

ERNI Experience reports on management, processes and technology

Experience

A portrait of a middle-aged man with dark hair, smiling and looking slightly to the right. He is wearing a dark suit jacket, a light blue dress shirt, and a blue patterned tie. The background is a soft-focus indoor setting with green foliage on the right.

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OCTOBER 2015

FIT FOR CHANGE

Transformation for future business success

CONSISTENT BUSINESS PROCESSES

Added value by eliminating media discontinuities

SECURING CUSTOMER RETENTION THROUGH QUALITY OF SERVICE

Integrated customer portals as work and service tools

USABILITY AND USER-CENTRED DESIGN

The first few clicks are decisive

DIGITAL NATIVES — THE CUSTOMERS OF TOMORROW

Companies are currently grappling with two parallel trends: With the introduction of technology such as the cloud and big data, as well as digitisation more generally, an increasing number of processes are moving into the virtual world. At the same time, people — both as customers and as employees — want a new means of communicating, connecting and collaborating: one that is personal, needs-based and tailored to the individual.

A third trend is the increasing speed at which new business models are emerging and established models are being challenged.

In order to succeed in this environment, companies must be open to change. They need to come up with innovations faster, collate and implement both internal and external feedback quickly, focus on benefits and put consumers as well as their needs at the centre of everything they do.

This change brings with it cultural challenges. With this in mind, in the first article we ask what criteria are critical to the success of change projects within a company.

Digitisation means that more and more business processes are being transferred to portals and mobile applications — and these processes need to be consistent. In the second article, we look at how to avoid media discontinuities.

The third article focuses on how to ensure that we are delivering a consistent level of service across all digital channels involving customer contact and retention, and how we can tailor the support that we provide to customers as much as possible with the individual in mind.

Finally, in the last article we consider why a user-oriented approach and, in particular, the intuitive usability of applications is a decisive competitive factor.

We hope you find this issue interesting and useful.

Best wishes,
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FIT FOR CHANGE

TRANSFORMATION FOR FUTURE BUSINESS SUCCESS

The digitisation of business processes is challenging and hard work. The right approaches need to be taken in order to first initiate, and then maintain, this process of digitisation.

BY BRUNO HEUFELDER AND DANIEL SANTOS

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CONSISTENT BUSINESS PROCESSES

ADDED VALUE BY ELIMINATING MEDIA DISCONTINUITIES

If business processes are consistent from start to finish in terms of their planning and the way they are modelled technically, they can run much faster and more efficiently.

BY YOANN PELÉ AND PATRICK FAUQUEX

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SECURING CUSTOMER RETENTION THROUGH QUALITY OF SERVICE

INTEGRATED CUSTOMER PORTALS AS WORK AND SERVICE TOOLS

Customer service is increasingly becoming a differentiating factor in competition, and digitalisation is a good way of increasing the quality of this service.

BY MATEUSZ KASPRZAK AND BEKIM META

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USABILITY AND USER-CENTRED DESIGN

THE FIRST FEW CLICKS ARE DECISIVE

With the self-service mentality among users growing when it comes to applications, greater focus is now being placed on the usability of these applications.

BY SASCHA NUSSBAUMER AND BRUNO KRIEG

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TRANSFORMATION FOR FUTURE BUSINESS SUCCESS

The digitisation of business processes is challenging and hard work. The right approaches need to be taken in order to first initiate, and then maintain, this process of digitisation.

The digital transformation has triggered considerable changes to business models and processes, these call for a shift in the overall organisation of companies. In order to get all employees within an organisation on board and involved, a culture of change must be created. This step is often not possible without outside help. The ideal partner creates a kind of «lab environment» where they can build up momentum and then spread it throughout the company.

