditional banking based on personal contact, every financial institution is looking for ways to outperform its competitors in digital transformation and the so-called smartphone banks.

Customer loyalty is decreasing, yet it is important now to have

the right digital offering to fulfil the expectations of clients. Available whenever needed.

The banking landscape of 2030 will not be the one we know today. The most important trend is digitalisation in its growing form. This is bringing new competitors such as FinTech or the big tech companies to the finance market.

The platforms are based on the newest technologies; they are fast and flexible. FinTech places itself in between the banks and the end customers, which poses the threat of losing direct contact to clients for the banks. This often results in joint ventures being established between banks and FinTech. Let us take a look at the most important trends influencing financial institutions today.



## 1 Demography

The population is getting older. As digital natives, new generations have different requirements on banks and do not have the loyalty to a certain bank as was the case with older generations. They have their apps and simply go for more convenient things. The customer behaviour is changed.

## 2 Globalisation

On one hand, we have protectionism, which is present in all countries. On the other hand, since the global crisis of 2007 the banks are no longer left to their own devices but state institutions came forward as regulators came and introduced criteria that the banks had to fulfil. This requires an enormous amount of resources from the banks. International banking has attracted increasing interest from policy makers, researchers and other financial sector stakeholders.

## 3 Sustainability

Sustainable finance aims at integrating Environmental, Social or Governance (ESG) criteria into financial services, and at supporting sustainable economic growth. The investment behaviour of clients has changed and continues to change. Aspects like business ethics, resilience, responsible finance and human capital are the focus of the efforts here.



# Case Study

## Data-driven prototype with gamification factor in banking

Nowadays, companies face many digital challenges, especially with regard to current and future customer target groups and their needs. For a local bank, we looked at how to better serve customers in the digital space with the help of collected data.



### Challenge

One of our Swiss banking clients asked us to work with them to develop a prototype of a fully integrated end-to-end data-driven recommender platform. This should serve as a showcase to demonstrate the potential of data science and AI to potential internal end customers.

The bank's management set expectations for data-driven innovation and new technologies. The task was to position the bank as the best digital bank in the country. In general, it is a challenge for all financial institutions today to address young generations due to their specific requirements for digitalisation. The goal of the use case in the prototype was to educate young people in the use of money through gamification and to create individual product recommendations based on peer group analyses.



### Result

Every major bank that has Big Data is already actively doing projects in the area of its analysis and use. This helps not only banks but also companies in general to better understand which customer journey end users go through and how best to accompany them on this journey. In the case of the customer, the aim was to pick up the end user who had just come of age, to identify his challenges and to select the appropriate content automatically on the basis of the different needs on the customer's journey and to deal with them in a targeted manner.

The developed prototype, which is already available, is fully automatic. This means that personal recommendations are always made based on specific queries, without manual intervention. The logic is contained in complex algorithms, which had not yet been used in this form. It took about 5 months from the initial discussions to the development of the prototype. The project itself involved a local team in Switzerland as well as a UX team in Manila, which developed the entire frontend. Currently we are in discussions to provide another showcase and to further develop the platform for a productive use.

The potential of this platform lies in its scalability and agility. The

prototype based on the gamification factor has the following modules:

- WebApp interface for interaction with the customer
- Recommender Engine for recommendations & comparisons
- Chatbot for consulting & communication
- Data models

What actually makes this prototype so unique? The customer can have complementary tools to the existing marketing (campaigns & lead management), test how customers react to "surprise recommendations", try to do direct marketing via influencers (place the recommendation with the influencer and spread it through him to his network) and experience many other functionalities.

### Customer statement

**"The cooperation was very constructive, solution-oriented and administratively uncomplicated. Also the integration of near- or off-shore employees was implemented very professionally and without unnecessary bureaucracy."**

Head of Financial & Analytics Services at a financial services provider



# Often there is a lack of a uniform data view

Interview with  
**Dr Stephanie Friedrich**  
 Senior Expert Product Manager Insurance  
 at Experian



**Dr Stephanie Friedrich** has focused on **insurance fraud** for years. In this issue of **.experience**, she spoke with us about the changes **Big Data** and **analytics** are bringing to the industry.



