AE NEWS

BRINGR: CO-CREATION WITH BPOST | DATA PRIVACY IN THE EU
STOP INVESTING IN QA | API MANAGEMENT | AE HACKATHON

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TABLE OF CONTENTS

Preface

At AE we firmly believe in co-creation with our customers and one another to develop strong products and services. This spirit also helps us become a stronger organization, one where people support each other and help each other grow.

We co-create by using models and digital technologies that have proven their added value time and again. But also by innovating and experimenting with new techniques and by continuously adjusting how we look at the changing world that surrounds us.

We also co-create by continuing to work on how we're internally organized and how we operate. By unifying individual and collective interests, facilitating dialogue and by offering frequent feedback and suggestions.

NEW RULES FIT FOR A DIGITAL ERA: WHAT TO EXPECT FROM THE NEW EU DATA PROTECTION REGULATION

By Aline Coelst & Regine Dhaene

On April 14, 2016, the General Data Protection Regulation (EU 2016/679) was formally accepted by the European Parliament. In the summer of 2018, this new regulation will replace all national data protection laws and regulations.

Fast-paced technological developments, globalization and the giant scope of collecting and exchanging personal data were the catalysts for this new legislation. Europe wants to set an example with it in terms of privacy protection and individual rights on the matter.

The new legislation brings lots of changes and even though 2018 still seems far on the horizon, organizations will need that time to take the necessary steps to comply with the legislation's far-reaching demands.

The EU regulation is applicable to the processing, maintenance, storage, distribution and removal of personal data by all organizations that in one way or another deal with personal data. All actors in the end-to-end data flow have a shared responsibility in the matter. Personal data applies to every bit of information relating to an identified or identifiable individual, structured or unstructured and in a digital or non-digital format.

Individuals have gained several far-reaching rights: the "right to be forgotten" and the "right to get access" to which data an organization collects and processes. Companies that have already undertaken steps concerning information & data governance are several steps ahead of those that lacked doing so.

Note that the required measures for mitigating data security risks are not solely of a technological nature. Organizations have to adopt all sorts of new principles – such as Privacy by design and Privacy by default – during the entire product and service lifecycle they offer. Performing a legal check when starting an activity or a project definitely won't be a frivolous luxury. Organizations also have to demonstrate the organizational and technological measures taken to secure the personal data from breaches. These measures need to be documented and be at the disposal of the EU Privacy Commission at all times.

Next to governance measures, technical measures will also need to be taken to ensure data security and to prevent breaches of personal data. It goes without saying that this is a serious challenge in a fast-evolving technical landscape. Many organizations are jumping on the bandwagon of Big Data, Internet of Things, cloud solutions and mobile applications. The days of a person implicitly agreeing to some sort of hidden privacy policy somewhere on a website without fully realizing it are gone.

Companies collecting and processing personal data need to inform the concerned person and get his or her explicit consent. For parties introducing new technologies or automated decision making using personal data, it will be mandatory to perform a "Privacy Impact Assessment" and to apply "Privacy by Design".

The responsibilities of companies (the "data controllers") collecting and processing personal data are far-reaching. The subcontractors, consultants and implementers (the "data processors") appointed by the data controller are also held responsible and need to comply to the EU regulation as well.

Most companies will need to appoint a new 'role', i.e. a Data Protection Officer (DPO), who offers advice on setting up an information management system. The DPO position can be filled by an internal or an external person, as long as he or she has enough leverage to enforce the required changes within the organization. Organizations that will take appropriate measure in a timely fashion and that will be very transparent about their data handling will be able to realize a competitive advantage versus organizations that will be seen as untrusted. Furthermore, organizations that do not comply with the new EU Data Protection Regulation will face heavy fines.

Knowing that we've only seen the tip of the iceberg, the time to act is now.

API MANAGEMENT: UNLOCK YOUR DIGITAL SERVICES

Making APIs available in and outside of your organization can be an important trigger for innovation. But how should you handle this?

By Yannick Geerts

I'm not telling you something new if I say the demands on IT from business are ever increasing. Certainly the last few years, business is looking more and more towards IT as a big part of the solution to their business problems.

Organizations are forced to undergo a digital transformation, where IT is the strategic enabler of their business. Think about IoT, mobile enablement, omni-channel sales/communication, partner integration and so on.

How can you provide a solid IT architecture that can cope with all of these business requests? I call them business requests, because what we are actually trying to do here is exploiting technology to create business value.

I recently heard a term I quite like that hits the nail on the head: organizations need to become "composable enterprises". If we take a look at the IT landscape of a typical mid-sized enterprise, we see a mix of custom-built and off-the-shelf software, using a variety of technologies, both on premise and in the cloud.

All these building blocks that make up their landscape are typically connected point-to-point, pumping data from one application into the other, without thinking about things like re-use, maintainability, replaceability and so on. By transforming all these point-to-point interactions to decent interfaces on top of these applications in the form of services/APIs, using commonly accepted standards like REST and SOAP, you add a lot of robustness to your architecture.

In short, projects can now use assets that are of value to them much faster and in this way innovate faster with shorter cycle times. Don't just think inside your own company's little box but think bigger: projects that involve sharing data with partners, selling assets to third parties who can innovate using your data and so on, this all becomes possible when using APIs.

Furthermore, you can increase the value of your own assets by aggregating data from your own APIs and those of third parties, and exposing this material as a new API. They all provide a common way to interface with them, which makes aggregating this data a breeze. This kind of use cases are typically handled by an API gateway, for both security and performance reasons.