BY BRUNO HEUFELDER
AND DANIEL SANTOS

Millennials are dominating the worlds of work and business. Tech-savvy, self-assured and ambitious with large social networks, — both as customers and as employees, the generation born after 1990 are not to be underestimated. After all, they have grown up with the Internet and digital technology. They use digital and social media with a self-assuredness that is far beyond many decision-makers and heads of marketing or HR in traditional companies. Yet change is afoot. Some industries, such as music and travel, have already been thoroughly shaken up by the digital transformation. The saying «adapt or die» is particularly relevant here: Companies must rethink their business models and make customers and their needs the focus of all their efforts — tech-savvy and increasingly mobile customers want to be able to access everything immediately, anywhere and at any time. What's more, they want this access to be as convenient as possible while also being tailored to their individual needs.

Digital technology is simultaneously the origin, driver and means to an end for this trend. It changes the way people obtain information, collaborate, shop and manage their day-to-day lives in general. Companies must be prepared to adapt to

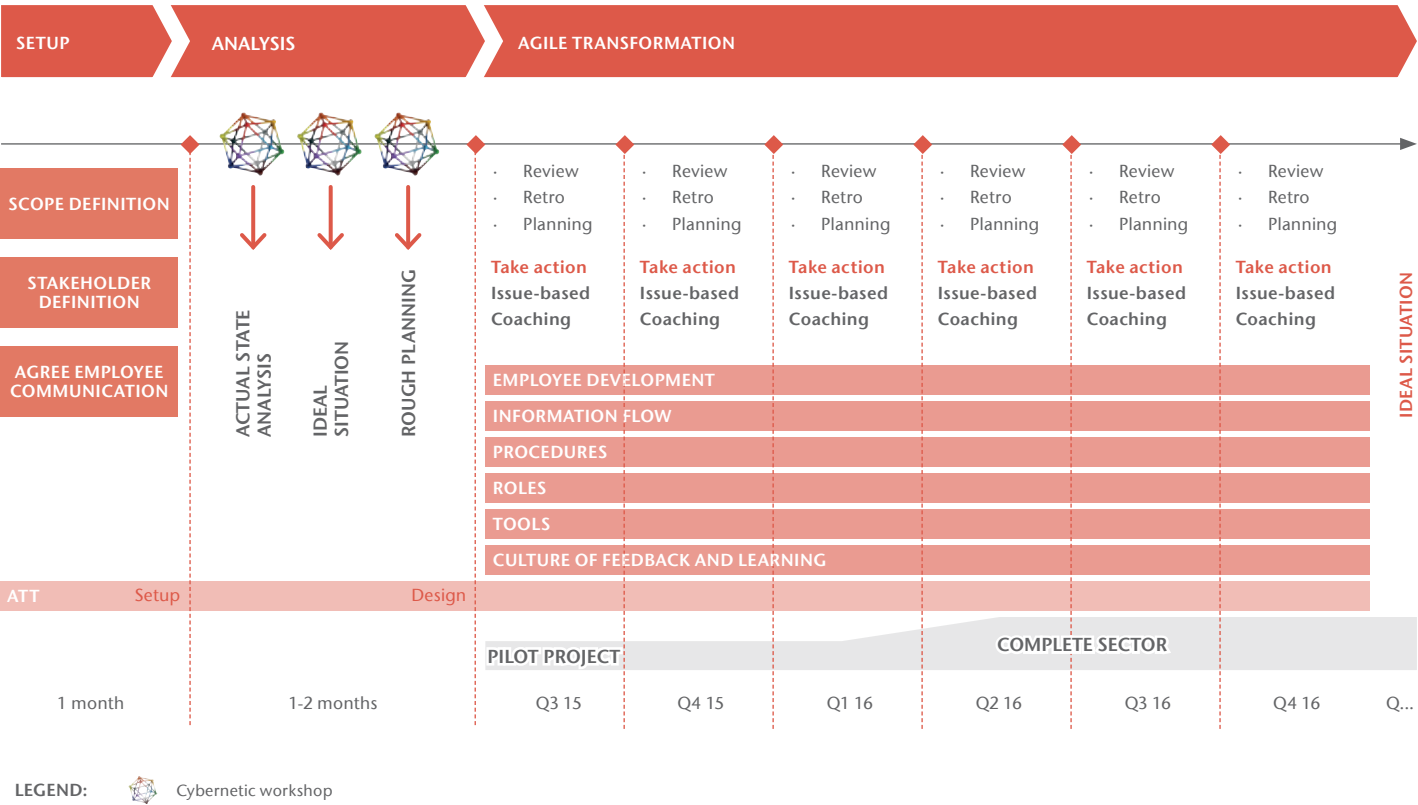
this change in customer behaviour. It is not enough simply to introduce this or that new technology, or put this or that process in place and then to continue on just as they were before. The business model must be thoroughly analysed and made fit for change: How does my company need to position itself strategically to change so that, simply speaking, the customer's needs are not the means to an end, but rather the end itself? In other words, it is not the product that is key, but rather the customer benefits that the product brings.