## How are data and analytics changing the insurance market?

As in all other industries, data and data-based analyses are playing an increasingly important role in the insurance industry.

Processes in the companies are optimised and automated by analytical procedures. This makes insurers more efficient and faster. However, these optimisations also allow for more differentiated considerations, e.g. in the context of customer potential. However, all these steps are not possible without a sufficient data basis and the corresponding analytical know-how.

Insurtechs in particular are taking advantage of the opportunities offered by data-driven business models and are therefore, in my view, an important driver of this transformation. In my view, the established insurers are observing these trends very closely and are reacting by taking up these topics and intensively driving them forward in their companies.

## What are the most visible trends today?

The changes for the end consumer are particu-

larly evident in the area of claims processing. This area had long led a shadowy existence, but most companies have initiated automation processes in recent years. The starting point and basis has usually been automated fraud pattern recognition based on a large amount of data available in the claim. While the first systems tended to be rule-based, ML processes are now also being used, particularly in larger companies. In addition, unstructured data is increasingly being included.

A more recent trend is above all process optimisation within claims handling. It is no longer only conspicuous losses that are recognised, but in particular also those that are identified as inconspicuous and suitable for quick settlement on the basis of statistical models. The use of expert reports is also partly based on this.

In addition to claims settlement, other processes are also becoming the focus of data-based decisions. In particular, external data can be used in underwriting and pricing and represent a competitive advantage. In addition, customer value, up- and cross-selling,

and lapse models are used to better manage customers in customer management.

### Is the situation different when you compare the German and Swiss insurance markets?

Certainly, there are some specifics when comparing the two markets. First of all, it is noticeable that the Swiss market is significantly less fragmented than the German market. Therefore, prices in the German market seem to me to be subject to even more significant competition, so that the pressure to optimise processes should actually be higher. Interestingly, this is not necessarily reflected in the activities. On the contrary, I see at least as much willingness to invest among Swiss insurers, especially in claims management but also in the area of data and analytics. And in the area of BVM, Swiss companies are, in my view, much more professional and consistent.

In my experience, there is a greater tradition in Germany of including external risk data in underwriting. In my view, this is not yet as widespread in Switzerland.

### What are the big questions coming from customers today regarding the use of their data?

I think it is important above all to deal transparently with the use of data and to communicate the benefits clearly. A customer definitely has a clear advantage if damage can be repaired more quickly because the relevant data is available and the algorithms declare the damage to be inconspicuous within seconds. An insurance company that consistently optimises its processes will also be able to offer lower premiums in the long term, which is in the interest of consumers.

**Insurers have a large amount of sensitive information about their custo-**

**mers' marital status, household sizes, property, occupation, net income, education. How do you deal with the issue of data security?**

In my experience, the issue of data security and data protection is a particularly important one for insurance companies, whose business model is, after all, the security of their customers. In case of doubt, even if it were legally possible, it would be preferable not to use the data than even run the risk of coming into conflict with data protection or data security.

The topic is therefore relevant in almost all projects, and in practice we very often also involve our lawyers.

### What do you think are the biggest opportunities with Big Data in insurance?

It is difficult to name a single topic.

I think that there are still many options, particularly in the area of pricing, but also in customer management and even claims management, to manage more efficiently and in a more risk-adequate manner. However, our customers often lack a uniform view of data, since insurance companies have a lot of data at their disposal, but it is not necessarily possible to access it centrally in the sense of Big Data. Therefore, the prerequisites for comprehensive analysis and use of the available data often have to be created first.

### And what about the challenges? Do you agree, for example, with the analysts from Gartner who say that it's not the technologies, but the people?