So, these APIs seem really attractive, don't they? However, I can anticipate the following questions you will certainly have:

- How do we identify what exactly should be exposed as an API?
- What's the impact on our current architecture, where does it fit in?
- How do we develop an API and make sure it's reusable, maintainable, secure?
- How do we manage this new "composable enterprise"?

Let's have a quick look at what these questions imply.

Before we do so, we have to make a difference between APIs for internal use (on premise application-to-application communication, own mobile app, cloud integration etc.) and APIs for opening up your enterprise to partners or third parties in general. We will be focusing more on the second category, since that is where the real new value of APIs lies. A first challenge you come across when starting an API program is of course the definition. Unfortunately, defining these APIs isn't always as obvious.

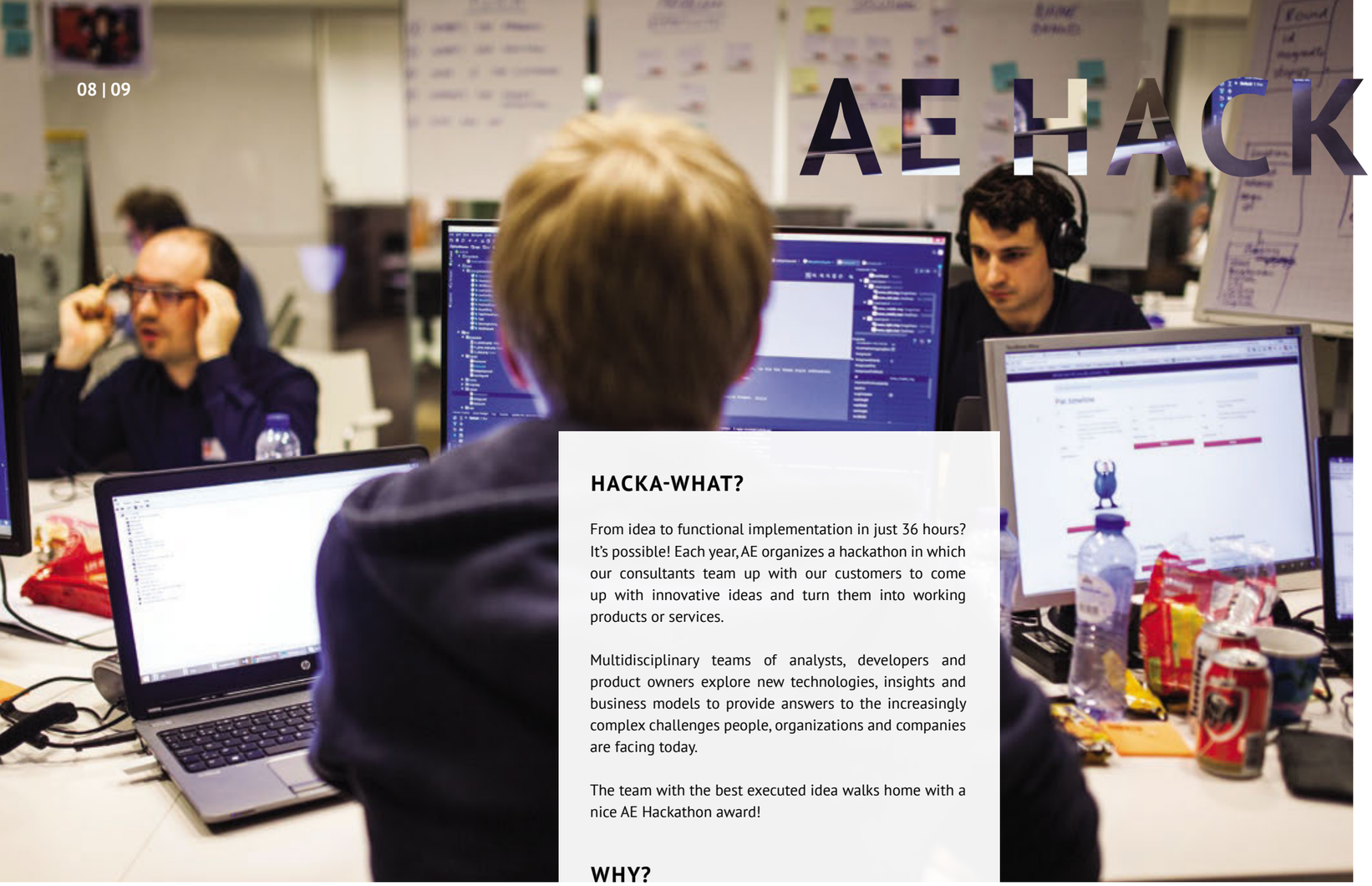
Once we have set our business goals and requirements, we can continue with a solution design and the realization of the APIs. But it doesn't end there. An important part of an API strategy that is often overlooked is the operational and retirement part. How will you make sure people can rely on your services? How can you make life easy for them to integrate with your APIs? How do you even get them to know about your API and encourage them to use it?

Since APIs are built for agility, they will evolve fast! Learn how to cope with breaking vs non-breaking changes. Talking about breaking changes, how long will you support a certain legacy version? Third parties need time to evolve along with you.

Depending on the use case, API security is probably also on top of your checklist. Exposing APIs to the outside world does not mean putting your internals at risk! Make sure you don't expose your internal data structure because that can be abused. Also make sure that when you expose APIs, your internal systems can't get harmed on performance level or on data/infrastructure/application security level. Putting an API Gateway in place can mitigate a lot of these potential risks, but the challenge here is to identify the concerns and to mitigate them in a proper way.