What is striking is that in many industries it is the newcomers that are setting the trend rather than the companies that originally dominated the market. These newcomers are revolutionising the market with their business ideas, ideas which are thought through from a digital perspective right from the start. Well-established companies that have been walking down the same beaten track for years, or sometimes even decades, are often unable to initiate the change required without outside help. This calls for momentum introduced from third parties: an external consultant who can offer experience in change management and methodically support these change processes — from the design stage right through to implementation. It is advisable to look for a partner who can offer domain expertise



«In other words, it is not the product that is key, but rather the customer benefits that the product brings.»

FIG. 1: ROUGH PLANNING – ROADMAP (TOTAL APPROX. 2-3 YEARS)



as well as experience in a range of industries. This is because different sectors are at very different stages of development — while industry has already experienced the breaking up of value chains, for example, this change — referred to as «industrialisation» — is currently a hot topic in the banking and insurance sectors.

Although digital technology brings about change, the impact extends far beyond IT departments. This technology challenges the entire organisation: Specialist departments must anticipate the future needs

of their customers and drive innovation. Marketing must reach and connect with the customer not only using conventional methods, but also through digital and social channels. HR needs to connect with employees who want to leverage trusted electronic work tools used outside of work for their day-to-day tasks, and both take responsibility and be inspired by a common vision.

A culture must therefore be created across all areas of the company in which change is not only possible, but also welcomed.

It is often necessary to develop cells from which a «virus of change» can grow and spread throughout the organisation. That way when you put your trust in a partner who brings both consulting and methodological expertise to the intersection of technology and processes, a kind of lab environment can be created, in which innovation is brought about through a common desire for change. The partner has two tasks: As an external agent the partner must initiate the change process and pinpoint any areas where improvements can — and must — be made. At the same time, the partner needs to support the change team so that it can keep this process moving forward internally and, little by little, get the entire organisation involved in the process.

Example 1 CONSULTING EXPERIENCE

Change agents typically encounter companies in which employees are so absorbed in their operational activities that they do not (*or cannot*) spend time analysing day-to-day operations: It is like the parable about the exhausted woodcutter who tried his best to saw down a tree — but without success since he was using a blunt saw and did not take the time to analyse his situation. He simply thought there was not enough time to sharpen his saw. When a mountain of tasks builds up, this has a negative effect on quality, efficiency and, above all, on employees' motivation to deal with any possible changes. With this in mind, change agents are tasked with raising awareness of the need for transformation from the outside. This is because transformation cannot simply be imposed from above; it requires initiative, as well as time

and space in order to progress. There is no textbook approach that can be applied within a company to allow it to progress in the right direction during the transformation process. Conventional organisational structures mostly consist of reporting chains. But the change that now stands before the company requires that every team and every individual does their bit to help the organisation achieve its objectives — hierarchies of command must be transformed into increasingly functional hierarchies that share the same purpose and objectives.

Consulting experience has generally shown that change agents must assume another role, depending on the level of maturity of the organisation: If the level of maturity is still low in terms of the desired change, best practices must be defined and, as far as possible, the workflow must be set out. As the willingness to change increases within the organisation, the consultant will increasingly take on more of a coaching role, but will still intervene in the process as required. Finally, the consultant only provides support for the company in the change process, ideally until the organisation has reached a point where it is able to develop further independently.

