

Let's Talk

CIO Leadership Summit



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Welcome to this Special Edition of the Let's Talk Magazine

In this edition we are offering interviews with speakers from the second CIO Leadership Summit in Genval.

A great line-up of presenters and panelists always offers excellent food for thought. In this edition several CIO's at large companies are sharing their views on some big themes that are fundamental to them. You will read some remarkable views like 'why CIO's should think like marketers' or 'How banks need to improve their sourcing strategies'. We investigate major shifts in the IT role and how IT should be collaborating with the business. We look into how IT environments for the back and front office are diverging.

We are also looking back at how this year's Olympic games have been the most connected games ever. And finally our newly appointed CEO Luis Alvarez is explaining how he sees the next generation at BT Global Services and what our customers consider as being their main challenges today and in the future.

Since we launched the 'Let's Talk' initiative more than 800 ICT decision makers have joined us in our closed linkedin group and they are now benefitting from the opinion pieces and reports that we post on our blog on a daily basis.

If you are not a member yet and you wish to network with your peers and our experts and benefit from the free content, I invite you to join me on Linkedin http://www.bt.com/be/linkedin or visit our blog http://letstalk.globalservices.bt.com.

I do hope you will find this special edition of the magazine informative and I am looking forward to talking to you at one of our future events or on Linkedin.

Edwin Hageman, CEO BT Benelux

Editoria

Rudi Peeters has been in the CIO seat at KBC for 18 months. Unusually for CIOs, Rudi has also led the bank's marketing and strategy divisions. And he's putting that experience to good use. Rudi explains.





As a CIO, you have an interesting career background, having at one point led KBC's marketing division, correct?

Yes, it has been a fascinating journey. I've held positions in IT, sales, strategy and marketing. Most recently, I was responsible for strategy and managed the carve-out and sale of our affiliates CENTEA and FIDEA.

That's a pretty unique career track for a CIO. What are some of the key lessons you have learned on the 'other side'?

My background is unusual today, but I certainly hope that it won't be in the future. Earlier in my career, when I first started working in IT, I thought the bank quite simply was IT. In marketing, I soon learned that the bank is so much more – technology is important, but it's also about people and relationships. I'm now absolutely convinced that, if you don't understand the business, then you cannot deliver value. When I talk to internal clients, my aim is always to first understand their challenges and priorities in terms of market share, revenue, profitability, and so on. We don't have that tradition in IT – we have a tendency to be too inward-looking and preoccupied with technical issues. But of course this question of customer focus isn't new. At seminars and conferences, we've been talking about business-IT alignment for years, but it's still challenging to

My approach is to implement systematic management practices that force us to become more customer-oriented. And in doing so, I'm applying basic principles from marketing. For example, we regularly measure customer satisfaction among our internal clients, and then, to a certain extent, that data determines our variable compensation. So, we're being held accountable, with a direct impact on our pay check.

It's important to mention that we're taking a broad perspective on customer satisfaction. In a classic approach to customer satisfaction, you'll only react when things go wrong. We're capturing the positive side of the story as well — the positive feedback and successful cases — and we're proactively communicating that to the broader organisation. It's marketing really: we're enhancing our credibility and reputation in the company, and also building pride within IT. It comes down to perception management. IT people often complain that the business has a negative perception of IT. To an extent that's true, and often those perceptions are more negative higher up in the hierarchy.

Why is that?

Because they're not involved enough in the actual projects. They're involved initially, when a sign-off is required, but then the layers below take the project further, managing obstacles along the way, but without keeping the business managers in the loop.

They're only brought back into the picture when things go wrong or when budgets are overrun.

That's why, in our customer satisfaction measurement and our communication, we specifically target business managers. We're trying to keep them interested, involved and excited about IT projects.

Ultimately, this is a people business. That's why communication and perception management is so important. You can't achieve alignment by relying solely on governance structures and complex organisational charts. You also have to work on the relationships and the perceptions. In IT, we can be so self-righteous at times. Often, that's simply because we are right – but that's beside the point, because perceptions matter more. We need to manage those perceptions. In that sense, I guess I'm more a psychologist or marketer, as opposed to a technologist.

You've been in your position for a year and a half. What have your priorities been thus far?

I've had three main goals: reducing cost, building customer trust, and improving transparency – but they're all interrelated. IT at KBC used to be a black box; it needs to open up and become a lot more lean and efficient. Note that this is not a criticism of my predecessors; we've come out of a long growth cycle, where IT had to continuously expand to keep up with the business. Today, we're in a down cycle: we have to reduce costs significantly, we have to restructure our organisation, and we have to do all of this without compromising customer satisfaction and trust.

Initially, our focus was on fixing the basics. These varied from country to country, but we had to put some basic principles in place – such as delivering on time, within budget, and according to specific quality criteria – that we all commit to. Or, in other words, we have to deliver what we promise. These commitments have been incorporated in our variable remuneration – we're held accountable on the basics. Once we had built trust in our relationship with our internal clients, we gradually started introducing agile development methods. Customers were cautious at first, because that new way of working does demand a lot of trust on their part. But it's booming now and having a direct impact on our costs – our development is so much more efficient.

Transparency is critical too. In our budgets and in the way we calculate costs, we've gone really far in our transparency toward the business. Many of our customers really appreciate this – it's all part of the way we're building trust in the relationship.

At present, our key priority is to increase the flexibility of IT. We want to be able to respond faster and more effectively to crises and opportunities. That will entail moving away, to some extent, from annual budget cycles, which obviously isn't easy, given our procurement and planning cycles.

But we're already deploying 'crash teams': small, multidisciplinary teams recruited from IT and the business, who're given a budget and a deadline to guickly tackle a specific opportunity. They're not encumbered with complex governance structures – they report directly to me – nor do they have to comply with disciplined project management methods. In this way, for example, we built several mobile apps in just two months. Obviously, we can't always work like this - because it conflicts with our usual budgeting, governance and release management principles – but it's great way to manage smaller, shortterm projects. And it's an initiative that has helped build trust in the business. We're also learning a great deal from these projects, because all our crash teams have to keep a diary in which they document the obstacles they encounter along the way.

IT is often seen as an enabler of innovation; is this one of your goals?