I wouldn't say that for every company. The technologies are available on the market, of course, but insurers often still work with very old legacy systems that often stand in the

way of using modern applications. So there has to be a transformation on the technology side as well, which is happening in a lot of companies right now. Of course, you also have to take the users with you, and that is certainly a challenge in some cases, but from our experience it can be mastered quite successfully. It is often advisable to take smaller steps without losing sight of the goal.

### What should companies look for when designing their Big Data strategy? What is Experian's approach in this area?

First of all, the goals should be clearly formulated. Big Data is not a strategy in itself. It must be clear in advance what you want to achieve with Big Data.

Then, in our view, it is essential to build the strategy on 4 pillars:

- Data
- Analytics
- Software
- People

So we need the necessary data for the goal and based on this, the appropriate analytical models. Modern ML methods are not always the means of choice; sometimes it is also of particular interest to be able to transparently understand why a decision was made. A BVM expert, for example, needs a clue as to why a loss is conspicuous in order to be able to continue working. A score alone will not help him. A very important point is to be able to implement the results of the analysis operationally, with the right decision engine. Decisions often have to be made in real time,

so it doesn't help if the model takes 1 hour to calculate. And then the employees in all areas must also recognise and support the opportunities in the project. Only then can projects be implemented successfully.

**"Also a transformation in terms of technology needs to happen."**

#### Dr Stephanie Friedrich, 47

- Studied Geography, German Studies and History at the Friedrich Alexander University Erlangen Nuremberg
- PhD in economic geography
- Karstadt Quelle Information Services (4 years)
- Entry as target group analyst
- Head of Project Management Analysis
- AZ Direct (part of Arvato): Sales Manager-Insurance (2 years)
- Arvato Financial Solutions (11 years)
- Key Account Manager - Insurance
- Head of Consulting and Solutions Insurance Claims
- Shift Technology: Sales Director DACH (1/2 year)
- Experian DACH (formerly Arvato Financial Solutions) (1.5 years)
- Senior Expert Product Manager - Insurance

# Big Data in Numbers

Data is driving the future of businesses, and companies not prepared for this transformation are at risk of being left behind. Let us uncover some facts and figures about Big Data.



**8-10%**

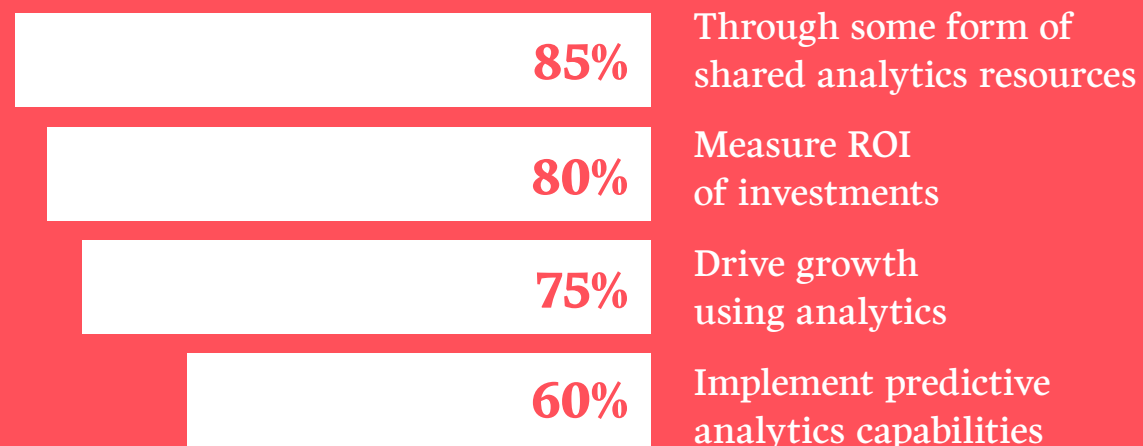
Increased profits by businesses that use big data



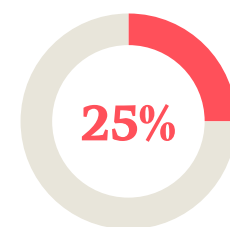
**\$119** Billion

Big data global revenue by 2025

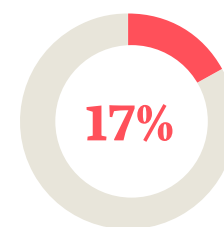
## How do businesses leverage big data?