5 steps to define your APIs

AE HACKATHON



HACKA-WHAT?

From idea to functional implementation in just 36 hours? It's possible! Each year, AE organizes a hackathon in which our consultants team up with our customers to come up with innovative ideas and turn them into working products or services.

Multidisciplinary teams of analysts, developers and product owners explore new technologies, insights and business models to provide answers to the increasingly complex challenges people, organizations and companies are facing today.

The team with the best executed idea walks home with a nice AE Hackathon award!

WHY?

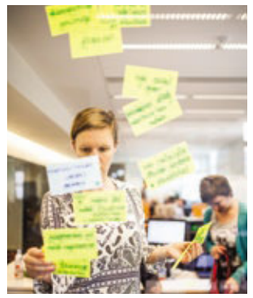
A hackathon is a considerable but very valuable investment. We do it to boost innovation, at AE and at our customers.

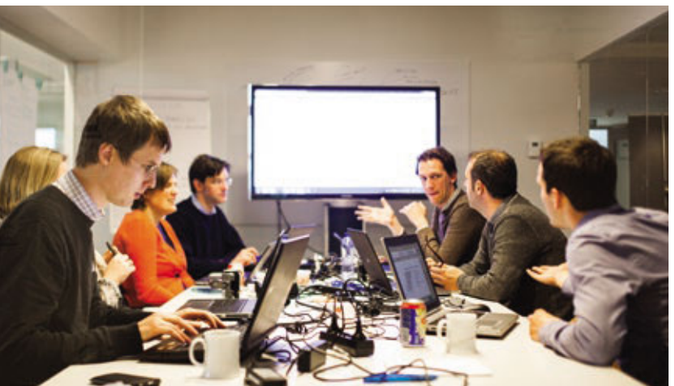
By taking part in the hackathon, our consultants gain hands-on experience without the overhead of larger projects. There's no need to beg for a budget and there are zero complaints about using the 'standard technology stack'. They also get to sharpen their pitching skills and collaborate with people from fields different than their own.

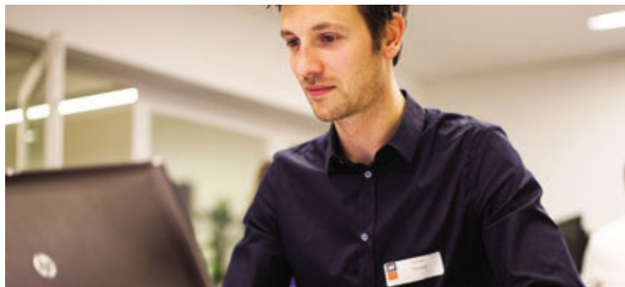
Previous editions of the AE Hackathon have proven to what kind of value these sessions can lead for our customers. A great example of a service that has its roots in one of our hackathons is bringr, the innovative bpost app that won the 2016 Data News ICT Project of the Year award.

Each year, we invite our customers to actively participate in our hackathon by making their API available, supplying data, attending the closing presentation or by taking part themselves.

For more information, check www.aehackathon.be







BRINGR: AN INNOVATIVE SERVICE BUILT IN CO-CREATION WITH BPOST

bringr is an innovative delivery app developed by AE in co-creation with bpost, Belgium's leading postal operator. The app offers an easy and cost-effective solution for people and companies to quickly send packages to their destination of choice across the country.

The pilot phase of the app launched in Antwerp in June 2016 and in November 2016 was expanded to include deliveries originating from Ghent and Brussels.

With a fast-track development period of just 6 months, bringr stands as a prime example of how a big and structured organization can innovate while keeping its existing business models intact.

How bringr works

After downloading the bringr app on their iOS or Android device, users can register either as a sender or as a driver. Senders can then specify what they want delivered where and when, after which the app automatically matches the sender's delivery job to the available drivers in the region. As soon as a driver accepts the job and the package is underway, senders can track the delivery status in real time. When the package has reached its destination, a delivery confirmation is sent and the sender can rate the driver's services.

Agile development the lean startup way

bpost came to AE with the idea of building a new service that was based on the principle of crowdsourcing. In full co-creative mode, both parties further brainstormed about the service during the AE Hackathon of 2015, an intense 36-hour period resulting in the first mock-ups for the project.

After receiving the green light from bpost management, a hybrid team consisting of bpost and AE experts was assembled. The team started development in early January 2016 using agile principles fitted to a lean startup approach. From the very start, sprints were planned and executed in a fashion that allowed for an iterative approach to build, test and optimize the app.

This approach required a continuous improvement of how the team went about their business day after day. An open dialogue and a retrospective following each sprint was key to maintain focus on the goal and scope of the project.

Because they stayed true to the spirit of co-creation, the collaboration proved extremely fruitful for everyone involved. "We've really done everything together, from defining even the smallest bits and pieces to making the biggest of decisions," says Hans Robben, Network Innovation Manager Parcels at bpost. "This spurred our interpersonal relationships and empowered everyone on the team, avoiding any 'us versus them' rhetoric."

Impact on bpost's business and culture

The launch of bringr allowed bpost to make its mark as first mover in the crowd sourced package delivery market and showed that the company could successfully play into current digital trends without affecting its overall business model.

bpost's decision to act before potentially falling prey to digital disruption from the competition has also had a positive impact on its internal culture and its public perception as a company with a full focus on innovation going forward. The project was awarded the ICT Project of the Year 2016 award by Data News.

