



**REALDOLMEN**  
to get there, together

# simplicity

MAGAZINE

SPECIAL EDITION  
**FINANCIAL  
SERVICES**

## DEAR READER,

The financial services sector currently finds itself in turbulent waters. Banks and insurance companies feel that the business models within which they operate today are gradually beginning to waver and that there is a need for acceleration. Because of the rapid rise of FinTech companies among others, they are coming under pressure to work with innovative technologies.

Realdolmen wants to face the digital challenge head on, alongside the banks and insurers. To get there, together, that's what it's all about for us. Not only in the way we organize our work internally, but also - and especially - in cooperation with our customers. On top of that, we have all the skills to connect different technologies and solutions to each other in one 'connected' vision, tailored to the financial sector, under one roof. That's what we want to highlight in this Financial Services edition of Simplicity Magazine.

As usual, we first asked several independent experts about key industry trends. We consulted Alain Grijseels, Head of IT at the financial regulator FSMA and Wauthier Robyns, Spokesman for Assuralia. Bart-Jan Engelen from ING Wholesale Bank told us how ING WB - partly with the help of Realdolmen - responds to the changes in the financial services industry.

We continue with our own people. They tell you how Realdolmen is organized internally to help the financial sector with their digital transformation.

Technology is playing a major role in this transformation, but it's about much more than just technological solutions. From a partner such as Realdolmen, companies expect advice so that they can make the right choices. Technology must be used relevantly and contribute to a company's strategic aims.

Finally, our experts illustrate the applications and services that we have developed or customized specifically for the financial sector, according to their specific needs. How do you, as a bank or insurer, become 'customer-centric'? Why is the bank as a platform considered to be the future of financial services? What role do FinTech companies play in the digital transformation? What about the rules regarding privacy and security in the Cloud? What to think about blockchain? What's the role of IT outsourcing for banks in the 21st century? How about the rules regarding privacy and security in the Cloud? What to think about?

Realdolmen is happy to face these challenges and find the answer to these - and many more - questions with you.

To get there, together!

Marc De Keersmaecker,  
General Manager of Realdolmen

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# FROM COUNTER to Internet

Interview with **Alain Grijseels**,  
Head of IT, **FSMA**

Will bankers be replaced by robots? Will most people soon be purchasing their car insurance online from Amazon? And, if so, will they pay in dollars, euros or... bitcoins? Technological innovations have recently been shaking up the financial world with increasing frequency. Should this be a cause for concern or should we perhaps be looking forward to all these new tricks and devices? We asked Alain Grijseels, Head of IT at the financial regulator FSMA, for his opinion.

Banks and investment companies are going online whenever possible, since that is what consumers also do with increasing frequency. Consumers use the Internet to easily and quickly manage and monitor their bank account, insurance policy, investments etc. But how far can things go in this direction? Will bankers soon be completely replaced by robots?

"Oh, but there are already lots of robots in the world of banking and investment,"

explains Alain Grijseels of the FSMA, the Authority for Financial Services and Markets, which, together with the National Bank of Belgium, is responsible for overseeing the financial sector in Belgium. "For example, if a customer asks for investment advice, it's handled, more often than not, in an automated fashion, in other words by intelligent software that is connected to the necessary sources of information."

## Too late or not?

The most important innovations in the financial world come from so-called FinTech companies: startups that have built a business model based on a single strong idea, or technology companies that specialize in financial services. Experts like Bart-Jan Engelen from ING (refer to the article on



**"There was a time when technological innovations had a lifespan of years; nowadays, it's more like a few months."**

Alain Grijseels, FSMA

page 7) are convinced that the banks have missed the boat in that regard. "That's a difficult question," says Grijseels. "They certainly have already taken initiatives to encourage innovation. But an aircraft carrier needs more space and time than a small cruiser to change direction. That's why some of them now work with innovation incubators, where people with a business background are tend to be linked to those with more technical expertise to develop new interesting innovative ideas. This combination is often successful in encouraging innovation."

Innovating is actually a very difficult task for companies in the financial sector. After all, innovation means: trying things out and experimentation, some of which will result in failure. But, of course, financial institutions must, above all, radiate stability and trust. "It's no simple matter to satisfy both these requirements at the same time," explains Grijseels. "A great deal depends on the reliability of the new digital products launched on the market. In contrast to companies in other sectors, banks cannot permit themselves to introduce half-finished products on the market."

## Threats everywhere

FinTech companies are not the only threat. Major tech giants, such as Apple and Google, are also making their presence felt on the financial landscape. "And besides Apple and Google, a great many other companies have taken that step. Look at PSA for example, the automobile concern that includes Peugeot and Citroen. They have also taken on the role of a bank. But they also have to comply with the same regulations as all the other companies operating in the financial sector. The problem is that



The CIO evolves from "Chief Information Manager" to "Chief Innovation Manager"

some of them are very large and operate across borders. Therefore, a global approach is needed, and thus we are investing a great deal of effort at European and global level."

And we haven't even mentioned yet the cryptocurrencies such as bitcoin, for example. How can you monitor and supervise that? "Those are financial products that the banking world has no control of whatsoever," says Grijseels. "The consumer should realize that it falls outside of all supervision, including ours. We need to continually make sure that they understand that. Together with the National Bank of Belgium, the FSMA has already repeatedly warned for the risks associated with the use of these virtual currencies."

## Busy times for the CIO

Due to the ever increasing role played by the new digital technologies, the role played by

the CIO in financial institutions is becoming increasingly important. Where should its focus lie in 2017? "Of course, everyone – not at the least in banking – is busy with big data, but that opens up a great many privacy issues. After all, the most interesting information relates to our behavior as consumers; what kinds of things do we spend our money on? And should banks be allowed to simply sell this kind of information?"

Institutions are presently experimenting on the financial markets with so-called intelligent contracts, in which case the recommendation given is based on the behavior of each individual consumer. Based on the information already available about the consumer, it's then possible to recommend an investment or product for the customer that is most in line with his or her profile. "As long as it's an honest and transparent recommendation that does not harm the interests of the consumer, there is no problem. It is different if the digital robot of an

institution starts giving advices with which the institution thinks it will earn the most money from the consumer" says Grijseels.

But at least as important as new technologies, thinks Grijseels, is that CIOs need to be committed to the organization of their own department and the service provided to the business. "It goes without saying that IT must be reliable, and that the systems have to perform well. But the IT strategy also needs to tend to be sufficiently agile to allow systems to evolve according to the needs of the financial markets. Agility, a quick reactivity to change, is becoming one of the most important skills, whereas it was much less important previously. There was a time when technological innovations had a lifespan of several years. Nowadays, if it lasts for a few months, you're doing quite well."

# DIGITIZATION IS CREATING NEW OPPORTUNITIES FOR THE INSURANCE SECTOR.

Interview with **Wauthier Robyns**, Spokesman for **Assuralia**

Terrorist attacks and environmental disasters cost the insurance sector almost 450 million euros last year. Crucial products such as life insurances are going through a major dip. At the same time, the burden of administrative formalities and regulations is noticeably increasing, and online competition is fiercer than ever. To say that the sector is going through challenging times is an understatement.

In order to survive, various companies are making the switch to digitization, a word that, until recently, was synonymous with restructuring. But does this switch always signify bad news, or can these new technologies also provide insurance companies with a lifeline? We hoped Wauthier Robyns of Assuralia, the professional association for insurance companies, would provide the answer.

**Technology keeps insurance transparent and affordable.**

Until now, digitization was primarily talked about within the context of large-scale restructuring operations at insurance providers such as AXA, Ergo, and P&V. But insurers who are not engaged in restructuring are also actively involved in digitization in various areas, explains Wauthier Robyns. "One of our biggest chal-

lenges is how to deal with all the types of data that we collect as an insurer. Take car insurance for example. Until now, we have been calculating the premiums for young drivers on the basis of historical statistics. Now it's possible to collect data via a device in the car, which enables us to analyze the driver's driving behavior. As a result, young drivers with appropriate driving behavior can benefit from lower premiums."

According to Robyns, insurers can also play a larger role in the healthcare sector. He sees two areas in which this is possible: in the area of hospital care insurance and in the area of disability insurance. "Technology can help our customers remain fit and prevent employee disability by monitoring various parameters such as pulse, blood pressure, cholesterol, etcetera. This used to be the domain of the family physician, but it is now possible to monitor these parameters on a daily basis and to take preventive measures or to modify one's lifestyle. Based on the data that we collect via the monitoring activities, we can adjust our premiums or transfer the benefits to customers with good results."

Finally, there are various technological tricks and devices that are come on to the scene. "We are increasingly making use of drones for inspecting buildings and for



**"Premiums used to be determined on the basis of historical statistics, whereas this can now be done using updated and personalized data for each and every policy holder. This makes insurance more transparent and affordable for both parties."**

Wauthier Robyns, Assuralia

expert report collection. In addition, insurers are increasingly developing apps in order to communicate with their customers on various topics, ranging from the payment of premiums to arranging for a tow truck or to providing a reminder that the garden furniture needs to be brought inside before the coming storm. This also enables the company to establish a link with the customer."

**Online competition for customers**

And it's all about the link with the customer, according to Wauthier Robyns. "Insurance companies are not likely to be seriously impacted by a disrupter such as AirBnB in the hotel industry. A more likely scenario, and one that we are seeing in other countries, is that someone else claims the link with the customer together with the associated margin. This means that insurance companies should think about how to ensure that customers end up searching for insurance coverage via their sites or their distribution networks instead of general sites such as vliegtickets.be.