Yes. That's why IT needs to be a much more flexible organisation. We need to be able to move fast and exploit opportunities as they emerge. But we also need to work more closely with the business – from idea and demand management, right on to the delivery phase. In the past, IT and the business would work independently from each other, lobbing the project back and forth over the wall, as it were. Now we're working together, helping the business develop their ideas and proposals; and once a project is initiated, we keep them involved. It's a much more effective – and also more efficient – way of working.

When we talk to manufacturing companies, we hear a lot about the changing role of IT and the shift toward cloud services, collaboration, BYOD, and so on. How does a large bank deal with these changes, given the fact that banks tend to have a lot more legacy IT and stringent compliance requirements?

It is more difficult for us, no doubt, but we're pursuing the same goals. We're preparing for the cloud and working with the sector's regulator to see what is possible. We're introducing collaboration tools, and we know that we have to collaborate with customers much more closely as well. Regarding mobile and BYOD, we've already provided mail and agenda access for iPhones and iPads. We're on track, and I don't think the gap with other sectors is getting larger. We're followers, to be sure, but we're not falling behind.



Rudi Peeters, CIO at KBC

Interview with Rudi Peeters, CIO at KBC

Congratulations on your appointment as CEO of BT Global Services. How do you feel?

I feel honoured to be given this opportunity to lead BT Global Services. I know the organisation well, having spent many years here; I also have experience running the business in a large region. It's a wonderful company, and I think it's a great tribute to BT that someone from inside the business has had the opportunity to develop such a fascinating career here. It shows that there is continuity in the business. It's good news for BT that we're able to leverage internal talent – and it's good news for the market.

What can people expect from you as a manager? Tell us a little about your management style.

I guess I've always been very customer-focused. I try to bring customer perspective or insight to everything I do, which will probably show in my management style. I should also mention that I'm not very bureaucratically minded. I give people a lot of responsibility so they're able to react quickly to challenges and opportunities. Empowering people is crucial to the agility of this organisation.

Finally, I'm familiar with the company – I understand the organisation. There is no need to explain how things work here. I know the company's history and understand why particular decisions were taken in the past and what their implications are for us today. So to summarise, I suspect I combine a bit of Latin passion with a solid understanding of the business.

Since your appointment, you've talked about 'the next generation' of BT Global Services. What do you mean by that?

That means that we need to build on our strengths, on our heritage. A family has a heritage and history that defines in part who it is, and the task of the current generation is to build on the strengths of that heritage to create a better generation.

Building on strengths

Similarly, at BT Global Services there will be continuity. Some great initiatives have been launched in recent years; we will continue working on those as we build on our strengths. That's the core of what we will do.

How do you see the company evolving in the coming years?

Well, we have an excellent track record to build on. We're clearly recognised – by both our customers and by analysts such as Gartner and Oyum – as a global leader in our industry. That's a great position to work from, but it also implies immense responsibility since we need to maintain that position. Our customers are increasingly demanding. They expect more innovation, more quality, but simultaneously place a lot of emphasis on cost reduction. As a result, we have to keep on improving and continue to get better at what we do every single day. That's our commitment to the market.

The key to achieving this is to build on our strengths. These include our capabilities in vertical markets such as finance, pharmaceuticals and government. They also include our expanding presence in emerging markets such as China, India and South America. We will continue investing in our portfolio, such as our recently announced BT One collaboration platform and our security solutions. And we will continue to invest in BT Advise, our professional services division. All of this

What are the biggest challenges for our customers today, and how is BT responding to them?

First, and most importantly, the technology services we provide have become absolutely critical to our customers' operations. Global companies have to navigate the rapidly evolving technology landscape, while protecting their assets and operations. That's a huge challenge – but BT is well placed to support customers in that regard. For example, if a customer intends to move to an IP environment, we're able to support them at every level. Not only technically, but also with change management – making sure that people actually start using the new IP-based tools. Simultaneously, we're covering them from a security

Secondly, our customers are increasingly internationally focused. They're investing in service centres and manufacturing operations in new markets and need to hit the ground running. In this world of instant globalisation, you can't distinguish on-shoring or off-shoring anymore; on the contrary, customers expect services to be 100% available worldwide. Given our expanding international presence, especially in emerging markets, we're in a great position to help our customers focus on their core business as opposed to worrying about local ICT sourcing, regulation and integration issues.

perspective.





Kalman Tiboldi used to be a CIO. Today he's Chief Business Innovation Officer at TVH Group. It's a name change that reflects a major shift in IT's role at TVH. Kalman explains.

Tell us about the name change: what does it mean? What's in a name?

It's part of a major transformation programme at TVH. Essentially, we're building a platform for innovation – we're giving the business, at all levels, the means to constantly improve and innovate its processes. In the process, we're redefining the role of IT in the organisation and we're investing heavily in collaboration, mobile and a more component-oriented approach to applications. Each of these priorities deserves a short explanation.

Let's start with the role of IT.

At TVH, IT has been renamed 'Business Innovation through IT' – BIIT, or simply BI²T – and my function is now called Chief Business Innovation Officer. I want to emphasise that this isn't a cosmetic change: it represents a major shift in our thinking about the role of IT and how we ought to collaborate with the business.

In general, IT departments are engaged in two somewhat distinct types of work. The classic component – call it IT execution – is concerned with keeping the existing systems running as efficiently as possible. Managing IT infrastructure, such as data centres and the network, fall into this category. At TVH, we spend less than 20% of our monetary and people resources on this component; the other 80% is focused on the second type of work, value creation. And this is where we're doing things differently.

In the classic model, the worlds of IT and the business are kept apart. The business submits a requirement to IT. IT works out a solution, taking a very functional and technical approach to the problem and keeping tight control over its turf. Today at TVH, our team of business analysts includes not only functional and technical analysts but also business people who have no background in IT. They're domain experts, and we've given them the tools and methods so that they can properly analyse business processes and develop data models. A lot of our recruitment these days is business-focused and, given our role in the company, we've become an attractive place to work.

On the business side, anybody at TVH with an interesting idea for improving a work process can submit a proposal to the relevant business process owner, who in turn discusses the proposal with dedicated business process innovators scattered throughout the business. At this stage, before the proposal reaches IT, they're already talking about processes and modelling those processes. And when it reaches IT, joint projects with joint responsibilities are set up.