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For more information on bringr, visit www.bringr.be

Recently, we organized an explorative Lego Serious Play session at our offices in Leuven. The goal was to get to know the technique and to learn more about the pros and cons of where the practice can be applied. Read on to find how it went about.

> ***"LOOK AT THEM, PLAYING WITH LEGO. WHAT DO THEY HOPE TO ACHIEVE?!"***
>
> ***"SO NOW IS PLAYING WITH LEGO GOING TO SOLVE REAL ISSUES? YEAH, RIGHT!"***
>
> ***"COME ON, SOME OF US HAVE TO WORK AROUND HERE! WHAT CHILD'S PLAY!"***

By Toon Herremans

Okay, maybe our colleagues weren't that harsh, but some of them certainly were thinking parts of these quotes. Even the participants were very skeptical when our Lego Serious Play (LSP) session started. And who could blame them? Imagine yourself solving your greatest organizational issues by using Lego. Hard to fathom, isn't it?

And yet LSP works. For two reasons: visualization and storytelling.

Visualization is a proven technique that is not only used by Lego, but that also helps you remember. Building models using Lego clearly visualizes them for every participant in the workshop and helps them understand what the builder is telling. As such, it's much easier to remember what was told.

The power of Lego constructions is that they allow you to make a connection between different views when the individual structures are combined. This way you can create a shared model that represents the solution to a problem.

Storytelling makes sure that everyone understands what is meant by the creation. The basis is that you can build anything you like, but the story you tell makes it the thing you want it to be. When building a model everyone will be able to tell their own story about the creation, but only you know what it really is supposed to be. That's why the storytelling part cannot be skipped.

For an LSP workshop to be successful, it's important that everyone participates, and this practice enables that. It also prevents potential hijackers of your workshop, i.e. the loudest participant, to force their view on the subject at hand. A shortcoming of this practice is that people who weren't present when the model was built and didn't hear all the background stories have a hard time understanding what the model represents.

That's why we videotaped our LSP session. Now we can revisit that moment and explain to others what we meant with our construction. The technique also requires the right soft skills. You can't just build and explain. You need to actively and critically listen to what other participants have to say, because interaction is key in this kind of workshop.

A factor that is not to be underestimated is the presence of an excellent facilitator. There are various ways to tackle different issues within your company. It's the facilitator's job to interpret what the issue, as formulated by a client, actually means. Then they have to analyze what is the expected outcome of the session and how the participants should arrive at this destination. That's why at AE we invited Marc Sonnaert from The Duck Academy. Marc and his colleagues are certified Lego Serious Play facilitators and have already helped many companies solve different types of issues.

Lessons learned

- **Prepare a well-defined scope so the facilitator can find the best approach**
- **Keep in mind that there are different steps depending on the defined scope**
- **Ask open-ended questions**
- **Take pictures and film the session**
- **If possible, display the final model in your offices**

When you're planning on using a workshop in your organization do consider Lego Serious Play. The possibilities are endless: defining new business, (re)designing business services, customer journeys ...

TRANSFORMATION IN A CHANGING WORLD

By
Stef Devos and
Frederik Hautain

When we ask our customers what drives them and what makes their organisations tick, the conversation always turns to the complex, changing world and its impact on their business. It isn't not knowing what the future holds that worries them the most but rather the rate at which new developments are taking place. Today's opportunity could be tomorrow's threat.

It's that mix of uncertainty and urgency that keeps our customers awake at night.

How can companies stay relevant tomorrow? And not only for their customers but for their staff as well?

As a consulting agency, this also applies to AE.

Our core business is to assist companies in their transformation. Whether it's innovation or renovation, we have to take care today of what our customers will need tomorrow, both in terms of business and technology.

Of course, we don't have a crystal ball and the pace of change keeps us on our toes as well. Still, we have a duty to our customers to understand what's going on in the market, to grasp what new opportunities new technology brings to their business, to examine what creates true added value, and to distinguish trend from hype.

To provide our clients with sufficient added value ourselves, we must make certain choices. We shouldn't try to do everything at the same time but what we do do, we strive to do better than the competition. Here at AE we use six clearly defined topics to put things into focus.

These topics indicate in which areas we wish to invest and build knowledge to join our customers in reflecting on what the future has in store. And it doesn't stop there: we actually help them build that future because if we are to become proficient at carrying out this transformation, we need to get our feet wet.

The 6 central topics AE works on:

1 | Realize Digital Business & Platforms

2 | Engage for the IoT Journey

3 | Embrace the Integrated World

4 | Turning Data into Competitive Advantage

5 | Human Relevance in a Digital World

6 | Time to Value

6 AE TOPICS FOR TRANSFORMATION

REALIZE DIGITAL BUSINESS & PLATFORMS

Digitisation has a growing impact on ourselves as human beings, but also on the companies that employ us and on society at large. For instance, we shop from the comfort of our own homes while running outside to catch Pokemons. Digitisation blurs the lines between the physical and virtual world.

The taxi company of the future no longer has drivers or taxis. People and physical objects receive digital counterparts and thanks to artificial intelligence (AI) and self-learning algorithms, digital entities are starting to exhibit human traits. Customers call on helpdesks that are no longer exclusively manned by flesh-and-blood persons but by chatbots as well. And if the Amazon Go model is universally adopted, the checkout till at the supermarket will become a thing of the past.