But according to Wauthier Robyns this cloud has a silver lining. "Customers often go online to search for information about insurance. This gives insurers the opportunity to be the first one to establish a link with them. It's therefore important for them to have an online presence, to be accessible online, and to be able to offer their customers up-to-date information. After initially searching online, most customers still prefer personal contact when it comes to actually purchasing an insurance policy."

**Will cyber risks save the sector?**

Using these technologies is also associated with risks, and insurance companies are in the front line as far as this is concerned. They store enormous amounts of information, and that makes them vulnerable to malfunctions as well as to hackers. Wauthier Robyns: "We need to pay attention to these risks and take adequate protective measures. Many agents are actively looking for products they can develop in order to manage and control

these risks. According to Robyns, insurers can also view these risks as an opportunity. "It's not only insurers who have to deal with cyber risks. This opens up an entirely new area for the sector: securing and protecting customer information as effectively as possible against unauthorized leaks or loss. This new business will likely lead to cooperation with software manufacturers and government bodies, and could provide many agents with additional lines of activity."

The digitalization of the insurance sector is well on its way, but there is still more work to be done. Accordingly, employees of insurance firms responsible for IT activities must not only deal with their own needs but should also consult with colleagues from other services in order to ensure these technologies also address their needs. As Wauthier Robyns sees it, companies that succeed in integrating and combining the use of such technologies can look forward to a sunny future.

## REALDOLMEN HELPS ING WHOLESALE BANKING WITH DIGITAL INNOVATION

Interview with **Bart-Jan Engelen**, sales coach & trainer, **ING Wholesale**

Digitalization changes the rules of the game in each sector and companies that don't take that into account will lose out sooner rather than later. That also applies to the financial sector. The rise of fintech companies, technology startups that focus on simplified solutions for a service in the financial sector, has revealed a new reality to banks. For insight on this we went to

**Bart-Jan Engelen**, Sales Coach & Trainer with ING Wholesale Banking as well as the founder of Valuefinders.net, an online platform that ING and Realdolmen have developed together. It was a fascinating conversation over the changes in the financial sector – and how you can respond to them, naturally.

**Fintech companies force the banks' hands**

Fintech companies? No one had heard of them until two years ago. Yet today they shoot up out of the ground like mushrooms. How did we achieve this outcome? Simple: they make use of the newest digital technologies to design highly innovative services or make existing services much simpler. Think of Kickstarter for example, a specialist in setting up crowdfunding. They ensure that projects can be financed by third parties, which means innovators no longer have to go knocking on a bank's door. Another success story is TransferWise. With TransferWise you can transfer money abroad without having to pay high fees. Here, too, banks are being pushed out of the game.

**Innovation is the keyword**

"The fast rise of fintech companies is simple to explain," says Bart-Jan Engelen. "It's

about the culture that these companies value. Each of them is a company that bets on digital innovation, and not only a focus on efficiency. Twenty years ago, working at a bank was popular. Less so now. More and more graduates and even top bankers get started in fintech companies or are starting their own. We just heard, for example, that Joop Wijn, corporate banking chief and board member at ABN Amro, is leaving the bank to join Adyen, an e-commerce-focused fintech firm.

Why? Because digital innovation speaks to the imagination. It's innovative, and that appeals to open-minded people."

"Banks realize that they too have to innovate. They can do so by taking over fintech companies, but these have risen sharply in market value and are expensive as a result. That's why more and more partnerships are being secured." That's a win-win situation for both parties. Banks gain innovation, while the fintech companies can profit from the wide network of client relationships that banks possess. ING Wholesale Banking has also established the ING Accelerator program (supported by PACE). In this way ING gives internal innovation initiatives the chance to effectively put their ideas into practice. At the moment there are two startups that are already in a test phase. And this is how the gap between two financial worlds is gradually bridged.

#### Valuefinders charts hidden capital

The rise of fintech companies is certainly noticeable in the bank's customer services department. But what's the situation in the world of large corporate banking? "At the moment it's a bit behind on digital innova-

tion," explains Bart-Jan Engelen. "That's why we started working with ING Wholesale Banking. We asked ourselves the question, how can we respond to the needs of companies and how can digital innovation play a role?" That resulted in Valuefinders, an online self-assessment platform that helps companies with on-the-spot evaluations of their financial value chain.

"More and more graduates and even top bankers get started in fintech companies. Why? It's innovative, and that appeals to open-minded people."

"Companies are continuously processing payments between people. Managing all of this is complex and can lead to errors, inefficiencies, and unexpected costs," adds Bart-Jan Engelen. "If companies don't notice these issues on time, it often leads to a demonstrable loss of income, and they rarely realize how it was caused. It's the loss of a sort of hidden capital, and a loss which companies are often not always aware of. In some cases specialized consultants can relieve the situation, but that costs time and money. Moreover, this kind of consultant often only provides expertise in one area, and you are immediately forced to bring in various other consultants to assist. Customers

don't want that; today they expect an integrated process, through which all their financial needs can immediately be brought online. That is precisely where we respond with Valuefinders' online scenario model. We analyze budgets, KPIs, and goals in order to spot hidden costs, risks, and opportunities in companies. The online scenario model also allows you to immediately compare your performance with the strongest competition on the market."

#### Realdolmen as a trustworthy partner

The building and hosting of Valuefinders.net happened with the integral participation of Realdolmen. "To think of a good idea is one thing, the technical execution of it is another thing entirely," says Bart-Jan. "That's why we went looking for a trustworthy partner. Considering that I already had prior contact with several people from Realdolmen, I was always going to confer with them. We had a good feeling together and the partnership was quickly realized."

"What originally began as an idea at ING Wholesale Banking has since expanded to a sort of stand-alone service. We're also very satisfied that we can bring this project to fruition with Realdolmen. Meanwhile, the platform has existed online for a year and we are expanding testing with a number of customers. The positive results that came out of these tests have ensured that this project has been accepted onto ING Wholesale Banking's Accelerator program. I think it's something that we can be proud of. In the meantime, we're continuously looking at what we can improve in our platform to further industrialize it in the future. And we want Realdolmen involved with that."

# WHY REALDOLMEN



Just like in many other sectors, digitization in the financial sector is set to have a significant impact. Banks and insurance companies feel that the business models within which they operate today are gradually beginning to waver and that there is a need for acceleration. They are coming under pressure to work with innovative technologies.

## WHY Realdolmen?

### NEW KID ON THE BLOCK, WITH HISTORY

Tim Claes: "Realdolmen is essentially the new kid on the block in the financial services sector. We are not a large international ICT player, nor are we a new startup. That means we want to offer the best of both worlds, by being pragmatic, constructive and proactive. By having a local presence and being close to our customers, and with the necessary clout to achieve the best results. We could be compared to the role of a sparring partner, a challenger. A sounding board with refreshing ideas and unbiased, objective advice that can really make a difference. That's what we want to be for banks and insurers."

Realdolmen may be the new kid on the block, but we certainly have a story to tell. Josef Szekeres: "Our expertise is certainly nothing new. Take, for example, RFlow, our solution for enterprise data management (EDM). It has been an established solution in the financial world for over 20 years. The fact that the product has been around for that long means that we allow technology to move with the times and adapt to the needs of today and tomorrow."

Tim Claes: Travi@ta, our CRM solution for insurers, also has a sound reputation in the financial sector, not only in Belgium but also around the globe thanks to our extensive partner network. What's more, the Single View Builder, a 360-degree view of customers and prospects, is a masterpiece of

### CHALLENGES

One of the priorities is the economic situation and the low interest rates. In addition, the increasingly strict legislation and regulations ensure disruption. Banks and insurers must therefore satisfy Basel III and Solvency II requirements, and introduce the more stringent GDPR rules concerning privacy and data protection. The introduction of PSD2 is also just around the corner. This European directive obliges banks to give third parties access to transaction data. Josef Szekeres: "As a result, new, non-banking operators can access the payments market and offer cross-banking services. The profitable nature of the financial institution is therefore coming under pressure, forcing it to explore additional business areas and define new collaboration models. What's more, the relationship between banks and customers will change, and perhaps even disappear."

The speed of technological changes may also lead to existing business models being reviewed. Customer satisfaction is one of the key benchmarks, although not the main one. Customers increasingly have high requirements and are increasingly making their voice heard. They expect a consistent service across all channels, which is fully adapted to suit them, and not the other way round. And this can be a problem, particularly for a sector that is known for heavy – and often outdated – legacy architectures. Yet consumer thinking has also permeated banks and insurers, as they are aware of the need to create a customer-driven business model.

We have all the skills to connect different technologies and solutions to each other in a 'connected' vision under one roof.

visualization techniques and ease of use." Josef Szekeres: "The power and added value of Realdolmen is that we can make generic technologies, such as the Microsoft Dynamics CRM in this case, customer-specific and then build customer-specific solutions ourselves. With us, it's not one-size-fits-all, but a tailor-made approach for the financial service provider. Single View Builder will also be offered in AppSource, Microsoft's app store. This is completely on trend with regard to microservices, where functional components are broken

down and marketed in smaller packages. Complex, monolithic solutions are no more; smaller scalable IP components that customers can try out faster and implement if desired are the order of the day. This is how we are trying to react to changing business models. It fits perfectly into our collaboration with Microsoft and the platform approach that the company is developing."

### MORE THAN JUST TECHNOLOGY

Technology is playing a major role in this transformation, but it must be put into perspective. Josef Szekeres: "Companies are no longer merely satisfied with a technological solution. From a partner such as Realdolmen, they expect advice so that they can make the right choices. It is not so much about the technology per se, but rather whether it can be used relevantly and whether it can contribute to a company's strategic aims. These are the ongoing adjustments that Realdolmen wants to make for its customers. What is the problem-solving ability of a specific technology and how can existing – as well as upcoming – trends cope with the challenges of today and tomorrow? Our specialists, as well as those from fintech companies, continuously scan the market for answers."