When we started working this way several years ago, we received about 300 proposals in the first year; now we receive between 5,000 and 6,000 proposals a year. The key lesson here is that, if you give people the opportunity and means to innovate, they will. We're pushing innovation deeper into the business. Furthermore, we've extended the competencies of IT. For example, we're much more focused on data analysis these days. We're analysing operational data, customer data, and competitive data – and in the process working much more closely with the business people to help them make decisions. We're extending the boundaries of the classic IT organisation – or, to borrow Peter Hinssen's terminology, we've achieved the fusion.

So by blurring the boundaries between IT and the business you're pushing IT-driven or IT-enabled innovation deeper into the business. How does collaboration fit in this story?

In today's economy, you need to be able to move fast – and that means people need the right information quickly to make good decisions.

We've already made a lot of progress in the way we collaborate with our customers. Our e-commerce platform basically extends our internal processes to our customers in the form of a virtual warehouse. This project was started in 1994, and it has completely transformed the way we communicate and work with our customers.

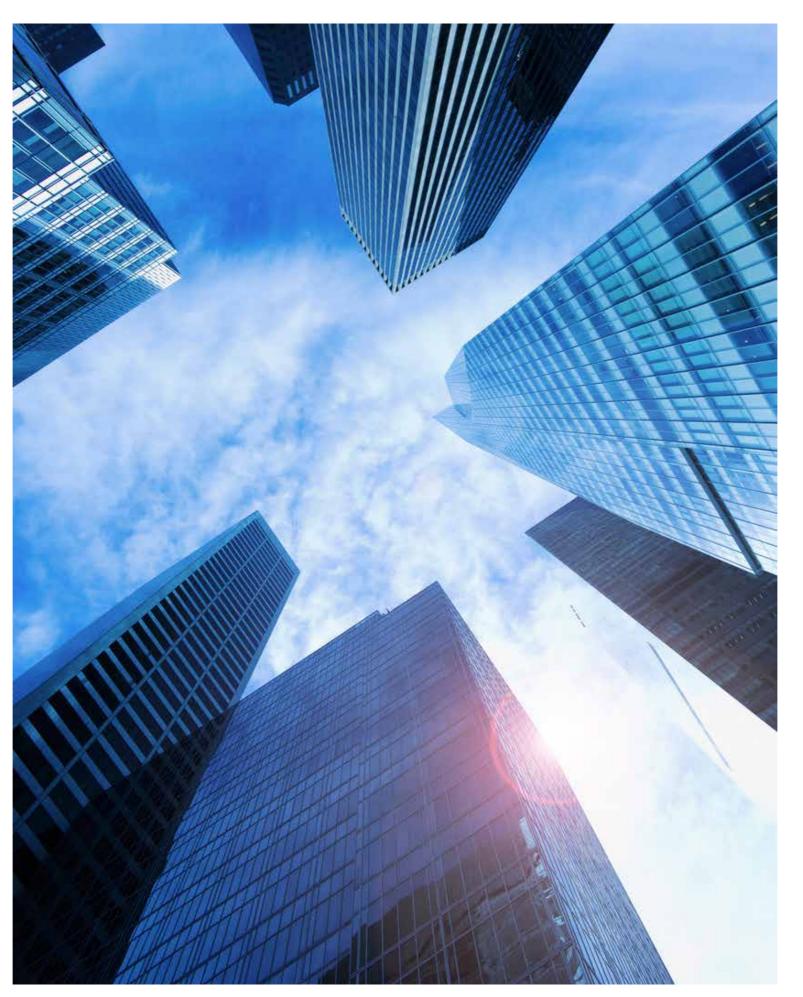
However, to facilitate internal collaboration and information sharing, we're currently evaluating a cloud-based approach like Google Apps. It's delivered via a global WAN where some of the security aspects have been moved to the cloud. Note that we're not simply replacing the classic mail and agenda functions here; on the contrary, we've taken a pretty fundamental step toward the cloud, which entails a shift in thinking, in mindset, about how we communicate and how we manage (and store) our information. Google Apps is part of that, but so is our use of Google Drive for publishing all our technical manuals, Salesforce.com for CRM, and several other public cloud services for controlling VAT numbers, currency exchange rates, and so on.

Which is why mobile is a key issue?

Yes. We've been investing in mobile for several years now — but, in all honesty, I think we've only just begun exploring this huge opportunity. We've decided to support the major platforms — iOS, Android, BlackBerry and Windows — with the goal of pushing our major utility components — such as Google Apps, Zoiper, Video conferencing and Cisco Jabber — to mobile. On the infrastructure side, we've got worldwide VoIP and voice over Wifi, but the major focus at present is on applications, and, by default, security.

That's why we're opting for solutions that already have strong mobile components, such as Salesforce. The collaborative component is obviously important, but so are the processes. For example, our field force is equipped with smart phones through which they receive their day planning, routing and track-and-trace functionality. The geo-location functionality is a huge opportunity that we're only just beginning to recognise. For example, we're testing an app that advises our employees on how best to get to work. That might sound like a trivial service, but it's all part of the way we're pushing innovation deeper into the organisation. And it contributes to our sustainability goals.

Admittedly, transforming applications for mobile isn't easy. We've adopted a bring-your-own-device policy, and, on top of that, users clearly expect applications to run native to the device and not simply via the browser. That's a headache and against the principles of standardisation and efficiency. Nevertheless, the gate is open and we accept that. We have to take advantage of the trend. It doesn't just concern young people anymore; everybody is becoming more tech savvy and raising their expectations



You mentioned earlier that you're pursuing a more component-based approach to applications. What do you mean by that?

If you want to support your company's processes in a more flexible manner, and, more importantly, if you want to encourage people in the business lines to take more responsibility for the way they exploit technology, then you can't rely on the classic end-to-end ERP-like solutions that the major vendors offer. Those solutions are too inflexible and they force you to follow their built-in rules. In a collaborative organisation, people have different expectations. They want to 'compose' a particular component themselves so they can differentiate themselves. Our role is to support the business in that regard. We want to make IT more flexible, but simultaneously keep an eye on efficiency and security.

Historically, IT has moved from the era in which we built everything ourselves, to the era in which we purchased complete end-to-end solutions, to today where we buy or build various components and orchestrate the overall landscape. IT is responsible for designing the core IT architecture based on our own infrastructure and cloud resources, and then coordinating the various components efficiently and dealing with security issues. I know that there are different opinions on this, ranging from 'ERP is dead' to 'don't discount the status quo'. I think the truth lies somewhere in the middle, but I lean more towards ERP is dead.