Technology has removed the physical restrictions of time and space. Both for customers and companies this opens up a wealth of new opportunities, transactions and experiences.
The business world will gain momentum, bringing not just new commercial opportunities but also risks.

The large volumes of information and the increased speed of our digital interactions make a real-time customer approach possible, but those customers will also develop new expectations and be presented with more options. They can zap away in an instant.
Also, governments are issuing new laws and regulations to protect their citizens' privacy.

In addition to the growing complexity of customer interactions, companies are also confronted with new business models. The lines between industries are fading and entire industries are feeling the effects of digital disruption. Competition not only comes from small (low-cost) players but also from non-traditional players from other sectors. Established companies must question and reinvent themselves in order to meet these challenges.

The key is innovation. Tapping into new markets and customer segments may be just what the doctor ordered for one company, while others will focus on offering new services, channels and models for collaboration. More and more often, companies are opting for an end-to-end digital model in an operational sense as well and this results in simplified processes, a more agile organisation and new possibilities in terms of IT.

At AE we feel that focusing on innovation is not a matter of choosing one over the other. On the contrary, we often see that digital transformation allows for traditional business models and systems to be used together with innovative services.

We help our customers take the right steps in their digital transformation and innovation processes. First of all, by better understanding our clients' customers and by putting innovative ideas to the test. In this way we gain a profound insight into what really works so we can market the best ideas and integrate them into a long-term overall approach for our customers.

ENGAGE FOR THE IOT JOURNEY

More and more, today's fast-paced technological evolution is replacing everyday objects with 'smart things': intelligent devices that effectively collect data on a large scale, both on themselves and their environment. These physical objects have access to the Internet of Things (IoT) and take part in the conversation in the digital world.

The intelligent collection and use of this wealth of data enables companies to optimise their operational processes and set themselves apart through new products and services. But the buck doesn't stop there. By combining intelligent systems with existing services, companies can transform their business and offer services which were previously unimaginable.

I'd like to illustrate this with an example from the utilities sector, where work is underway on a smart meter that will register the end user's energy consumption.
Error-prone and time-consuming manual meter readings can be replaced with an automated process, decimating the number of interventions required and limiting the risk of error to a minimum.

Energy providers can distinguish themselves from the competition by offering their customers energy/eco coaching based on actual consumption data. As for grid operators, they can market themselves as the operator of a digital marketplace where supply and demand are orchestrated by customers – the Uber of the energy market!

IoT will also have a major impact on other branches of industry. In the sector of Payroll and HR Services Providers, the services offered in terms of prevention & protection can be modernised by using wearables and giving staff incentives to maintain an active lifestyle. The insurance sector could offer insurance products with premiums that depend on actual driving behaviour instead of by the 'statistical' risk of an accident, as is still the case today.

AE assists customers in their IoT journey, both in developing opportunities and in assessing the business risks. We develop the know-how to coach our customers end-to-end, throughout the various phases: from ideation across architecture & lean prototyping to implementation & roll-out.

In order to maximise the potential business value, we work with multidisciplinary teams and we always aim to strike a balance between innovative and architectural thinking.

EMBRACE THE INTEGRATED WORLD

Meanwhile everything and everyone is connected. Time zones and distances are being bridged with ease while national and company borders are fading. Companies can be present anywhere in the blink of an eye.

Intensive globalisation and digitisation gives birth to new forms of interaction, communication and collaboration. These new models of cooperation give rise to ecosystems. Companies have access to new markets through networks that help them find new partners and interact with their customers through new channels. Their relationship with their staff also changes: remote working and flexible jobs are on the rise and growing numbers of people are working for and with companies on a freelance basis.

Companies face immense challenges in terms of business and IT if they are going to offer digital services directly to the customer (e.g. through self-service) or exchange information with the ecosystem (e.g. through open APIs).

As much as possible, process chains are simplified, streamlined and digitised end-to-end as much as possible.

The IT architecture must be adapted to the new digital world and must evolve towards a (micro-) service approach. Increasingly, in-house developed applications are being replaced with standard packages that can run both on-premises and in the cloud. As a result, demand for integration is growing. Innovative platforms (iPaaS, iSaaS and API Management) support these new needs through cloud and hybrid implementation models. This calls for additional investments in skills, knowledge and capabilities with regard to integration.

At AE we consciously focus on the integration of companies, both in-house and with the ecosystems they are part of or would like to become a part of. Integration literally affects every aspect of a company and specifically demands an architectural approach. Apart from aspects of standardisation (of processes and software packages) and virtualisation (cloud computing), we also assist customers with channel integration, process integration, application integration and data integration.

TURNING DATA INTO COMPETITIVE ADVANTAGE

To survive and to really make a difference, companies must not only be masters of suitable and customer-tailored service; they must also outshine the competition in flexibility, accessibility and personalisation. They can only do this by thoroughly understanding the expectations and behaviour of their customers and reacting accordingly.

Decision quality is not the only thing that needs to improve, companies also need to make decisions faster.
In the digital world, companies have to process ever-increasing volumes and different types of data, which are generated faster and faster. The relevance of that data is often short-lived and that makes fast processing absolutely crucial.

Just think of streaming data generated by sensors and, more and more, by the many other devices we use in our daily lives. And then there are the data from online interactions by customers or from the use of apps and smartphones.