### CONNECTING THE DOTS

Tim Claes: "The technological enhancements are following each other at a fast pace. Niche solutions are no longer enough. Everything is interlinked. You must have the right people and expertise in-house to be part of the technological revolution. And that's the thing that makes Realdolmen stand out as an ICT integrator – we have all the skills to connect different technologies and solutions to each other in a 'connected' vision under one roof." Josef Szekeres: "That's where fintech startups often hit a wall. They excel with the solution they have built, but are not quite as strong at embedding the solution in the wider environment. They then lack the knowledge and range to cover all the interfaces and components."

### TO GET THERE, TOGETHER

The world is changing so fast that it's almost impossible to know, keep and do everything yourself. Collaboration and partnerships – that is the future. Josef Szekeres: "It has become clear that innovation should no longer just be sought in-house. By looking at customers' requirements together with other organizations, we may be able to develop new initiatives that we haven't yet thought of today. It is often said of data that the power is in combining it.

Realdolmen wants to play a facilitating role here."

Tim Claes concludes: "The financial services sector currently finds itself in turbulent waters, but Realdolmen wants to face the digital challenge head on, alongside the banks and insurers. Or, to put it another way: to get there, together."

**Tim Claes**  
Sales & Marketing Director  
**Josef Szekeres**  
Services – Healthcare – CEE



# CUSTOMER-CENTRIC

## banking and insurance

The banking crisis has fragmented the customer landscape more than ever. For a long time, consumers have no longer been customers at one bank and one insurer for all their accounts, mortgage, motor insurance, fire insurance, etc. At the same time, consumers expect an increasingly professional, individual approach in return for giving up their privacy on the worldwide web. Anyone who has taken out a new car loan does not want to receive advertising from the bank for cheap car loans or motor show tickets. Customers also expect added value from their bank or insurance broker. This is because they can find basic information on the internet for themselves.

The rapid changes in technology and the internet, as well as the ever increasing consumer power, have forced banks and insurers to move from being product-led to being customer-centric.

**FROM WEB-CLICK  
TO WEB EXPERIENCE:  
THE CUSTOMER  
COMES  
FIRST.**

### How do you, as a bank or insurer, become 'customer-centric'?

Until about 15 years ago, email and telephone were the main touchpoints between customer and supplier, and the supplier was the only one that could obtain information about products. Now potential customers do the majority of the work themselves before making a purchase: customers know everything about the product of their choice via websites, blogs and internet forums before they contact a potential supplier. In other words, the first touchpoint between supplier and customer is now the first web-click of these customers. It is therefore very important that your customers have the correct web experience from the first click, so that they don't surf to the next supplier straightaway. Other, rarer contacts who are yet to embrace the digital world must also receive the perfect experience if you don't want to lose customers instantly.

That's why a 360-degree view is of great importance – a bank will map all of its customers' key moments and offer a bespoke product that aligns with the customer journey and fits the time and point in life in which your customer finds themselves.

This may sound easy, but is actually rather difficult, particularly in the insurance sector where customers, brokers and insurance companies all have to work together. It requires integrated databases, technological expertise concerning geolocalization and the Internet of Things, for instance, as well as legal knowledge of compliance rules,

**THE 360-DEGREE CUSTOMER VIEW**  
is a prerequisite for companies to be successful today and in the future. The sooner a supplier is visible during the customer journey, the greater the chance of successful contact. A strong CRM tool helps you to get to know your (potential) customers better than they know themselves and to offer them a tailored response.

security and privacy, where MiFID II and Twin Peaks II are still fresh in the mind.

An example from the banking sector: your customer pays their bill in a restaurant using VISA and the balance of their account is insufficient. At that moment, the bank receives an alert and sends the customer a text message to transfer funds into their account from their savings. The perfect event-based solution in a one-to-one communication.

Other examples for the insurance sector are apps that link driving behavior to motor insurance premiums, and sensors on windows and doors that ensure fire and theft prevention (a 'connected home').



"You must give customers the feeling that you know them better than they know themselves, and always be there for them," says Olaf Hoppenbrouwers. Single View Builder is a powerful and user-friendly tool for this. It gathers information about customers and prospects from their click behavior to favorites and reproduces this information in color-coded graphs.

#### With the right CRM tool...

Travi@ta for Insurance Carriers is the CRM tool par excellence for putting the customer at the heart of your business. As an extension to Microsoft's standard CRM application designed specifically for the insurance sector, the software supports the channel from broker/insurance company to end customer, as well as the broker-insurer combination. Originally developed as a solution to monitor vendors at insurance companies, it is now a complete tool that, apart from sales monitoring, also has a marketing aspect in order to prepare campaigns and business plans for brokers, and updates all customer data centrally to build a 360-degree view of every customer.

A simple CRM tool is no longer enough for financial companies to be future-proof. One of the tendencies in the insurance world is the direct contact between the insurance company and the end customer. CRM for the financial world must therefore offer more than portfolio and contact

"Earlier we spent a considerable amount of time looking for information. Now, all the important information about brokers and sales figures are available in a single application. Our vendors gain two hours a week as a result." Noël Van de Velde, Baloise

management. Policies must be able to be managed, policy and claims balances calculated, regional campaigns established, and much more besides. Travi@ta for Insurance connects to a whole range of standard and tailor-made applications, which means the possibilities are almost endless for brokers and insurers. Single View Builder captures customers' and prospects' DNA to offer a 360-degree view, while Sales Journey Assistant supports vendors in their daily planning. Both are an integral part of Travi@ta, but are also available separately. Other potential add-ons include Power BI for business intelligence and Rflow for document management.

#### ...you can take your business to the whole world

Travi@ta for Insurance is a highly stable off-the-shelf product with plans for the future. The low-entry model, modern design and the fairly simple implementation make it an internationally renowned tool. Travi@ta is now already distributed via our partners in Portugal, Germany, Austria, Switzerland, Mauritius, France, Eastern Europe, Central America, Africa, the Middle East and the Asia-Pacific region, with new countries and regions being added every month. Single View Builder is now also available in English, Dutch, German, Portuguese, French, Bulgarian, Arabic, and many more.

The single views we now receive about customers and brokers are fantastic. Thanks to Travi@ta for Insurance Carriers, our customers can recognize trends in the market quicker, plan and work together more efficiently, and react fast to challenges."

Jorge Xavier, myPartner, partner for Portugal and Mozambique



### Trends in CRM

What trends do we see in the CRM market? **Mobile** CRM tops the list; everyone wants an application they can use wherever and whenever they like. Another nice example from the financial sector: e-banking has resulted in a large degree of self-service. Customers manage their accounts and cash flows themselves via tablet or smartphone. It therefore makes sense that when visiting the bank branch, they also expect to view and use the same screen together with their banking adviser, next to each other at the same table.

The same question concerning **self-service** is permeating the insurance world. Even

policyholders are asking to manage their policies themselves on their insurance company's or broker's secure platform.

This mobility stimulates the **omnichannel** trend. Today, more and more communication channels are becoming available: Twitter, blogs, Facebook. But the 'old' channels, such as fax and telephone, are also still going strong – for now, at least. This makes the structuring of data and solutions highly complex. Customers always want to receive the same answer, irrespective of the channel they use to ask their question. At the same time, they want the answer to be available at any time of day: in the morning, short and to the point on their smartphone; or in the evening, a more thorough explanation

**11,2 MILLION  
SUBSCRIPTIONS  
for online banking**  
**3,3 MILLION  
SUBSCRIPTIONS  
for mobile banking**

Figures from Febelfin 2016 for Belgium

with more time to read it on their PC. CRM must therefore be the main link and a tool where you can offer a tailor-made answer on any channel, at any time.



www.traviata.eu

Furthermore, the technology to support CRM in this regard is becoming more and more powerful. The launch of **machine learning** by Microsoft is a valuable addition to the 360-degree view offered by Single View Builder. Electronic communication from customers and contacts is automatically scanned for sender and content, allowing the message to be sorted into the right folder and reach the right person automatically. What's more, the content of the email or letter permits the customer's 360-degree view to be further refined.

Another major trend is the **cloud**. An increasing number of applications work in the cloud, which means that the timeframe between searching for and purchasing a solution has become shorter and the purchase is increasingly made outside the company's IT department. The sales department chooses its own CRM solution today and implements it tomorrow via the cloud, ready for use.

Finally, in connection with the cloud, we are seeing an extremely important trend, namely the **platform approach**. Inspired by collaboration and essential in the fight against the disruptive fintechs, Microsoft offers, by way of example, the Dynamics 365 platform – a stable platform that combines analysis (Power BI), machine learning (Cortana Intelligence) and the Internet of Things (Azure IoT) to form a powerful CRM tool which is also open to third-party apps. Travi@ta is ready for Dynamics 365 and the future of CRM! (Read more in the article Collaboration is the financial sector's insurance policy.)

**Olaf Hoppenbrouwers**  
Product Manager CRM for Insurance

### AUTOMATED PRICE CALCULATION FOR THE SMALL INSURER

The more detailed the 360-degree view you have of your customer and the more information you have at your disposal, the more personalized the quote you offer your customer will be. Calculating a tailor-made car insurance policy for your customer depends on many factors: gender, place of residence, age as well as past driving behavior, calculated averages, and more. The software required for such a complex calculation is often very expensive and therefore not always an option for the small insurer or broker.