The future will be about orchestrating components. Just look at what is available in app stores these days. More and more components are available to solve very specific business problems – and, from a technical and security perspective, they're totally encapsulated. To a large extent, security is built in to these applications, which means that the classic perimeter-based approach to security makes less sense. Google and Salesforce.com will inevitably be better than we are at managing data centres.

We have to build or buy components that have built-in defence systems. In the future, we won't be building ever-higher walls around our systems; instead, our systems will have an immune system – that's the better analogy.



Kalman Tiboldi, Chief Business Innovation Officer at TVH Group





Sabine Everaet, Europe Group CIO for The Coca-Cola Company, talks about how the IT environments for the back and front office are diverging.

We hear a lot about the shift toward cloud services and a lighter, more flexible IT platform. Would you agree that IT is changing, moving away from large end-to-end solutions to a more flexible cloud-based setup? What is Coca-Cola doing in that regard?

I think the transition you describe is more complex. At Coca-Cola, there's a clear distinction between our front office and back office environments. They're evolving differently and will need to be managed very differently.

For our core back office application, we rely on an end-to-end solution that is robust and stable. In that regard, we have relied on SAP for many years and will probably continue to do so in the years to come. This is also an environment that is globally standardised and firmly under centralised control. It has to be, from a security and risk management perspective. I think people underestimate the integration challenges that you are bound to face if you work with a variety of different cloud services.

On the front-end, however, we're clearly seeing a great deal of change. The change is most evident in our customer-facing activities, but it also pertains to the way we communicate and collaborate internally. In recent years, we have switched from Lotus Notes to Outlook and Live Communicator, all managed in the cloud. We've also introduced Skype, which is being used throughout the entire company. For example, you can use Skype at home and call in to our corporate video conferencing system. And most recently, we've implemented Salesforce Chatter.

What about mobile and BYOD?

We're taking steps in that direction. For example, our senior managers can access our company's business results reports from their iPads. We also allow for iPhones, and we're assessing Android-based smartphones to be deployed shortly. We've also developed a BYOD policy for iPhones and iPads. However, I suspect that BYOD will only be properly stimulated once we start giving people a budget to buy any device they want. BYOD today is not yet replacing the devices we provide as a company, and employees end up carrying too many devices. Also, mobile is still encumbered by high roaming tariffs in Europe.

How are things working out with these new collaboration tools?

These solutions have definitely had a significant impact on our organisation and the way we communicate. First of all, they're being used very actively. In fact, I'd say that these tools are already culturally embedded in certain functions of the company. Secondly, they've made mobile or remote working possible to a scale we never imagined 10 or 20 years ago. Today, many of our people regularly work from home or from different geographical locations. For example, our Paris team recently recruited someone who's based in Lyon. Thirdly, we're seeing a shift toward what you could call a collaborative or network-oriented organisation. Coca-Cola is a large international organisation with a complex matrix structure, and communication and collaboration used to happen according to the hierarchy. That's changing – other, more social, dynamics are coming into play. I've personally found, for example, that I come in contact with many more people across the organisation breaking both geographical and functional borders.

Tell us about your customer-facing applications.

This is where the change is most profound, no doubt. The main driver underlying this change is the shift from mass marketing to customised communication, and, in parallel, a shift from TV to internet. Whereas in the past we focused mainly on TV campaigns, today we're developing much more refined content for our consumers, which in turn is based on a better understanding of their preferences.

For example, just a few years ago, we were managing lots of consumer websites, assuming that consumers would come to our websites of their own accord. The reality today is that people have their own environments in social media. They're chatting to friends. They're gaming. We've realised that we need to put a lot more effort into understanding how our consumers behave and what their needs are. And we need to be a lot more proactive in the way we reach out. To illustrate: consider our classic consumer call centre of the past, which was primarily reactive in function. People called us. Today, our contact communicates proactively with consumers via Twitter, Facebook, and so on. And our contact staff members are all experts in relevant fields, such as music and sports. Conceptually, that's an entirely different form of marketing.

To further illustrate that point, we've also integrated all communication to stakeholders. In the past, consumer and corporate marketing were separated; today, all our external communication is managed from a central platform and database.

All of this has had a huge impact on our IT. In fact, we've been instrumental in driving that change and have 25 IT-related work streams underpinning it. Central to it all is our consumer database.

Our content management system is an open source platform. And we rely on social listening tools to track what people are saying about our brand, or to identify topics that we should be talking about.

We also rely on a mobile platform that customises all our content for different mobile platforms – because all our customers should have an optimal content experience, irrespective of the device they use.

I assume this is having an impact on your IT organisation too?

Yes, we've hired people with strong marketing backgrounds and expertise in social media. They've been instrumental in selling our services to marketing and forging a close working relationship. The organisational structure is pretty hybrid at present – in the sense that we've learned to think in marketing terms and marketing has learned to think in technical terms. We had to come together. More than ever, marketing is reliant on IT – but conversely, we have to be very proactive in the way we serve marketing.

It's fascinating to see our competencies evolve in that regard. For example, we're now focusing increasingly on our data analytics capabilities.

So, as you can see, our back office and front office are becoming two very different environments from an IT perspective. The IT architecture is totally different, as are the requirements in terms of technical skills, support, upgrades, project management, and so on. Agility is crucial in the front end, but both of these platforms need to be up and running 24/7. Customers won't tolerate a maintenance weekend.



Sabine Everaet, Europe Group CIO for The Coca-Cola Company

Davor Jakic, Systems Integrator at BT Advise, is concerned that many companies' Business Continuity Plans (BCP) and Disaster Recovery Plans (DRP) are not flexible enough to deal with emerging threats.

What is your impression of Business Continuity strategies at companies today?

Frankly, we're a little concerned. It's striking how, time and time again, companies are confronted with threats that they aren't well equipped to deal with, notwithstanding the significant investments they may have made in Business Continuity and Disaster Recovery.



For example, we've seen several attacks by hackers recently that have forced companies to cut off all connectivity with external networks, including internet and mail, but also system-level connections with suppliers and partners. Also, some customers have been responding to our recent "Winter blackout in Belgium" article (on BT's Let's Talk blog), expressing concern that they're not well protected against a major power failure in Belgium.