For companies it is absolutely essential to process, integrate and convert these data into the right insights at the right time because it enables them to make the conversion from a reactive to a proactive approach: preventing production breakdowns from taking place, anticipating changing market circumstances or customer needs and expectations…

Organisations obtain different kinds of information through a variety of sources. Acquiring, storing and integrating this information as well as processing and gaining insights into this data requires new methods, competencies and technologies. Companies must organise in such a way that they can manage both the classic information streams and the new forms of data and information in an effective way.

AE helps organisations set up and implement a holistic approach with a view to turning information and data into a true competitive advantage. We do this by establishing a strategic road map for information management, by mounting initiatives in light of the customer's actual needs (migration, integration, big data, architecture, …) and by providing support in several strategic and core disciplines such as master data management, data governance and data quality management.

Conceptualising, designing and developing intelligent decision support systems (reporting, predictive and descriptive analytics, visualisations, …) is also one of our strengths. These systems can be used in the optimisation of operational excellence, to enhance the customer experience, to devise strategy and to develop innovative business models.

This makes it possible to translate the insights gained from data into concrete actions and new products and services that capitalise on current customer needs. Companies that do this well hold a competitive advantage over their rivals that don't.

HUMAN RELEVANCE IN A DIGITAL WORLD

No matter how much we digitise, computerise or automate, at the beginning and end of the value chain there are still actual people with real emotions and desires. That is why digitisation and robotisation increase the need for insight into the human psyche.

People still attach a great deal of importance to a few fundamental values:

- By nature, people try to establish a rapport with other people, they want to be part of a community, … This explains why social networks are so successful.
- People also want to stay in control. While being flooded with information, we still ask ourselves whether we are consulting the right information to be able to make a decision.
- Doing business is still a matter of trusting the other party, in the services they offer and in how they treat us. The reason Blockchain is so popular right now is exactly because it inspires trust within a decentralised network of people.
- People also value their privacy; we want to be sure our data will not be abused. We want to be certain they will only be used within the context we have agreed to.
- People are always on the lookout for solutions to make their lives easier. These solutions range from digital assistants to robots that perform certain tasks for us.
- People also want to realise their potential. How can we improve ourselves to be able to keep our jobs in the future, taking into account that 40 to 80% of jobs as they exist today are under threat?
- And finally, people also want to give meaning to their lives: what is my purpose in the digital world?

From a human perspective, companies in the digital world face challenges both in terms of staff and customers.

No matter how automated the processes, every company needs good staff, whether they work directly for them or belong to a community of staff. How can a company continue to attract and motivate staff, how can they be used to best advantage, how can they help staff grow or go through the necessary changes so they can provide added value in a new way?

Customers have to trust a company. They may need a helping hand in crossing that digital threshold and companies have to keep them interested. Also, a company has to provide a satisfying customer experience and deliver a reliable customer service. This is the basis for building a long-term relationship with your customers and maybe even turning them into ambassadors.

At AE we work in autonomous teams within a network organisation. We are more than prepared to share our experiences with this new organisation model with our customers. We can also help companies find the ideal candidate using platforms such as Sk!lld and Compass.
We also organise training programs and like to carry out our assignments through co-creation so there's an element of change management to every project.

As for the customer experience, AE focuses on all aspects that enhance the human experience (user-centric design, gamification, …) and optimise human interaction (process simplification, customer behaviour analysis, digital marketing, legal compliance, …).

TIME TO VALUE

What we've said on the previous pages clearly illustrates that companies go through a transformation to keep creating value for new and existing customers in the complex world of today.

Expectations towards their IT department are high in terms of managing complexity and capitalising quickly on new opportunities. And while the CIO is expected to set a course for the future of the organisation, the existing IT landscape still absorbs tons of attention and budget for maintenance, rationalisation and cost control.

The Standish Chaos Report is a prime example in this regard: just 29% of all IT projects worldwide are considered successful (this means timely delivery, within budget and with the realisation of the intended customer value). What is so remarkable about this statistic is the fact that it hasn't changed for 20 years. This prolonged stagnation has a number of causes:

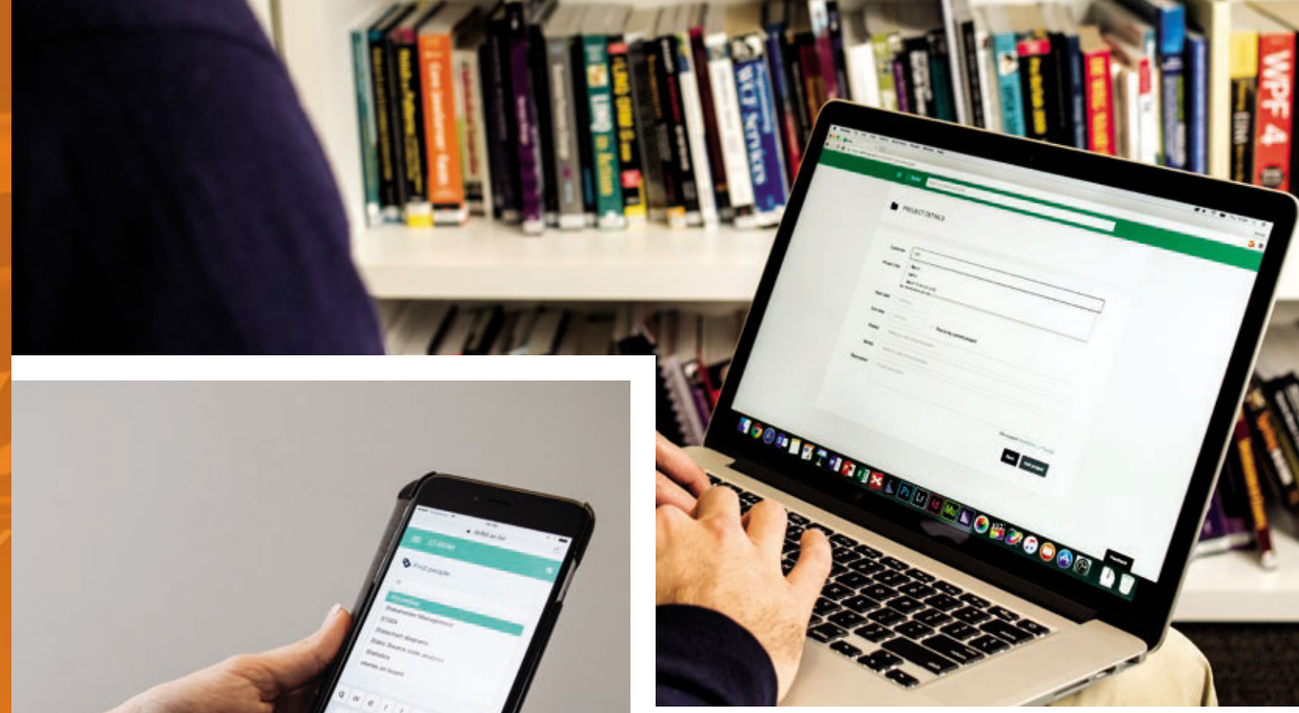
- The IT ecosystem is becoming ever more complex. We are expected to integrate with everything and everyone, content must be made available on all kinds of devices, etc.
- The role of IT in the core processes of an organisation is growing and it is shifting from 'supporting service' to 'enabler'. The pressure to deliver faster just keeps building and this increases the error rate.
- Things have to go faster all the time and usually there's an entire legacy of applications that can no longer cope with such a work rate, let alone offer the flexibility to be able to provide the customer with added value.
- Add in the fact that customers are growing less patient by the day. They expect products or services to deliver added value from day one. If they don't, customers write negative reviews or switch to the competition.

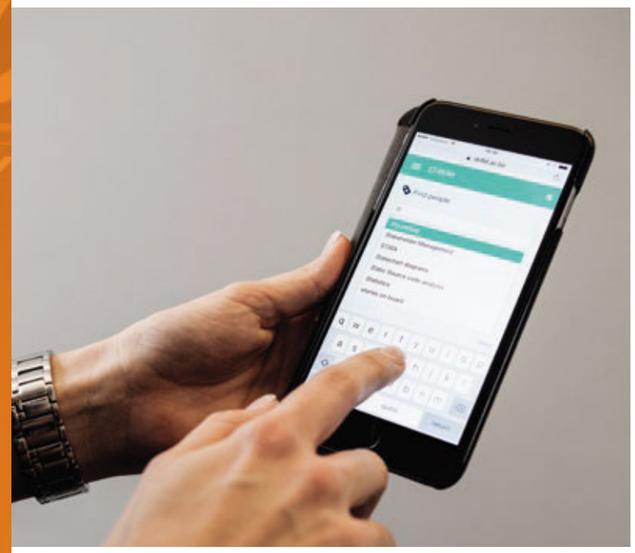
The list above is not exhaustive but it does reflect a number of important dynamics that get in the way of an effective IT organisation.

AE presents companies with the know-how to combine speed with efficiency in three distinctive ways:

- 'Doing the right thing': tackling the efficiency of the IT organisation by setting up a 'just enough' enterprise architecture. The IT objectives must be aligned with the corporate strategy so the scarce means can be allotted to the right projects and initiatives.
- 'Doing things right': aimed at boosting the efficiency of the IT department when doing things quickly. This also includes the location and removal of bottlenecks and break points in the Software Development Lifecycle process (ALM, DevOps, test automation, etc.).
- A combination of the above: adopting a co-creation approach in taking the client through an entire trajectory from initial idea to operational product within a timespan that is too short for a traditional IT structure.

Such projects have no chance of success without the buy-in of all stakeholders. That is why the creation of engagement by implementing change management is necessary to make them a success.





TRAENING DAY

AE organizes 8 Traening Days per year. These are afternoons during which our people come together to share knowledge with one another or to gain insight into new trends and technologies. Next to this, our Traening Days are also meant to bring our colleagues together and to establish links between the various accounts.

The programme of our Traening Days is handled by our consultants themselves. By way of various presentation formulas they can share information about their projects, concrete realizations and knowledge gained.

Following each Traening Day, our AE Event Team provides a nice closing moment, each time based on a specific theme.

STOP INVESTING IN QA

By Wouter Moermans

Over the past 10 years businesses learned about the value of QA and testing in general. Today every company has its own QA department that is making sure their software runs correctly. But the cost for these departments has become extremely high.

Will this trend continue or can we find new approaches to QA that are less expensive?

DIGITAL DISRUPTION

At the corner of my street is a Chinese restaurant. Yet when I order Chinese for dinner it's almost never from that place but from a restaurant that is not even located in my village. And it's not because their food is bad. No, the sole reason is that the latter restaurant provides their customers with an app to order online. Existing customers like me can literally order their dinner in a matter of seconds.