Travi@ta for Insurance now offers a new standard module – a rule-based calculation engine specifically designed for the small, specialized insurer and medium-sized broker. With this new Configure Price Quote solution, every insurer can carry out personalized price calculations in their CRM tool.

### EFFICIENT FILE MANAGEMENT WITH TRAVI@TA FOR INSURANCE

You may have heard of dispatch systems that are used to send files from one department to another. They may still be used every now and then, but today's modern technology offers other opportunities for document management.

Even in the insurance sector, where today large amounts of paper are used, the digital march is – thankfully – relentless.

Travi@ta for Insurance offers a new module for integrated document management. Thanks to this module, you can scan documents, call them up from a hard disk or the cloud, and link them directly to the right file in the CRM tool. You can even take photos of a car accident on-site and upload and link them to the file in Travi@ta. A clean desk operation that substantially increases CRM users' efficiency.

**MACHINE  
LEARNING  
SUPPORTS  
YOUR CRM TOOL**

### EXPANDED CRM FUNCTIONALITIES FOR THE MEDIUM-SIZED BROKER

As a medium-sized broker, you may manage a sales team that works on behalf of your policyholders on a daily basis. A new module within Travi@ta focusing on commission and contract management gives you the option of calculating commission for your vendors and managing contracts within your CRM system.

# THE FUTURE OF FINANCIAL SERVICES: THE BANK AS A PLATFORM

SOLUTIONS AND APPLICATIONS - STRATEGIC ICT  
The future of financial services: the bank as a platform

Over the last decade, we have seen an evolution whereby certain sectors and branches of industry feel threatened by the so-called 'disruptive newcomers'. We've all heard of them: taxi companies that don't actually own taxis, but have a significant market share in the blink of an eye. The Ubers who, with their new business models, reshape the traditional landscape of established companies. They fully commit to the innovative potential of digitization and focus their business strategy explicitly on the customer and their experience. At the same time, there is also a new trend where customers themselves are increasingly at ease with digital platforms and determine – and even expect – how things are done.

## Renewed focus on the customer

The question is, how can banks best achieve this? The banks' traditional business model, in which the current account is often used as bait for other credit products, has been left unchanged for what seems like an eternity. Change is now taking place, partly thanks to digitization, which is also

soaring in the financial world. One of the driving forces behind this is the renewed focus on the customer, who increasingly wants to be served across several channels. They choose the device and channel that suit them at that moment: irrespective of when and where, be it in real-time, adaptive or personalized. Banks are now more aware than ever of the need to have a dynamic and agile front office that facilitates the customer's experience and ease of use.

## Fintech

Another driving force behind digitization is the increasing competition from fintech companies. Fintech refers to technology-driven companies that seek out, specialize in and perfect certain niches in financial services, such as payments and risk analyses, with innovative products and services. Large firms can be found among the fintech companies, but it is more often all about the startups. These newly established technology companies can approach the banks' customers in an agile, efficient and low-cost manner and force themselves in between the bank and the customer.

Banks have the potential to reposition themselves from a classic institution to a digital platform in which an API economy is crucial.

# THE BANK AS A PLATFORM

As a result, the financial institutions' value chains are coming under pressure.

The fintech companies are the Ubers of the financial services world. Banks must be aware of this and learn from other sectors where it seemed that the established firms were too slow for the Ubers of our time. Banks must make tough choices about the type of bank they want to be for their customers, because let's be clear: the bank of today is no longer the bank of tomorrow. Hendrik Albrecht: "As other organizations are busy trying to reinvent themselves, banks must do the same. Insurers are facing the same challenge. It all boils down to standing less on your own and working more with the advantages that networks and platforms offer. One of the challenges for the banks is the dual approach to the speed of the digital transformation. They

need to establish a structured approach that ensures speed in the digital front office as well as stability in core systems. This can be achieved by defining new collaborative models and opening up their data and systems to third parties."

## API economy

"From a technical perspective, data and systems are unlocked using application programming interfaces – APIs," says Hendrik Albrecht. "APIs are nothing new. They have been used for years to link software components within an organization. What is new, however, is that APIs are increasingly being made available to third parties – partners, customers and suppliers – as digital access ports. APIs act like glue in that they ensure systems can be integrated easily and in a secure, controlled fashion without the developers needing to know exactly how the other component works. The advantage is that you no longer have to build everything yourself, but can use APIs from third parties – plug and play, so to speak. This is how an ecosystem of applications is born, and it allows you to excel easily and expand the range of your services. This fits perfectly with the growing trend for open-source technologies, systems and processes."

## PSD2/XS2A as a catalyst

One of the driving forces of innovation in the financial sector is the PSD2/XS2A legislation. The revised Directive on Payment Services is an EU directive that obliges banks, as of 2018, to provide external service providers with access to customers' current accounts, as long as the customers give permission. In order to achieve this, the banks must build open-source APIs – and this in turn opens up the banks' traditional playing field to new players. According to the regulator, the use

of open-source APIs will also stimulate innovation and as such will be a catalyst for the digital transformation of banks.

## Play to your strengths

The ability of banks to adapt is the key to success. The best bank is the one that works hand in hand with the technology companies in a joint ecosystem in which the banks benefit from the technology firms, and vice versa. Given that the bank is in position to group together the best tech firms, it can use the best APIs as well offer the top APIs to its customers. The market, and therefore the customer, determine how the service is used or integrated, which is completely in line with the API philosophy where decentralization and specialization are the keywords. Each organization must contribute from where their strengths lie; no more, no less. Technology companies are agile and ensure innovative acceleration, but banks also have their advantages. Banks represent security and trust. They know their customers. Above all, they have years of experience with IT and are extremely good in areas such as compliance, security and privacy. The future of the financial world? Hendrik Albrecht: "Experts agree that partnerships and co-creation are the way forward, with one goal – the customer and their ultimate experience."

**Hendrik Albrecht**  
Division Manager The Connected Company

The ability of banks to adapt is the key to success. The best bank is the one that works hand in hand with the technology companies in a joint ecosystem in which the banks benefit from the technology firms, and vice versa.

# The FinTech REVOLUTION

As traditional banks work to improve customer service, FinTech firms are making significant inroads.

Source: World Retail Banking Report 2016, Capgemini & Efma

## THE BAD NEWS

Bankers **UNDERESTIMATE** the impact of FinTech firms ON THEIR CUSTOMERS



Nearly **2/3** of customers globally are using FinTech products or services

Bankers also **UNDERESTIMATE** how their customers **FEEL** ABOUT FINTECH SERVICES



FinTech offer **faster services**

**81%**

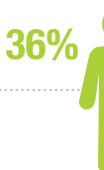


FinTech provide **a good experience**



**80%**

CUSTOMER



**36%** **40%**

BANKER

Banks are starting to see FinTechs as more than just **COMPETITORS**

Banks **perceive** FinTechs to be...



**PARTNERS**  
**65%**



**COMPETITORS**  
**28%**



**IRRELEVANT**  
**7%**

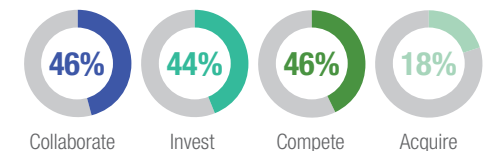
BEST **STRATEGY** FOR BANKS

**Banks** have  
- Customer trust  
- Large customer base  
- Expertise with regulators

**Fintechs** have  
- Agility  
- Innovation  
- Ability to attract digitally-savvy customers

**COMPETITION IS EVOLVING** INTO ACCEPTANCE, AS BANKS SEE **OPPORTUNITIES** for collaboration

Banks' strategies for competing with FinTechs



**96%** of bankers agree the industry is evolving towards a digital eco-system

**87%** say their core systems cannot support it



Since last fall, Uber has been trialing around a hundred self-driving cars in Pittsburgh. And at the end of August, nuTonomy put six self-driving cars through their paces in tests on public highways in Singapore.

This is a good example of what is happening in today's banking and insurance world. However, who is the insured in these taxis – the non-existent driver, the car itself, or the firm Uber as a whole? Are you, as an insurance company, ready to soon tackle this technological and financial challenge in the wake of Uber and nuTonomy?

In the traditional, and sometimes cumbersome, financial sector, innovations have for a long time made very small gains. Giant leaps in technological advances didn't always seem realistic, and the sector was assured profit in the traditional business model. Yet the banking crisis in 2008 and the recent monetary policy with zero – and even negative – interest rates have shaken the financial sector to the core. And the increasingly fast technological changes that are being embraced by the public in large numbers are putting the banks' and insurers' traditional business model under heavy pressure.

#### Challenges in abundance

Traditionally, each bank department had their own IT personnel. Over the years, this has delivered a whole host of customer information which cannot be linked together in any shape or form, making it tough for the banks to form a single view of their customers. The same customer, however, requires an increasingly large amount of digital flexibility. They want the same experience that they have with other service providers on their smartphone in every aspect of their lives, including opening an account or taking out car insurance.

New technologies, along with their suppliers, are popping up all over the place. Disruptive, non-banking players are taking a share of the market away from banks and insurers. In the supermarket, you can put a loan in your shopping cart, loans are agreed peer-to-peer and you can call on crowdfunding to get your new coffee bar off the ground. ApplePay is already on the mobile payments market, and Google Hands Free is in the testing phase. This new competition, of which the Apples and Googles perhaps have more capital at their disposal than the traditional banks, are not subject to banking legislation, which allows them to enter the market quicker and in a more flexible manner, unhindered by strict regulation.