So what is going wrong?

It's our impression that many Business Continuity Plans are too static – they're not adapting to evolving threats. When a company invests in a new data centre, they usually put a lot of effort into creating a BCP and executing on that plan. But then they put it on the shelf, so to speak, while the risk landscape keeps on evolving.

What should companies be doing to improve their Business Continuity Plans?

BCP has always been a very challenging topic. The job can be quite daunting and expensive because there are so many potential components and parameters to be managed. The problem is that many BCPs aren't based on a good risk assessment.

I have the impression that many ICT managers focus too much on the features of competing BCT(what does this acronym stand for? perhaps spell it out here) products and let that drive their BCP strategy, when they should be figuring out the costs of potential risks. If you take a purely IT perspective on BCP, there's a tendency to want to control and protect everything – but that's impossible

and unaffordable. Ultimately, BCP is a business decision.

In workshops with our customers, we first ask:

"Can you quantify the financial loss if your business

along the lines of: "A potential financial loss during

critical application is down for one hour?" It's worrying

that most often the customers don't know, or they reply

system downtime is high, but we have no exact figures."

This is a real problem, because managing BCP and DRP

interruptions in service delivery. There are many, many

country redundancy to intra-continental and even inter-

attached to each of these solutions, so it makes sense to

continental redundancy. But obviously, there is a cost

ways of keeping services up and running – from in-

based on the assessment of potential financial loss during

is basically a risk management exercise and should be

Are you saying that priorities need to be set – but also that BCPs need to be flexible and agile to deal with evolving threats?

Exactly. Agility is important, not only to quickly respond to business opportunities, but also to manage disruptions, both planned and unplanned. BCP/DRP can no longer be only the IT department's concern. It needs to be managed in teams by the business, internal ICT and service providers like BT. For example, when some of our customers were attacked by hackers, we were able to respond very effectively by leveraging our pre-

provisioned network, security, data centres and cloud computing infrastructure. By relying in part on BT's infrastructure, our customers are able to incorporate a degree of flexibility and security that they couldn't achieve on their own. And that doesn't mean that companies need to suddenly write off their data centres and move everything out to the cloud. Often it's simply a question of design – there needs to be a way for us to step in quickly with our cloud infrastructure should something go wrong.

But ultimately, will it make sense to outsource more of your infrastructure?

Well yes, in general it makes financial and business sense to consider delegating some tasks to service providers. There are plenty of studies that show that outsourcing can be much more cost-effective than building and supporting your own data centre. While some companies may have business requirements that dictate the building and maintenance of their own data centre, Disaster Recovery sites could very well be outsourced.

For people involved in Data Centre management and operations, the Uptime Institute's tier certification is a well-known reference. Without going into technical details, a data centre's certification – or tier level – is determined by the percentage of uptime that it can deliver. Thus, a Tier IV data centre – the highest ranking – is expected to deliver availability of 99.995% (which translates to approximately 28 minutes or less of downtime per year). To achieve that level of uptime, the data centre's equipment will need to be independently dual-powered beyond the topology of a site's architecture and, preferably, the facility should be on multiple power grids. The question is, does this investment make financial sense, and is it even technically possible to build a Tier IV data centre in Belgium given the country's current power infrastructure? The answer could be 'yes' if you rely on your service provider's data centre facilities for Disaster

By using our Infrastructure and Data Centre facilities in the Benelux, we can build a "Virtual Tier IV" data centre for our customers, with all the characteristics and requirements of Tier IV, including multiple power grids from different providers. Furthermore, we can assist in building a private cloud computing platform, which can be interconnected throughout our network infrastructure and thus to our Cloud Platform. We're even able to provide disaster recovery office space. The most important advantage of this approach is that it significantly reduces initial capital investment while it enables true Disaster Recovery and the flexibility to grow or shrink services as needed.



Davor Jakic, Systems Integrator at BT Advise

Interview with Davor Jakic, Systems Integrator at BT Advisee





André Vanden Camp, newly appointed CIO at AXA, reflects on the evolution of IT in the banking sector and offers his view on the banks' sourcing strategies

You have spent many years in IT in the banking sector, at ING, Dexia and currently at AXA. How have you seen IT evolve in the sector?

The evolution has been profound. In the 1990s, IT was totally dominant in most banks. If you wanted anything done, you needed IT. IT always had the final word and could make or break any initiative. IT was the centre of the world, and no wonder really, because a bank is a computer. In those days, banks also competed very heavily on the basis of IT: consider their ATM networks, internet banking, electronic payments, and so on.

In the years leading up to 2000, IT was at its pinnacle – eating up budgets and resources. But the business was becoming increasingly frustrated with IT as well. The end came with the 'millennium bug'. Costs had escalated to such an extent preparing for this impending disaster that, when it turned out to be harmless, the business finally said "enough!" That's when most banks started shifting massive budgets away from IT to the business.

Of course, there was more to it than the millennium bug. With the rise of the personal computer, users were gradually becoming more computer literate. For example, they could develop spreadsheets to solve problems, as opposed to going to IT to have them develop an expensive solution that would take months to build. IT was becoming a commodity in the eyes of the users, providing some essential back-end technical requirements such as automatic back-up, IT security, etc. All this has changed the role of the CIO significantly – from being captain of the boat, as it were, to a role that requires strong managerial and selling skills. As CIO, you now need to continuously sell the value of IT to the business. You can't take much for granted anymore.

I suspect that we need to balance out the role of IT a bit more – perhaps the pendulum has swung too far to the other side. With the business divisions taking so many IT-related decisions, it has become imperative for IT to take responsibility for the overall coherence of the IT setup.

Questions of IT architecture and security remain hugely important.

Managing the back-end isn't easy. The IT department needs to protect the coherence of the overall IT architecture. This is extremely challenging and requires strong governance. Nowadays, business lines are willing to go too fast. By focusing on only one part of the solution, or by implementing quick wins, the solutions proposed by the business could seriously impact the long-term IT vision. Business lines need to keep in mind that IT remains complex and needs to be managed by IT professionals.

What is your view on outsourcing and vendor management? Are banks moving in that direction?