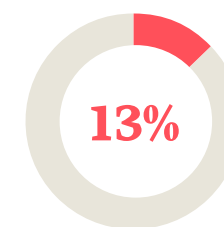
## Top benefits of data analytics



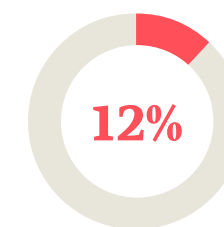
Faster innovation cycles



Improved business efficiencies



More effective R&D



Better product/service

By 2022, public cloud services will be essential for 90% of data and analytics innovation.

## Big data in Banking



U.S. banks have recently surpassed 1 Exabyte of stored data



Which would equate to 275 billion MP3s

## How banks put big data to work

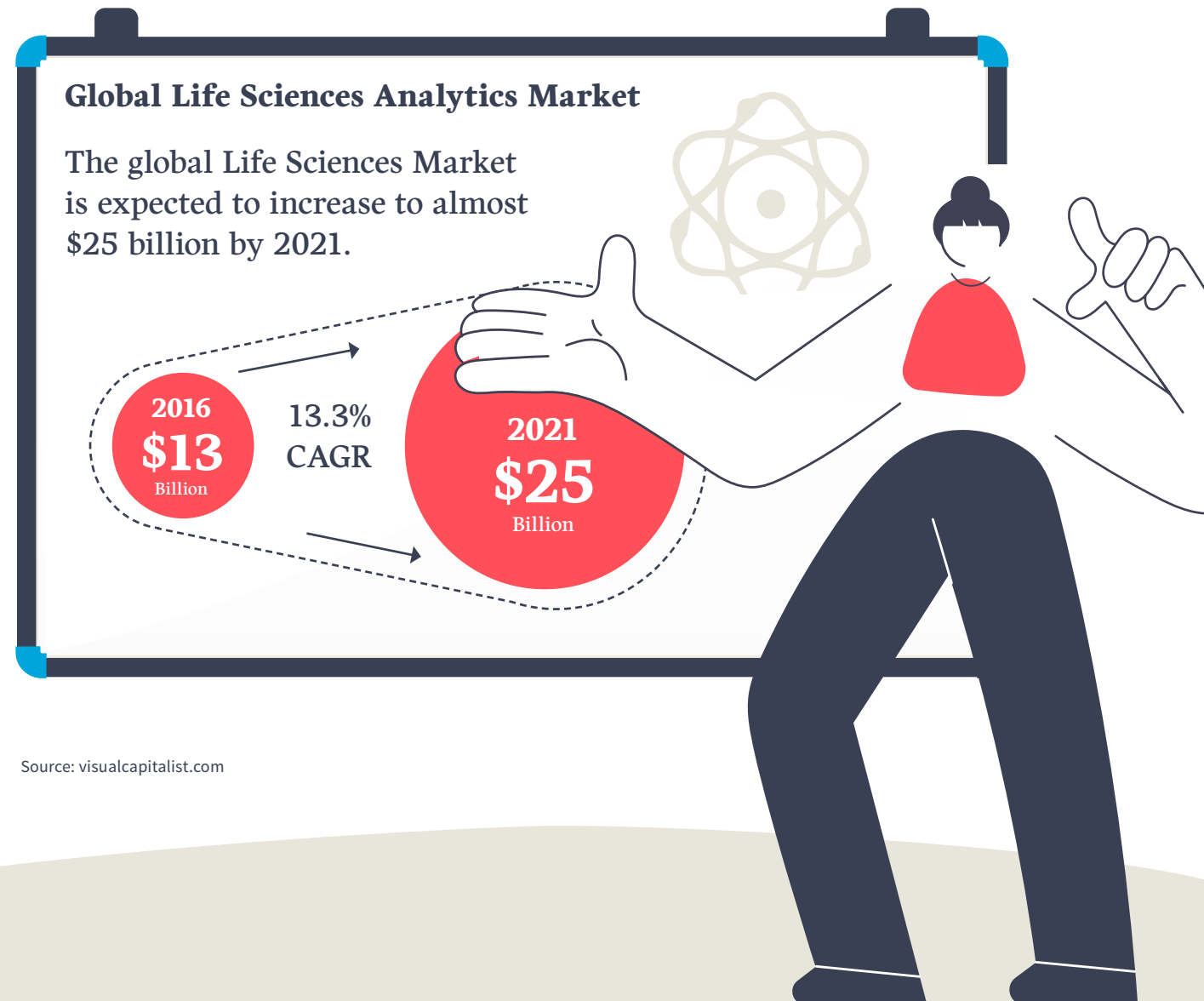
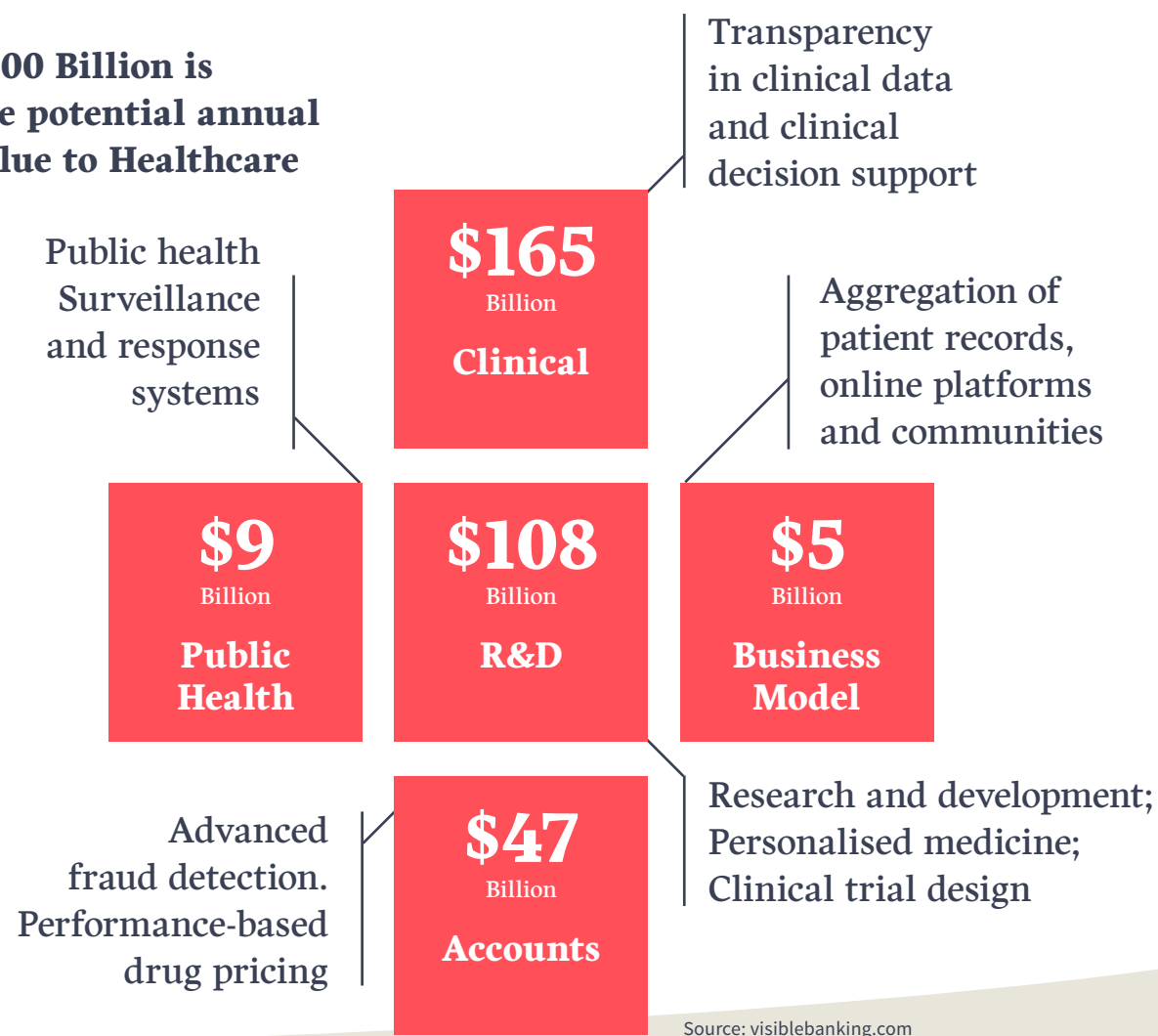
- Customer risk assessment
- Anti-money laundering procedures and fraud detection
- Compliance and regulatory management
- Customer relationship management
- Stock trade surveillance and pattern analysis