How can a traditional bank deal with these challenges and how can it guarantee its place at the table alongside the new competition in the near



**COLLABORATION**  
is the business model  
OF TOMORROW

# COLLABORATION is the financial sector's insurance policy

future? And how can an IT supplier in the financial sector offer a solution to these challenges?

**Platform approach and collaboration**

"Digital transformation requires smart systems tailor-made to every branch of industry, every company, and every microtask carried out by each individual. Systems that can learn, expand and adapt to changes in the world and corporate life." This embodies how Microsoft is planning the business model of

According to McKinsey, the insurance sector worldwide is worth approximately four trillion dollars. A market of this size, with so many imperfections and latent and obvious requirements, naturally attracts investors, entrepreneurs and large firms from outside the insurance sector.

Source: <http://www.emerce.nl/achtergrond/zeven-smaken-van-fintech-in-verzekeringen>

the future: collaboration and partnership. At Realdolmen, we work together with various partners who are leaders in their respective fields. And as an IT supplier, we capture your business and IT requirements, work with the right partner to find a tailor-made solution, or enrich existing solutions by adjusting them to your sector-specific needs.

One such requirement is an app. As a rule, apps make our lives easier, and we therefore want the same user experience in our daily routine. Microsoft also understood this need, and this fall launched Microsoft Dynamics 365 and Microsoft AppSource. By way of comparison with Office 365, Dynamics 365 is a platform which offers bundled CRM and ERP solutions. Third-party suppliers can build specialized apps for this platform and market them in AppSource, Microsoft's app store. Via AppSource, Realdolmen markets, among others, Single View Builder, an app which visualizes data from every MS-CRM system in an attractive and clear way.

This platform approach from Microsoft is just one example of the collaboration with Realdolmen: Microsoft offers a stable platform, and tangible tools are developed by specialists suited to the users' microtasks. In the northern hemisphere, Realdolmen is one of the few IT providers with extensive knowledge of CRM in the financial sector. The CRM for Insurance solution is an absolute must for any bank or insurance firm wanting to be customer-centric. The partnership between Microsoft and Realdolmen is therefore setting the tone for new business models.

Another example of collaboration is the Insurance Executive round table, an idea that has been a fixture at Realdolmen for some

time now. Customers from the insurance sector and representatives from Realdolmen meet regularly to discuss the market. Insurers exchange experiences, Realdolmen understands the IT-related needs and starts looking for ways to improve the CRM for Insurance applications. In time, we even see this blossoming into real co-creation.

**WOULD YOU LIKE UBER as a customer?**

The result? The customer experience, and no longer the bank or insurer, today determines the benchmark. Customers' high expectations compel companies towards creative collaboration models between ICT suppliers, banks, insurers and third parties. Only by doing so can the financial sector secure its place at the table in the future.

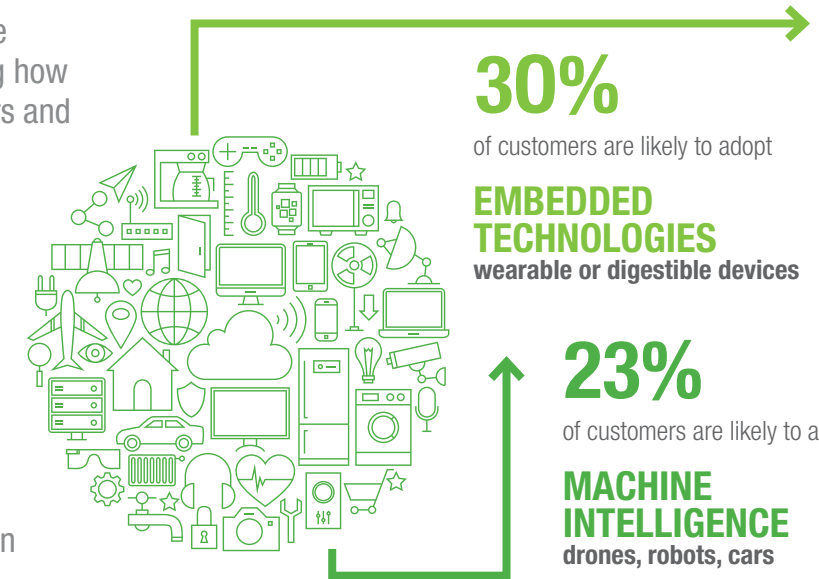
- Frederic Pieters**  
Business Development Manager Microsoft Dynamics 365 (CRM)
- Marc Loeys**  
Business Development Manager Microsoft Dynamics 365 (AX)
- Bart Moens**  
Domain Manager Data Insights
- Josef Szekeres**  
Services – Healthcare – CEE

**World INSURANCE report 2016**

Globally, **47%** of all customers have positive experiences with their insurers, but only **34%** of GEN Y CUSTOMERS do.

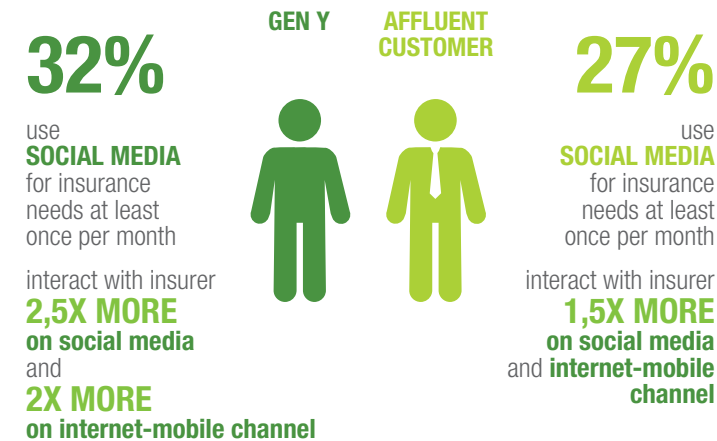
Connected technologies and the Internet of Things are disrupting how insurers connect with customers and underwrite risks....

**34%** of customers are likely to adopt **CONNECTED ECOSYSTEMS** Smart homes & buildings

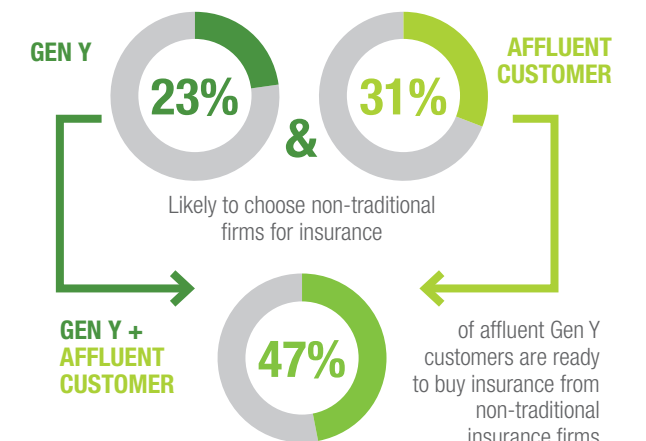


... and driving the transformation of the insurance industry.

Gen Y and affluent customers are more demanding in the way they connect with their insurers



These affluent, technology-savvy customers may easily turn to non-traditional firms for insurance



Source: World Insurance Report 2016, Capgemini & Efma

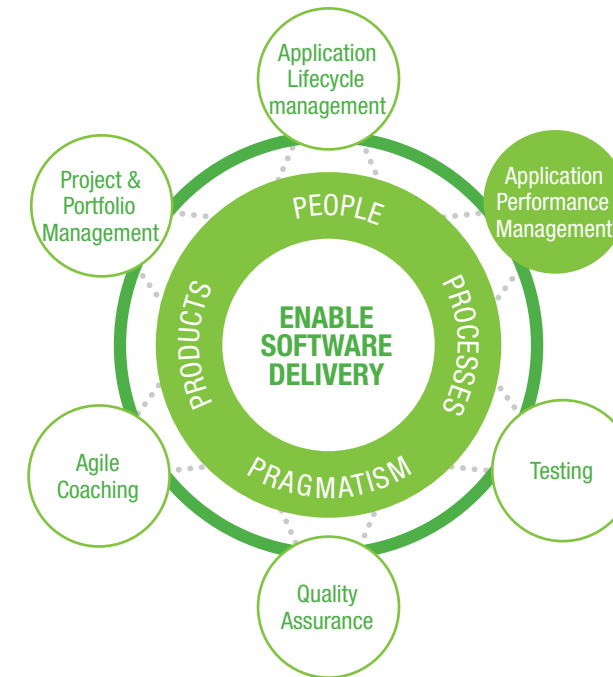


# PERFORMANCE TESTING allows your bank to grow

Application performance management – a term to describe how crucial performance has become for modern applications, anytime and anywhere. That sounds like a demanding requirement, but in reality it has grown into the standard. Today's consumers can choose from an abundance of apps. If your online shop's app isn't fast enough, take a look at the competition in the app store to see if a new, better and quicker app is available. This mentality is slowly permeating every area of our lives, even when you manage your banking business via PC, tablet or smartphone.

Digital disruptions, however, are shaking all sectors to their core. That's why the financial sector is focusing its efforts on digital transformation; forced to do so by increasingly strict regulations that attach great importance to the quality of service provided, software testing is more important than ever.

## SOLUTIONS AND APPLICATIONS - OPERATIONAL ICT Performance testing allows your bank to grow



### KBC is a role model

At KBC, one of the financial pioneers in digital transformation, Realdolmen is playing a vital role alongside Dynatrace in establishing performance management. Bert Jagers: "We measure and test the performance of

company-critical applications, including KBC's online banking platform."