Banks today are indeed relying more and more on external providers. In the past, banks tended to do a great deal in-house and relied on only a handful of dominant providers. That's clearly changing. Sometimes it just makes a lot more financial sense to work with providers. And we can't be expected to maintain expertise in every conceivable technical domain. For example, it would make no sense to develop apps for all the mobile platforms ourselves. But we do need to be able to manage the providers who help us in that regard.

Banks certainly have started outsourcing in various forms, such as on-shoring, near-shoring, off-shoring, and worker secondment. The problem is that the banks aren't very good at it. There's still a lot of room for improvement, especially in the areas of contract management, price negotiation, quality and performance management, and relationship management. Our providers talk a lot about 'partnering', but often that's just a slogan. We haven't yet learned to work together well. We don't have good performance monitoring systems in place, and escalating procedures don't work as well as they should.

Why is that?

A lack of experience. We've done everything ourselves for so long that our IT divisions are slanted heavily toward technical competencies. Vendor management and procurement have never been the types of competencies we've recruited for.

I'm not saying we need to totally reinvent the way we do vendor management, but I do think that there is still room for improvement and optimisation.

Companies in the manufacturing and services sectors have a head start in outsourcing, but also in moving to cloud computing, collaboration, and so on. Are banks, given their security constraints, running behind? Is the gap widening?

We're pursuing the same goals, but it's more challenging for us. You have to understand that a bank is risk-averse by definition. I realise that sounds strange in the context of the financial crisis, but our organisational culture, our DNA, is risk-averse. That makes it difficult for IT to change rapidly. But we are changing, and in other ways we actually have a head start.

You have to recognise that IT is fundamentally important to banks. Banks still are, at core, computers. We deal with data, not tangible things like cars or machines. For our customers, a bank represents two things: trust and process. As a customer, you trust your bank to properly process a mortgage application, make the money available to purchase the house, and not surprise you in the many years ahead when you're repaying that loan. Computers make all of that happen. And in that regard, banks have made amazing progress – so much of what we do is automated. We don't need to radically reinvent our IT setup, but we do need to be more outward-looking and focused on our customers and suppliers, as opposed to our back-end IT.



André Vanden Camp, Member of the Executive Committee and CIO 'IT & Business Transformation' at AXA Belgium

Frank Stockx, CIO at ING Belgium, explains why he shuns all talk of business-IT alignment and 'internal clients'. According to Frank, IT is part of the business and clients are simply clients. That's the type of thinking that underpins an ambitious attempt to create value chain teams and KPIs.



Most CIOs talk about cloud, collaboration, mobile and the changing role of IT. What is your biggest challenge? What preoccupies your thinking as CIO?

There are plenty of current technology trends, and all are interesting in their own right, but the biggest challenge from my perspective is how we, as an organisation or workforce, are able to continuously digest these new developments. How do you integrate these new technologies into your world - not once, but time and time again? That's a serious challenge because most organisations are hampered by an inertia that is anchored to the past. That said, I don't think such inertia necessarily needs to be the case; people can learn faster than we think. For people to change, they need to be given the space to do new things – but obviously, without putting the core business and assets at risk. The art is always to get the collective, the group, at whatever level, to move in the same direction quickly and efficiently. I spend a lot of time focused on how groups work, how people work together to achieve common objectives.

Are you succeeding in that regard? Or is this inertia – which I assume is more profound in a large bank, given the legacy infrastructure and security mindset – causing you to fall behind on the technology curve?

I don't think so. If you have existing technology in place, then obviously you need to take that into account. And the finance sector has lots of technology in place, which isn't a bad thing, since there's a great deal of intellectual property in that. A lot of what we do in banking is now automated, so I don't think we necessarily need to be slower than other sectors.

Can you tell us about your approach? How are you managing change in the organisation?

Federated decision-making is a key component of our approach. The bulk of decision-making for IT projects is decentralised – they're not my decisions. Of course, a lot of what we do and implement is centralised, for the sake of efficiency, standardisation and so on, but the actual decision-making is distributed. That applies to our Belgian organisation as well as internationally at a group level. It boils down to managing the classic tension between customisation and standardisation. For your customers, you try to differentiate, to customise; but internally, you try to standardise and create efficiencies. It's a matter of constantly finding the right balance between the two, and your governance structures need to allow for that.

Thus, I'm a member of the IT management team at group level, but I'm also CIO for the Belgian division – so I constantly need to alternate between two perspectives: do we standardise or do we customise? For example, in Belgium we've implemented BYOD because our backbone is ready for it. Other divisions in the group haven't done so, either because their infrastructure isn't ready yet, or because it doesn't make sense to do so given their workforce priorities. Within our Belgian organisation, we've created a collaborative environment in which people are organised in cross-functional value chain teams. These value chain teams are composed of sales, marketing, operations and IT staff, and they look at their objectives and customer needs from end to end. It's a constant shifting of perspective: from figuring out how to address customer needs, to working out the backend. In the customer-facing activities, we try to customise and differentiate: in the back-end, we stick to common approaches, building blocks and software development formats, either agile or waterfall.

So you've created a degree of business-IT alignment by placing IT people in the business?

Beep! I refuse to use that language! We don't have 'internal clients'; we only have clients. We don't have IT and 'the business' – we're all the business, including IT. I try to avoid talking in those terms, because it creates a dichotomy. But still, we're trying to achieve what Peter Hinssen wrote about in his book Business/IT Fusion.

So how are you achieving this?

First of all, the top 50 managers in the organisation all need to tell the same story. It's crucial to create a common context. If leaders deliver conflicting messages, then people will arbitrate(vacillate?) - that's just the way it is. So, a consistent message is imperative. Secondly, as I explained earlier, we've organised the bank along value chains. The functional divisions, such as IT and marketing, still exist, but in practice we work together along value chains. The people in our internet distribution chain - whether they're from IT, marketing or sales - all sit together on the same floor; they can't avoid each other. And every day, they discuss their financial performance, sales figures, IT projects, and so on. They have joint responsibility for achieving their KPIs, which run across the departments. Am I happy with the current situation? No, not yet. But it's a good start, and it's beginning to work.

Would you describe it as a matrix organisation, with people having dual reporting lines to product and department heads?

No, certainly not. Think of it as organic or amorphous. We still have the traditional departments, but our target setting, our KPIs, run across departments. Most people's KPIs are split pretty evenly along functional and product lines. Hence, it's up to the people themselves to learn how to work together well and trust each other. Only when there is real trust do people begin to work together constructively, helping each other achieve their respective targets. That requires cultural change.