This is yet another example of how businesses are being affected by digital disruption. This is not only true for small local businesses: large enterprises that have proven themselves for decades are also struggling with this digital disruption. Look at what happened to Kodak for example. These last couple of years, customers have been getting spoiled with digital solutions that make their lives a lot easier. And now with the explosion of mobile adoption, virtually every business has the means to provide their customers with those digital solutions. Customers are not only fond of these features, they are expecting them. Just like me, if I can't order my dinner online from you, I will move to a competitor who can.

CHANGE ISN'T EASY

Knowing about digital innovation is important. I'm quite convinced most large corporations are aware of the fact, but dealing with it isn't trivial. I've seen this in the financial sector. Banks that have been slowly extending their IT landscape for the last 40 years, to improve their internal processes, suddenly have to start building enormous online platforms to compete with new digital players like PayPal.

Businesses recognize this problem and are investing heavily in their digital transformation. This transformation means something different for every business, but if they want to succeed, they should aim for a similar goal. They must learn what their customers find important in their products and deliver those features to them. Companies who can do this faster than their competitors will have the competitive advantage. When putting this into an IT perspective, it basically means that companies must speed up their product release cycles. By a lot.

Although companies are investing heavily in their digital transformation and have adopted practices like lean thinking and agile software development, they are still struggling with lowering the lead time of their product releases. There are several causes for this that are worth talking about, but one of the most overlooked causes for me is quality assurance.

TRADITIONAL QA

QA is a practice that has become apparent in almost every large company that is confronted with IT projects. Over the years, more and more resources have been invested in QA. On average, companies are already spending 35% of their project budget on QA and this number is still increasing rapidly. This can mainly be explained by the value that QA delivers to a company. Every defect found by a tester provides value for the project's stakeholders and every fixed defect provides direct value to their customers. And now in this digital era customers can have a lot of impact on a company's reputation thanks to social media. To keep our customers happy, we need our QA team to find all the critical defects. But projects grow more and more complex and business requirements keep changing at a faster pace which causes small QA teams to have a hard time dealing with the workload. This makes it feel intuitive to keep investing in QA, but if we look at how QA has evolved historically we can see this doesn't necessarily make sense.

The problem is that in most companies a QA team is a team of testers that looks at the software as if a user was using it. It is an external view on the project and it is something that can only be done when the application under development has reached a certain level of completion. This makes traditional QA inherent to the waterfall approach. When a critical defect does get found by a tester the entire project needs to iterate the waterfall again. This is a very expensive and lengthy process. The defect needs to be fixed, the code base needs to be redeployed and the application needs to be retested for regression defects. This takes a lot of time for possibly just one feature that stakeholders want to push to their customers.

TEST AUTOMATION

I've seen a lot of attempts by companies to automate their functional regression packs just to mitigate exactly this problem. On paper this makes sense and for traditional QA professionals this feels natural because they look at a product from an external point of view. But investing in this strategy will not help you reduce your average lead times. More testers and functional test automation won't solve this problem. Many technical experts know exactly what the pains are of investing in functional test automation. It's merely the equivalent of putting an expensive band aid on a wound that needs to be stitched.

THE ROAD TO QUALITY AT SPEED

In its early days, QA was a safety net that caught bugs at the bottom of the waterfall. Even customer-facing software just needed to 'work'. Today's QA teams are still seen as this safety net, but now they have to deal with a lot more aspects. We often forget that QA became way more than simply testing for bugs. QA is getting confronted with performance and availability SLAs, usability and accessibility requirements, flawed environments, projects that depend on legacy or external products and many more new aspects that simply were ignored in traditional QA. Investing in a bigger safety net is just not going to cut it anymore.

Traditional QA teams can't deal with all these new aspects and because they sit at the end of the cycle many new QA aspects like usability or code quality stretch far beyond their scope. To speed up our releases, we need to start integrating QA with the rest of the project. We need QA professionals that know the business value of the project, understand the tech stack of the project and the infrastructure it runs on. QA experts will need to spread awareness and need to assist architects, developers, analysts … into blueprinting the necessary measures which can assure the quality of the project in a rapid way. Those measures will be different for every project, but they will always target the same elements. They will have an impact on how our software is designed, how code gets written, how environments get set up, how we deal with data and so on. QA should be engineered into the project instead of on top of it and every project member should fulfill their role with a QA mindset.

With this kind of QA we can finally move away from weeks of bug hunting on acceptance environments. Our acceptance environments can then be used by our business stakeholders as a private beta environment where they can learn even faster what their customers really want and how usable their products really are. Features for products that can be released in days instead of months will reduce the feedback loop between the business and their customers. For a company that is undergoing its digital transformation this is one of the goals that once achieved will help them outperform their competitors.

Obviously, these are high impact changes that can't be made in one shot. But when testing cycles start taking days to complete, bugs are reaching production or customers start complaining on social media, maybe we shouldn't invest great amounts into our traditional QA department anymore. It might be the time to reevaluate how QA should be done in our projects and look for new partners who can help us with making those first little steps forward into achieving true quality at speed.

Corda Campus

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SATELLITE OFFICES

At the end of the Summer of 2016, AE opened two satellite offices: one at the Corda Campus in Hasselt and one at the Ghelamco Arena in Ghent. Our main office remains in Leuven.

The opening of these offices means that it's become much easier for our locally active consultants to meet each other and to exchange insights and experiences without having to travel many extra hours.

Next to that, we're also actively using our presence in Hasselt and Gent to establish strong networks with businesses, organizations and partners in these regions. This way, we can focus on our ambition to help these companies with their business challenges.

Ghelamco Arena - Meet space

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