Historically, detecting the cause of performance problems is not always easy. An APM tool helps to locate the problem thanks to transactional monitoring and detecting problems on a coding level. Bert Jagers: "All transactions going through the applications are monitored by the tool so that we know in real-time whether they are performing well. As soon as a problem rears its head, we see it immediately and can help the development teams to get to the root cause quickly. We do this proactively in the application development phase. In this way, we support the development team in solving performance issues quickly and efficiently before an application goes into production. And afterwards, too, we monitor the performance in production in real-time, resulting in a significant gain in efficiency and effectiveness for

the development teams, through which KBC saves a lot of time and money in delivering their applications."

### The value of testing in the financial sector

The recently announced redundancies by AXA's insurance arm coupled with the heavy investment in digitization show how important the digital transformation is for the financial sector to maintain its market position. Banks and insurers are also investing heavily in IT. The quality of IT systems is therefore crucial because today's consumers are increasingly demanding. In addition, a sector whose main activity is financial transactions cannot afford mishaps in the performance, functionality and security of IT systems. Increasingly strict regulations, including Basel III, are forcing banks and insurers to renew their technologies to remain compliant. This not only requires investment in terms of purchasing software, but also testing it. Functional testing, test automation, security testing and performance testing are therefore the four most important areas that will help the financial sector to secure its digital future.

**Bert Jagers**  
Senior Unit Manager Software Delivery Enablement Services

POOR IT SYSTEMS  
CAN DRIVE YOUR CUSTOMERS  
towards the competition

# DIGITIZATION & STRICTER REGULATIONS put identity and access management in the limelight

Identity and access management (IAM) is all processes and technologies that together facilitate the management of digital identities and their rights in an automated manner. IAM therefore enables the right person to have the right access at the right time. That is the traditional definition. IAM has already existed for more than a decade and thanks to the recent disruptive trends such as the cloud, social media, mobile computing and the Internet of Things (IoT), more people, applications and 'things' are connected than ever before. In today's world, an identity is no longer an individual or a legal entity, but just as much a sensor in a truck or a mobile app. To be able to cope with all these technologies in different locations, the role of IAM has evolved into a flexible platform architecture, built on open standards and

APIs. IAM is becoming a central hub that is capable of connecting everything together.

## Identity means business opportunities

Based on digital transformation, IAM is moving towards new horizons. The classic B2E and B2B models are now reaching the consumer market (B2C), opening up a whole new area where user-friendliness and an integrated approach are the keys to success.

When identities are linked to relevant data, valuable information appears – which can translate into a win-win situation for the customer. The financial market can take advantage of this, too, by launching products

that provide customers with context-driven information. As a result, your bank can, for example, spontaneously provide you with information about your available balance, taking account of any scheduled payments,

Is your bank  
**READY**  
FOR PSD2?

57%  
OF BELGIANS FIND  
PERSONAL  
DATA PROTECTION  
EXTREMELY IMPORTANT



ONLY  
1/10  
SAY THEY  
DON'T WORRY ABOUT IT



According to a 2015 survey by Febelfin on privacy and big data, it appears that five **conditions** are attached to the "use of data" for many Belgians. There must be a clear benefit (**win-win**); the information must remain **internal**; the company must remain within its **core business**; there must be **transparency** in terms of what will happen with the information; the customer must have a **choice** and can decide for themselves what happens with the information.

Source: [https://www.febelfin.be/sites/default/files/InDepth/profacts\\_febelfin\\_privacy\\_en\\_bigdata.pdf](https://www.febelfin.be/sites/default/files/InDepth/profacts_febelfin_privacy_en_bigdata.pdf)

when you go to the till in the clothes shop to buy a new outfit. Or you may receive a discount voucher by text for the perfume store while waiting to board your flight at the airport.

## IAM and regulation

At the same time, banks must constantly ensure that everything remains secure and can be trusted. Customers are very wary of how their personal (financial) data is processed and shared, in particular. The General

8/10  
BELGIANS  
ARE AFRAID OF DATA ABUSE



82%  
OF BELGIANS  
CONSIDER THEIR  
ACCOUNT  
NUMBER  
TO BE SENSITIVE  
INFORMATION



62%  
OF BELGIANS ARE  
IN FAVOR  
OF SHARING PERSONAL DATA  
WITHIN THE SAME COMPANY.



Passing information on to other companies is seen in a very negative light

Data Protection Regulation (GDPR), which is due to come into force in all EU member states in 2018, is an important milestone in this regard. The GDPR focuses on the individual, and IAM systems are a good match to this end from a technological perspective. Imagine, for example, giving explicit authorization and the management of said authorization via OAuth2. User managed access (UMA) builds on this by applying the Privacy by Design principle, by giving the individual concerned the choice as to who may use their information or application.

To give a specific example: "Allow only my accountant with the email address boekhouder@gmail.com and via the TaxApp client to see my bank details if they are securely logged on and as long as the tax period has not come to a close."

The imminent PSD2 directive is also a significant factor, as it will oblige banks to open up their data to third parties. IAM and API management will therefore ensure that the right individuals can be associated to the right access rights. This is just another reason for the banking sector to develop applications tailored to customers before the disruptive fintechs beat them to it.

## Tailor-made partnerships according to your needs

At a Belgian bank Realdolmen is replacing, in partnership with Evidian, the existing IAM system developed in-house with a flexible platform that is ready to accept modern integrations. Realdolmen is not only ensuring the delivery of the platform, but is also responsible for its maintenance and further development. As part of our vision for IAM, we act as a long-term partner who not only preserves the status quo, but also works proactively alongside the bank to bring further IAM projects to fruition. Alongside our partnership with Evidian, which dates back to 2008, Realdolmen also works with other technologies such as WSO<sup>2</sup> (open source), Okta (IDaaS) and Microsoft Azure.

**Kenny Willems**  
Security Architect

# PRIVACY & SECURITY IN THE CLOUD

WHAT'S THE SITUATION  
REGARDING THE RULES?

On May 24, 2016, the General Data Protection Regulation (GDPR) came into force. The new regulation replaces Data Protection Directive 95/46/EC from 1995, and aims to harmonize the fragmented data protection policies of the European Union member states. It is a response to increasing globalization and technological developments such as the cloud, mobile products and social media, where personal information is increasingly spreading outside company walls and is becoming increasingly difficult to protect as a result. A good data protection and privacy policy is therefore essential. Companies have two years to make the necessary adjustments according to the requirements of the regulation, before the GDPR comes into effect in all EU member states on May 25, 2018.

## Accountability

Stefan Smeets: "The European regulation is not completely new. For example, it takes a number of principles from the 1995 data protection directive, such as the principles of legality, finality and proportionality. There are, of course, also a number of significant changes. One of the fundamental points of the new legislation is the principle of accountability. Companies must be able to show that they fulfill the requirements of the GDPR and that they have taken certain steps to ensure compliance. When the processing of information entails a high risk, companies are obliged to assess that risk using a Data Privacy Impact Assessment (DPIA). Some companies will also have to employ a Data Protection Officer (DPO) to maintain an overview and draw up standards. Furthermore, any data leaks must be reported to the regulator within 72 hours. Above all, the rather voluntary nature of the previous directive will disappear, with





The European Union Agency for Network and Information Security on the secure use of cloud computing in the financial sector: if the rules and regulations were clear, many more players would automatically take part.

penalties for breaching the legislation amounting to up to 20 million euros or 4% of the company's overall turnover – whichever is highest."

#### Privacy by Design en Privacy by Default

The law also introduces new concepts such as the right to be forgotten, Privacy by Default and Privacy by Design. With the right to be forgotten, the individual concerned can, in certain situations, submit a request to have outdated or incorrect privacy-related information about them deleted. Privacy by Default and Privacy by Design specify that when developing IT systems and services, the highest level of privacy must always be taken into account, and that privacy must be an integral part of the development right from the start.

#### The law applies equally, whether on-premises or in the cloud

The GDPR rules apply irrespective of the means used to process personal data, be it on-premises servers or in the cloud. Stefan Smeets: "The biggest change with the new legislation relates to responsibilities. Both the data controller – responsible for processing – and the data processor – as the processor of personal data – are now responsible and liable for respecting the GDPR. If everything is located within your own four walls, this presents fewer prob-

lems. But how realistic that is in the current digital environment, in which cloud technology has become increasingly widespread and the classic customer-supplier relationship is becoming blurred, is unclear."

#### Location, location, location

The GDPR sets out that controllers and processors must know where personal data is stored and processed. In terms of the cloud, they must also be able to show that the data they store and process in data centers, fulfils the requirements of the new European legislation. Stefan Smeets: "For the public cloud, this could be a problem, mostly because this often relies on overseas – say, American – cloud service providers, where privacy is not necessarily guaranteed. We have the Privacy Shield to protect European personal data from mass surveillance by the US intelligence services, but that doesn't go as far as the EU legislation. Here you're talking about privacy, data protection and regulation that surely has a negative effect on a critical sector such as the financial sector."

Large players, such as Microsoft Azure, are aware of this fact and are taking the initiative to ensure that European data effectively stays on European soil. The company already has several data centers in Europe, but has now commissioned two additional data centers in Frankfurt am Main and Magdeburg. What is new, however, is that these data centers are managed entirely by T-Systems, a subsidiary of Deutsche Telekom. By placing the data under the management of

a German company, the data is automatically subject to German and European law, and as a result can no longer be seen by the American government. With this service, Microsoft wants to ensure the integrity and confidentiality of European data and is specifically targeting sectors where reluctance concerning the public cloud is the most prevalent, such as in the financial sector.