You say you're not happy yet? Why?

We're not there yet. We've taken an important step, and we've made progress since we launched the initiative, but we have a long way to go to push it through the entire organisation. That said, I'm also probably not happy because I'm seldom satisfied quickly.

A final question on another topic entirely: how has the financial crisis impacted IT?

I suspect the impact on some banks' IT divisions has been dramatic, with massive budget cuts and organisations being split up into several parts. ING Belgium, however, is somewhat atypical, because we came out of the crisis reasonably unscathed. In fact, we've done rather well, growing our client base by 10%. As a result, we haven't had to make major adjustments to our IT plan or budget. But the economy is still clouded. There are a heap of new regulations coming at us, and we need to prepare for them. And IT security has become more important than ever.



Frank Stockx. Head of Information Technology in the Executive Committee of ING Belgium

Pascal D'Eer is trying to build a more flexible and coherent IT capability at Belgium's Federal Police service. But in a security-focused organisation like the police, change doesn't come easily. Pascal explains his approach.

Could you tell us a little about one or two issues that you are most focused on today in your role as CIO?

We have a myriad of different challenges and priorities at present – but broadly speaking, there are at least two major themes that I'm focusing on. Interestingly, neither is technology related; they're both concerned with the management of people. The first challenge concerns speed and flexibility; the second, coherence and strategy.

Let's start with the first challenge.

Our IT organisation moves too slowly. Within the police services, we have a tradition of working in a very procedural manner – and that also holds true for IT. So, we typically analyse potential IT needs according to formal principles, and then we set priorities and make decisions in a methodical, scientific manner. This has its advantages, but it can also be a slow and inflexible way of working. Technology is changing so rapidly that we need to be able to respond faster to the changing expectations of internal clients. We have to be more focused on the needs of customers, as opposed to being preoccupied with our own

Ultimately, this is about altering the mindset of our people. While there are other factors at play, such as our legacy IT infrastructure and the sensitivity of the information we manage, I do think that the cultural dimension is key to changing the way we work. We have to start thinking differently.

Clearly you're not alone in this. Most CIOs are trying to create a more flexible IT organisation in response to their users' changing expectations, IT consumerisation, and so on.

Indeed. Mobility is a key driver in that regard, and that has a huge impact on our IT architecture. We're also seeing various user groups trying to come up with solutions themselves. In principle, that isn't a problem. However, we need to keep central oversight over costs, possible duplication, security, the platform, and so on. Still, compared to the private sector, I suspect that we still have a lot of centralised control over IT; there are a lot more restrictions on what you can do in

So how are you trying to change the mindset; how are you creating that required flexibility in the organisation?

We're addressing this issue at various levels. Some initiatives pertain to our IT setup and the way we're organised, while other tactics are concerned with people management. To start with the structural initiatives, we have decided to try to stop building commodity IT products ourselves. We have a long way to go in this, because we come from a situation in which we built a lot of things ourselves – our own mail applications, for example. That simply doesn't make sense anymore. Technology moves too fast, budgets are tightening, and we can't hope to maintain a sufficiently broad IT capability ourselves. We have to rely more on external providers.

A second priority is to work more closely with our internal clients and support them in their own initiatives. As opposed to keeping all IT decision-making and projects central, we're trying to support such decentralised initiatives in whatever way we can. It's important that we start early to make people aware of what is and isn't feasible from a technical or staffing perspective, such as with certain types of databases and programming languages. We're able to support some of our technologies, some not. So, for example, we wouldn't be able to support a large-scale Java project at this point – but we would be able to do that with some Linux versions.



Flexibility also requires a tolerance of failure. For this, we have very recently developed a specific policy so that people in our group can experiment with smallscale initiatives that are allowed to fail. That's quite new, and from a cultural perspective, it's very foreign to this organisation.

Can you give some specific examples of how these challenges manifest and how you are addressing

Our mainframe illustrates the struggle for change guite nicely. It's still a crucial part of our infrastructure – handling a high volume of requests – but it isn't flexible enough to deal with changing requirements. And it's increasingly difficult to find people with mainframe skills. In that regard, we have to start opening up the mainframe using web services. Some people in our group are concerned about this, and they'll cite technology- or security-related reasons why we shouldn't follow this route. So, I've given these people prime responsibility for implementing web services. I recognise that they don't agree completely with every aspect of the strategy, and that's why I'm asking them to take the lead on this. They have a good perspective on the problems that need solving, and it's crucial that they be on board with the new way of working.

Similarly, we have to make a transition in our programming languages, from Delphi to probably another one. Again, those types of decisions have elicited resistance – but it's something we have to do. To encourage change, I'm handing responsibility to the biggest naysayers. We also have an exchange programme with other public services, whereby some of our people spend a few days a month at a public service that has made the switch to a different environment. It's a great way to encourage learning, but it also helps change people's attitudes. At the police services, everything we do is entrenched in a security mindset. It's in our DNA. By spending some time at another federal service, you're exposed to a different culture, a different way of thinking. We need that too.

Tell us about the second challenge: coherence and

In the past, we have built and implemented some excellent technical solutions, especially those with a limited functional scope. Some of the larger projects haven't fared as well. I won't say that we've had any real disasters, but time and resources could have been put to better use. But the problem with nearly all of our projects – even the successful ones – is that they were not always part of a coherent master plan. Too often, we ended up focusing too heavily on functionality (even duplicating it), which, in hindsight, shouldn't have been a priority. To address this problem, we've spent the past two years working on an IT master plan, which was recently accepted and taken up as the basis for the national security plan. We're now busy implementing the plan and using it as a "guiding light".

Achieving a degree of alignment across the organisation isn't easy. All the divisions have their own agendas and priorities, and it's our job at IT to facilitate that discussion, to balance out these priorities and come up with a coherent overarching plan. There is no perfectly objective or scientific way of doing this – so, ultimately, it requires people to be constructive and willing to compromise.

Our approach is to speak regularly with the various divisions within the police services. We're encouraging our people to get out of their offices more and talk to the other departments. We want to understand what their needs and concerns are – but simultaneously, we want them to understand us too: what our competencies are, what infrastructure we have available, what we can and can't do. There has to be two-way communication.