## Typical banking sources of big data include:

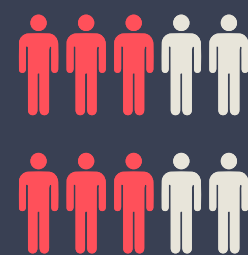
- Customer bank visits
- Call logs
- Web interactions
- Credit card histories
- Social media
- Transaction types
- Banking volumes

### Big data in Healthcare

**\$300 Billion is the potential annual value to Healthcare**



### Patient records and data sharing



**62%**

show **high or very high** readiness to forward their health data via an **Electronic Patient Record** to doctors and pharmacists.

Source: statista.com

n = 1,000; summarised figures "very high" and "high"

The amount of medical data generated every year worldwide is rising astronomically.

Growth in healthcare data  
**1 Exabyte = 1 Billion Gigabytes**



# About ERNI

ERNI stands for Swiss Software Engineering. What are we really interested in? How we can support you and your employees better than any other company in developing and marketing software-based products and services. Our global platform for software development in combination with a sound understanding of the market forms the framework for our customers' success. Our team also implements complex projects, empowers people and delivers outstanding customer solutions in the shortest time. We apply the Swiss mentality with behaviours such as consensus building, pragmatism, integration, reliability and transparency on a global scale – and have done so since our foundation in 1994. Together with our great team, which is the basis for successful software projects. Today, the ERNI Group employs more than 800 people worldwide.

## About .experience

In this magazine, which is published several times a year by ERNI, we provide information about important experiences that we have learned in our daily work in the areas of collaboration, processes and technology.

## Imprint

### ERNI

Swiss Software Engineering  
betterask.erni

### Publisher

ERNI Management  
Services AG

### ERNI Locations

#### ERNI Switzerland AG

Bern  
Zurich  
Lucerne

#### ERNI Suisse SA

Lausanne  
Geneva

#### ERNI Consulting España S.L.U.

Barcelona  
Madrid  
Sant C. del Vallès

#### ERNI (Germany) GmbH

Frankfurt  
Munich  
Berlin  
Schorndorf

#### ERNI Development Centre Philippines Inc.

Manila

#### ERNI Development Centre Romania S.R.L.

Cluj-Napoca

#### ERNI Singapore Pte Ltd.

Singapore

#### ERNI (Slovakia) s.r.o.

Bratislava

#### ERNI USA

New York

### .experience Magazine

#### Contact

marketing@erni.ch  
T +41 58 2681200

#### ERNI on the social networks

betterask.erni  
linkedin.erni  
facebook.erni  
instagram.erni  
youtube.erni  
twitter.erni

© 2021

by ERNI Management  
Services AG