#### Adopting the cloud in the financial sector

A report from the European Union Agency for Network and Information Security (ENISA) on the secure use of cloud services in the financial sector confirms the reluctance and the low level of maturity regarding the adoption of cloud services in the European financial sector. Stefan Smeets: "Financial institutions and national supervisory bodies recognize the financial and technical advantages of the cloud, but they remain cautious when it comes to the risk of losing control of their data." Figures confirm the low level of maturity – only 50% of the financial service providers surveyed have a clear cloud strategy. 42% have no cloud strategy or are currently in the early stages, while 8% have a fully non-cloud strategy or have neither the time nor the resources to develop such a strategy.

The majority of the financial institutions who do have a cloud strategy use both a public and private cloud. The services that are most often migrated to the cloud are those with a low risk, such as test environments, software development and email management. The most reluctance occurs when it comes to outsourc-

## SOLUTIONS AND APPLICATIONS - TACTICAL ICT

Privacy and security in the cloud:  
what's the situation regarding the rules?



ing core banking services to the cloud. The study shows that for most financial institutions, the private cloud is the most suitable form of cloud computing, primarily due to concerns surrounding privacy and compliance. Even the national financial regulators recommend the private cloud over the public cloud. 23% of the regulators asked believe that public cloud services should never be used in the financial world.

According to the cloud providers surveyed, many preach caution regarding the misconceptions surrounding the technology. Many supervisors are strongly against using the cloud as they feel that cloud providers are not transparent enough. For the providers, that is an incentive to strive for increased transparency and to help organizations by providing them with better insight into the security features of the different types of cloud.

### Recommendations from ENISA

Stefan Smeets: "What makes ENISA's study interesting is the recommendations provided by the researchers, not only to the financial institutions, but also to the national financial regulatory bodies and the cloud service providers. These three parties must work together to ensure the cloud is well understood, so that banks can make full use of the advantages of the cloud, while taking privacy and security into account." One of the recommendations is that the regulators develop best practices and standards regarding cloud governance and risk management on a national level. They should also define minimum requirements in terms of security and privacy to be applied when using cloud services. Financial institutions are advised to develop a cloud strategy and to bring this in line with their corporate risk assessment. Like the regulators, they receive the recommendation to acquire better knowledge of cloud computing. For their part, the cloud service providers should increase their efforts to offer transparency and certainty towards the financial institutions and the regulators. Together with the

European institutions, they should launch information campaigns to better inform the financial institutions and regulators of the security aspects, as well as the risks and advantages, of cloud computing.

### Harmonization and uniformity

Stefan Smeets: "Finally, the researchers are calling on the European institutions and the national financial regulatory bodies to continue working on harmonizing the legislation and regulations within the European Union. This is an important recommendation when you know the reluctance towards the cloud in the financial sector is, for the most part, due to the uncertainty surrounding the legal obligations." There is, for instance, no cast-iron rule regarding when the national regulatory body should be informed of migration to the cloud. For 33% of the regulatory bodies who took part, it is a requirement that they are kept up to date. Other regulatory bodies only wish to be notified of a migration to a public cloud or when it concerns sensitive information or critical services. A small minority expect to be notified on a voluntary basis. Due to a lack of formal guidelines for cloud-based services, it is not always clear precisely what information should be provided, which has a negative – and sometimes stalling – effect. Stefan Smeets: "The report concludes by saying that if the rules and regulations were clear, many more players would automatically take part."

**Stefan Smeets**  
Unit Manager The Connected Company

## SOLUTIONS AND APPLICATIONS - TACTICAL ICT

Data as the starting point for successful transformation

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Real Solutions, the digital transformation partner for businesses, has developed new data management tools that help facilitate process automation. With RFlow, Real Solutions helps organizations become more efficient, no matter what problem they are challenged with.

Switching to digital enables a business to make optimal use of all the data at its disposal with a view to automating its processes, making them more fluid, improving communication and creating added value. To help companies meet new digital challenges, Real Solutions has deployed extensive expertise and developed outstanding solutions to facilitate data capture, collection, processing and distribution. "Our objective today is to create intelligence on all data flowing through the company, to improve organization and communication and make all its processes much more efficient," says Eric Fornacciari, Sales Manager for Real Solutions.

### Creating intelligence from data

With RFlow, Real Solutions helps its clients reorganize an entire activity based on better use of incoming data or data generated in the company. The aim is to achieve immediately noticeable performance gains. "Data is obviously central to any transformation process. Our expertise has traditionally focused on providing support to companies with information management and archiving. Today, our solutions go much further, making it possible to create intelligence or to completely overhaul processes."

## REAL SOLUTIONS,

subsidiary of Realdolmen in the Grand-Duchy of Luxembourg, distributes, implements and ensures the maintenance of IT solutions and management software packages since 1988. Thanks to its local presence to best serve the interests of its customers, REAL Solutions is generally regarded as the front-runner on the Luxembourg market, in particular in the financial sector.

An Enterprise Data Management solution, RFlow is used to capture and collect all incoming data as well as data created within an organization and to identify its nature in order to improve processing, create value-added information for users or provide input for various processes. "Whatever the entry channel - a scanned paper invoice or an e-mail, for example - the solution identifies the data accurately and processes it as part of a defined workflow," says Eric Fornacciari. "RFlow, connected to the company's databases, becomes the organization's one and only information hub. But in addition to data management, it can also be used as business management software for various purposes, such as customer relationship management (CRM) or enterprise resource planning (ERP)."

### Automating workflows

The solution occupies a central position in the company and can be used to automate many processes. "Depending on each player's needs, RFlow can analyze data accurately, process the information and automatically activate a series of actions," says the sales manager. With a scanned or e-mailed invoice, for instance, the solution can easily identify the following: the

addressee, the supplier, the amount, the payment deadline, the nature, various scores and so on. The invoice validation process can be automated in terms of the various data. RFlow forwards the items to the individuals in charge of validating the invoice, based on the information identified. Working with a user interface, the person in charge can easily review and either validate or reject an invoice. If it is validated, payment can then be automated using the solution.

### A mobile solution

"With a single user interface, accessible from any type of device, any time and any place, RFlow allows better follow-up of tasks and facilitates access to value-added information created from the data collected. Employees can also access useful information much more quickly via the interface," adds Eric Fornacciari.

The solution has already proven its worth. A family office has implemented it to improve the production of its asset management reports, regardless of the nature of the investment. "In the world of wealth management, certain assets are structured and others less so. Some are tangible, others are not. With our

solution, all such data can be collected, structured and processed so that accurate reports can be compiled automatically," adds the sales manager. For a retail bank, RFlow has enabled the automation of paper bank transfer slip management. The software is used to identify handwritten information on the scanned document and to automate the transaction process.

### Addressing business problems

Data from various sources can also be added into the system, using RFlow to create value-added information useful for any number of purposes. "It all depends on each user's needs. We are seeing today that, over and above the technical aspects, it is essential to be able to deal with business problems. In the past, our contacts were mostly IT managers. But requests are now coming more and more often directly from company management. Only later do we interact with IT departments."

Achieving an efficient digital transformation requires taking the business problem as the starting point and coming up with the best ways of addressing it. Real Solutions, with its expertise in all system environment layers, from infrastructure to software solutions,

provides quality support to enable its clients to take advantage of the opportunities offered by the technology. "Our consultants can deal with complex problems and implement digital transformation projects that accurately address business needs, at the departmental level or for the company as a whole. The technical challenges must be considered with the necessary critical distance in order to implement cross-cutting solutions. It is essential to carefully consider the way the stakeholders in a department or an organization function together and the origin of the data they use."

### Digital transformation leverage

Real Solutions has developed real digital transformation leverage with RFlow. Nowadays,

everyone needs to more efficiently manage the documents and data that enter and exit the company, to provide input for processes or to create intelligence. RFlow alone makes it possible to tackle numerous digital challenges. "At the administrative level, our solution can be used for all procedures," says Eric Fornacciari. While it can operate autonomously, it can also easily be interfaced with other environments and tools, such as Odoo ERP, on which we have based a number of developments. Together, they enable every business to move fully into the digital era."

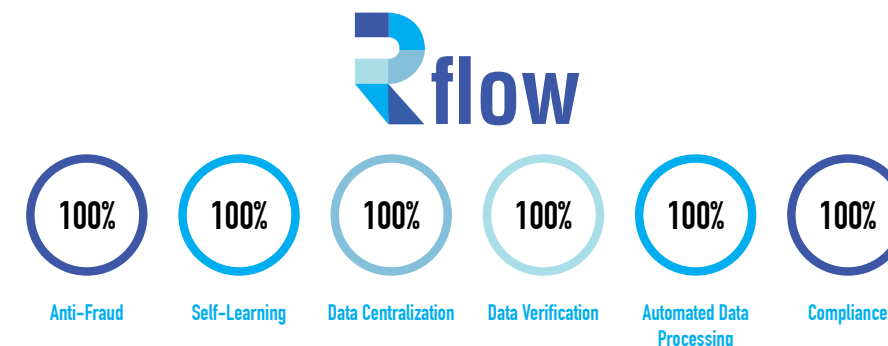
### Users at the heart of projects!

Today, Real Solutions can capitalize on a good deal of feedback from various digital transfor-

mation projects. One of the key lessons learned is that the risk of failure of this type of project lies in the resistance to change among end users, whether internal to the organization or external, when it comes to implementing new business models connected to digital platforms (web and mobile in the broad sense). It has been clearly demonstrated today that control over customer acquisition channels does not guarantee a sufficient conversion rate. In addition to activating appropriate Change Management methods, Real Solutions has adopted the LEAN approach in its transformation projects, which was particularly the case for the design of the Front (Web and Mobile) layers of the latest version of the RFlow platform (LEAN UX approach).