One more formalised aspect of this consultation process is the creation of an IT Steering Committee, currently chaired by an external person from the ICT Federal Service. The committee's members include a mix of people, ranging from corps chiefs to administrative managers and technical people. They have a very challenging task, because they constantly need to switch back and forth between a functional or information-oriented perspective and a technical perspective. In fact, the key challenge is not to get stuck in a technical perspective. Broadly speaking, we have a tremendous task ahead of us in breaking down information silos, opening up information flows, and building a more flexible architecture – and to do all of this without losing sight of security. In that sense, we're pretty unique. Our 'business' is exceptionally information-driven, but most of that information is highly

My challenge lies very much in translating these functional issues into dynamic and modern solutions. And at the same time, communicating our technical choices to stakeholders. A never-ending story, it seems to me...



Pascal D'Fer. CIO at Belgium's Federal Police

Interview with Pascal D'Eer, CIO at Belgium's Federal Police

In 2008, Roel Louwhoff learned that he would lead one of the world's biggest peacetime telecommunication projects yet – the 2012 London Olympic Games! Not only were the games destined to become the most connected games ever, it was also the first time that a single telecommunications provider was given responsibility for the entire project. We asked Roel, who is CEO of BT Operate, to look back on BT's biggest project to date.



How did you feel back in 2008, looking at the task ahead?

We knew we were tackling a totally unique challenge. Obviously, we had learned a great deal from the previous Olympic Games in Beijing and Vancouver – but from a telecommunications perspective, the scale of the London Games would be something entirely different. To illustrate, we assumed that we would have to carry approximately seven times as much data traffic as in Beijing.

Why is that?

It's only been four years since Beijing, but in that short timeframe there's been a huge surge in demand for network capacity, driven by social media, smartphones, video, high-definition TV, and so on. Just consider: back in 2008, Twitter had about one million users; today, they have half a billion. Facebook is 10 times bigger than it was then. Smartphones were only just taking off, and the iPad didn't exist. Not to mention that more and more people worldwide are watching and following the Olympic Games.

We knew there would be at least two critical moments in the volume of data traffic: the opening ceremony, and the final of the 100 metre sprint. We could prepare for those moments, but we had to deal with a lot of uncertainty too.

Journalists and broadcasters, for example, are notorious for their unpredictable behaviour. They're always innovating(improvising?), so it's practically impossible to impose a standard solution on them. And we couldn't plan as well as we would have liked because the media wasn't involved in pre-Olympic test events. To put that challenge into perspective: more than 27,000 journalists, photographers and TV commentators were completely reliant on BT's network.

Tell us about the infrastructure that was built.

I think it's important to mention that this was the first time that the entire infrastructure was served by a single fibre-optic network – a single IP network carried all data, TV, internet and voice. In Beijing, they still relied on different networks for each of these media formats. We laid 5,500 km of cable, provided 80,000 voice and data outlets, 16,500 fixed telephone lines, 14,000 mobile SIM cards, and 1,000 wireless access points. We had 500,000 Wi-Fi hot spots across London, including the UK's largest Wi-Fi installation in the Olympic Park. And we hosted the London 2012 website. In sum, we built a network designed to handle up to 60 GBPS, which is approximately four times the network capacity of the Beijing Games.

Clearly, this was a very large project to implement.

Yes, the project was huge! It took 1 million man-hours to deliver this communication infrastructure, but we met our entire contractual milestone on time or ahead of schedule. For example, most of the infrastructure was built and installed by mid-2011, leaving plenty of time for testing. Some of this was done at our specially built test facility near lpswich. We also completed hundreds of venue-specific tests and 42 live tests such as the BWF World badminton championship. Finally, we did two full technical rehearsals, which included dealing with hypothetical crises such as flooding of one of the stadiums and a bomb alert in the technology operations centre.

Then it happened – one of the most successful Games ever.

Indeed, and they were also the most connected games ever. Every official photograph and sports report, and millions of calls, e-mails, texts and tweets were carried over BT's network. A total of 961 terabytes of information were carried over the network, with peak traffic reaching just over 6.71 GBPS. 500,000 phone calls were made by media and organisers. The number of tweets per day was more than the number sent during the whole of the Beijing Games.

Specific events during the games had a huge impact on demand. For example, when Bradley Wiggins won gold for Great Britain, there was a 25% increase in video traffic across the entire BT network. Usain Bolt's sprint victories also made digital history by generating 80,000 tweets per minute.

Traffic on the website was huge: London2012.com recorded more than 20 billion page views, which makes it the most popular sports website to date – bigger than the FIFA World Cup 2010.

You mentioned that peak traffic was less than 7 GBPS. Did you provide too much capacity, given the fact that the network could handle 60 GBPS?

No, we had to plan for all eventualities. Failure wasn't an option, especially during a crisis. The network's capacity did, however, lead to a few surprises. For example, early on in the Games we received a large number of help desk calls from photographers complaining that their images weren't being transmitted. It turned out that the coloured bar on their screens – which shows how long the wireless transfer takes, and which normally creeps along – disappeared in a flash before they could register it.

What are some of your personal highlights of the Olympics?

The highlight for me was the closing ceremony of the Paralympics. That was the moment at the very end when we knew that we had run an extremely successful Olympics and Paralympics, and possibly one of the most successful ever from a communications perspective. The latter aspect was especially rewarding because of the tremendous increase in technology needed and deployed in London compared to any other Games.

How satisfied are you with what BT was able to deliver? Did it meet your expectations?

Without a doubt, BT has done a tremendous job. As a company, we should be extremely proud of what we have put together and were able to show the world. We've received compliments from the IOC (International Olympic Committee), LOCOG (London Organising Committee of the Olympic and Paralympic Games), the UK government, the Mayor of London, and many customers and corporations. In meetings I've had after the Games with external people, even in completely different regions, the first thing they do is congratulate BT for the tremendous achievement and result. We have been able to change perceptions — and now it's up to all of us to translate that into commercial success.

So what happens to the infrastructure now?

Most of the infrastructure will remain in place, which is great news for the London Borough of Newham, which hosted most of the Olympic Park. The Olympic Village, for example, will become residential apartments with super-fast broadband.



Roel Louwhoff, CEO BT Operate

Interview with Roel Louwhoff, CEO of BT Operate



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