End users are thus deliberately placed at the heart of each project from the start, in order to be able to permanently adjust the alignment to match their needs and concerns with the technology solutions put in place, while optimizing user-friendliness to encourage or even guarantee adoption of the digital platform.

Source: Sébastien Lambotte for ITnation



# BLOCKCHAIN: A REVOLUTION, OR EVOLUTION?

Those in the know compare blockchain and Bitcoin with the rise of the internet and email in the nineties. Some believe these to be the real game-changers, and even think they have more of an impact on our economy and society than the internet and email have ever had up to now. They have the potential to turn the role of the traditional trusted third party completely upside down. According to the World Economic Forum, the technology will reach its tipping point by 2027, and 10% of the world's GDP will be stored in blockchain technology. That sounds pretty spectacular, but what exactly are blockchain and Bitcoin?

## Digital currencies, and more besides

In short, Bitcoin is a digital currency, a form of programmable, electronic money, while blockchain is the open-source digital ledger

According to the World Economic Forum, blockchain technology will reach its tipping point by 2027, and 10% of the world's GDP will be stored in a blockchain network.

(or distributed ledger) in which all Bitcoin transactions are logged in a secure and reliable manner. Stefan Smeets: "Bitcoin was the first – and perhaps the most well-known – example of a blockchain application, but blockchain is not only suited to exchanging virtual money. It goes much further than that. Blockchain can facilitate transactions between parties for anything to which a value or right is attached. For example, think of shares, loans, deeds, permits or contracts."

## Peer-to-peer and local

A blockchain is essentially a peer-to-peer network of computers, so-called hubs. Each transaction between the hubs must satisfy the blockchain protocol in question. Their strength lies in the fact that all transactions between different parties are dealt with individually and without the intervention of an intermediary, such as a bank, notary or government. As a result, two parties who do not know each other can still work together in a secure and reliable manner.

Anyone who wants to take part in such a scheme can do so with just an internet connection and email. And just like the internet and email belong to all of us and no one individual at the same time, so blockchain platforms are owned by one and all. This applies all the more so for public blockchains. With private blockchains – ones which are established by and between a group of organizations – computers must first receive permission to act as a hub. In some circles, private blockchains go against the original idea behind the principle, but they can be

a good alternative for banks and governments, for instance.

In actual fact, a blockchain can best be compared to a spreadsheet. Every hub has an exact copy of the list and amendments are shared directly over the network, resulting in everyone having the same information at all times. Sharing, in itself, is nothing new; but one thing does make a blockchain rather unique: transactions are anonymous and participants can only add rules or transactions to the bottom of the list. Modifications or rogue manipulations of earlier rules added are not possible. So-called 'miners' use cryptographic puzzles to build in the necessary security and protective measures in order to prevent copies and fraud.

## Blockchain 2.0: smart contracts

In the meantime, blockchain has since gone further than simply facilitating transactions and saving data, with it now being possible to set conditions for certain transactions. Stefan Smeets: "One of the interesting, and perhaps even the most disruptive, blockchain applications are the 'smart contracts'. A smart contract is a piece of software that is activated on the blockchain and ensures the contractual conditions stipulated for a transaction are executed. Certain commitments must be met to allow a transaction between two parties to go through. If these are not met, the transaction is not executed. The data and software are stored unchanged and mandatorily executed on the blockchain. This takes place

autonomously and without the intervention of third parties."

Smart contracts are a new way of processing transactions in which digital streams can be established in a secure and reliable manner. Compliance is built in up front and the parties do not need to go through any red tape. In this way, for example, crowdfunding agreements can be concluded with watertight guarantees for all investors and stakeholders concerned. "With blockchain, we can make sure that certain criteria are met and, according to a majority opinion on the network, without a controlling intermediary and without data being influenced or manipulated from the outside. Think, for instance, of the increasingly smart services and products that are based on behavior, such as in the insurance sector. In-car sensors measure the driver's behavior behind the wheel and determine the amount of the car insurance," says Stefan Smeets. "Reputation systems, which collect and determine opinions regarding quality, are another domain in which blockchain can be applied."

He continues: "The technology is not standing still, and the application possibilities for blockchain are incredibly diverse. We are seeing a move away from all kinds of solutions based on cryptology, game theory and blocks, yet others are founded on other rules which allow them to address and solve very specific problems. For example, at Realdolmen we are working on an idea for a track-and-trace system for concert tickets to combat ticket fraud. Here, it's about tackling fraud where a large amount of tickets are

bought online using fake profiles, but with real people's details. The tickets are then sold on for crazy prices to often duped or unwitting buyers. With our solution, the transaction chains are perfectly traceable."

## Revolution or evolution?

Will blockchain cause certain processes or business models to disappear? Stefan Smeets: "It's still too early to talk about winners and losers. Technology is currently still being experimented with, as the commitments are so high. But, in fact, it's still very early days." What is true is that blockchain – like the internet – has brought about change, and therefore requires mentioning early on in the innovation cycle. Given the 'trust' in the technology is deep-rooted, many sectors that consist of trusted third-party businesses, such as banks, may be turned upside down if they do not react on time.

According to experts, the innovative potential of blockchain will ensure that the technology will be more evolutionary than revolutionary, partly thanks to the strict legislation and regulation in the financial world. It's all about finding the right application areas. Stefan Smeets: "International payment transfers, with an inefficient administrative process and often high costs, is just one area in which blockchain technology can be applied and huge gains made. Yet the technology certainly offers possibilities to take a closer look at other banking products and processes once again and to optimize them. In all likelihood,

new products will also come onto the market. There are also banking sectors in which blockchain technology is less suitable, for example, super-fast transactions such as payments. At least for now, as technology is constantly evolving."

The long-term consequences will be serious not only for the banks, but also for other professional intermediaries such as insurers, lawyers, brokers and notaries. But that doesn't necessarily have to be seen in a negative light, as analysts at the Spanish bank Santander InnoVentures, one of the largest in Europe, estimate that by 2022, banks will be able to save between 15 and 20 million dollars in costs annually thanks to efficiency gains through blockchain. Stefan Smeets: "The disruptive nature of blockchain rather revolves around making sure you don't miss the boat."

**Stefan Smeets**  
Unit Manager The Connected Company

"Banks are facing a huge dilemma. They must be seen to find the right balance between meeting all legal and regulatory requirements, on the one hand, and on the other the need to develop new commercial activities to secure their competitiveness in the future."

Source: KPMG / <http://bit.ly/KMPG-PR1606>

# THE ROLE OF IT OUTSOURCING for banks in the 21st century

Gartner predicts that, by the end of 2019, 25% of retail banks will commission a startup provider – the so-called fintechs – to replace legacy and mobile banking systems. This is largely due to the fact that old legacy systems no longer offer customers the digital experience they require.

Yet you cannot simply ignore the existing infrastructure. That's not only a very expensive move, as the existing systems give you, as a bank, a huge amount of valuable information to enable you to form a 360-degree view of your customers and therefore improve the customer experience in the long term. At the same time, the stricter European privacy legislation doesn't make it easy for banks to simply go their own way with the results of data analyses.

In short, banks are facing the significant challenge of technology and regulation, as well as connecting both the old and new systems in the best possible way.

As a financial institution, how can you push forward with digitization in a cost-effective manner and increase your business, without radically breaking away from the past?

## Agile, together

Outsourcing your operations is the first part of the solution. How much time do your highly trained IT specialists spend on keeping the legacy systems going? Probably more than you'd like. If you outsource these tasks to a trusted partner, your IT experts can focus on integrating all the new solutions developed by fintechs for the fi-

ancial ecosystem. Collaboration is the new keyword for the future here – working with agile niche players such as fintechs, but also with stable providers who have experience with the regulations and requirements of the financial sector.

The Realdolmen Project Factory is one example of a collaborative model in which you can gradually modernize your legacy systems – at your bank's, colleagues' and customers' pace. The R Project Factory is a multi-functional platform where you and our experts can build the bank of the future, together. In one of our hypermodern R Project Factory offices – either on your site or in virtual, connected teams – you are more closely involved with the development process than ever before.

## Together for the ultimate user experience

Nowadays, another crucial keyword is workplace management. Outsourcing your commodity creates even more space for your IT specialists to focus on the challenges in the banking sector. Outsource your financial colleagues' entire management chain – with all their current requirements in terms of connectivity, CYOD, BYOD and more – to an external partner, from procuring front-end devices to providing support to end users. The advantage of a partner such as Realdolmen is the local proximity and presence which guarantees support in your colleagues' language, be it Dutch, French or English. This is just one of the conditions set out in our experience level agreements (XLA), the evaluation mechanism we offer

for the workplace experience, and which places the user experience at its core in contrast to the objective and technical service level agreements (SLA).

Whichever part of your IT organization you want to outsource, we prefer a transparent collaboration model. The options offered by Realdolmen – on your premises, or in the private cloud or public cloud – ensure that together, we always look at the best way in which we can accommodate the challenges you face.

And together, we will strive for the ultimate user experience for your colleagues and customers.

**Jo Leemans**  
Group Manager IT Outsourcing

## THE R PROJECT FACTORY:

- Responding more quickly and flexibly to customer queries
- Always offering the best solution
- Prioritizing and monitoring quality
- Anticipating new developments, trends and innovations

TO GET THERE, TOGETHER!

PUBLISHED BY:  
Thomas Verschuere  
Marketing Manager  
Vaucampslaan 42  
1654 Huizingen

COPYWRITING AND EDITING:  
Christel Vanhooft  
Natacha Hinoul

EDITOR IN CHIEF  
Catherine Vanmarsenille

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is half the journey

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