The path to transformation usually starts with a setup and an analysis, undertaken jointly with all stakeholders. The need for change typically manifests itself on many different levels: Habits need to be changed that affect how people work with one another. Processes must be re-established and technological requirements created in order for employees to work well as a team and so that employees undertake the expected individual responsibility and therefore individual organisation. Over



«A lively culture of change means creating an environment in which employees can develop themselves as fully as possible.»

several consecutive round table meetings on transformation, measures are defined and gradually implemented. Experience shows that a gradual, evolutionary change within the company is more easily «digestible» than large upheaval projects that fail to meet their own ambitious targets. What works at team level needs to be gradually transferred to other areas until the whole company has been «infected» by the change. The change agent's job — depending on the specific challenges at the company — is to apply appropriate methods and tools and introduce platforms that promote a culture of feedback and learning within the company.

In doing so, creative approaches and more formal frameworks have both proven to be successful here. The formal frameworks are retrospective, for example, and show the working methods used, where there is potential for improvement and what specifically should be implemented as a next step. The core team meets regularly to discuss experience and knowledge gained during the process and uses this as a basis to identify measures to be taken. In the case of a medical engineering company that developed a new device, releases that used to take four to eight weeks could be optimised and delivered as daily, stable deployments.

In a public sector organisation, methods from a two-day training camp are being used for agile process transformation. After a theoretical introduction, the team members are entrusted with tasks in several iterations, and the implementation of these tasks — the «how» rather than the «what» — is subsequently analysed in detail by the team and improvements then made accordingly.

It is not always necessary to take a step back from day-to-day operations in order to initiate changes. In another case, it was enough to simply increase transparency regarding upcoming work. By visualising/mapping out any barriers in the workflow or obstacles at interfaces on a board, these dependencies and their effects can be anticipated and addressed in the next iteration. The path from awareness in the sense of «stop starting — start finishing» to arriving at the solution is then relatively short.

The saying «less is more» also applies in the case of the company for which the change agent proposed the continuation of just five instead of two dozen parallel projects as part of a simple experiment. Focusing on fewer projects resulted in a significantly higher output while also increasing the completion rate of projects and boosting motivation among project staff.

It is said that faith can move mountains. If employees are involved in the change process in such a way that they believe they are able to accomplish it and make their own personal contribution, a positive chain of events is automatically set in motion: The resulting motivation that employees then have quickly produces positive results that resonate within the team and subsequently the entire

organisation. A self-learning mechanism is often set in motion right from the outset by creating a culture of play. Simulating the abandonment of old habits as part of a game and then transferring this experience to day-to-day tasks is an effective method. This method was put to the test with two scrum teams in a service provider's software development department; during this process, the change agent had the employees make boats out of paper while the workflow was constantly being changed. When this experience was transferred to actual day-to-day tasks, a new, much more efficient process could be put in place that also served to reduce the latent feeling of being overloaded among team members to a minimum.

Freedom to play brings «people» back into focus. Employees do not just work in their specific role, but see themselves as creative and free. On a smaller scale, this has — in the main — allowed the foundations for an evolutionary change process to be laid.

It is important that companies recognise, in good time, if they are sawing towards their business success using a blunt saw — to go back to the parable cited earlier — and bring in external support to sustainably promote change.

Example 2

ACHIEVING A DEFINED TARGET IMAGE

A service provider calls in an external consultant for an assessment in order to determine how and whether or not an extended workbench could be used for the outsourcing of processes. The findings: The processes are not yet mature enough — they are not standardised enough and are therefore not efficient enough. Changes



« Individual organisation and responsibility, as known in agile software development, must become the cornerstone of the corporate culture throughout the company so that the company is able to manage upcoming changes. »

are needed, not only at the process level but also with regard to overall framework conditions. An optimisation project is launched on the basis of this concept. A target image is defined with the support of the consultant: In which direction does the company want to move in general? As a first step, the partner explains to management the opportunities and risks involved in the impending change process. In order to minimise the risks, the decision is made to carry out a pilot project. This gets the stone rolling: During the pilot project, many challenges become clear, such as how the environment and the culture in the company must change so that the target image can be achieved. An agile transition team was specially set up in order to address these issues. The CEO assumes responsibility and drives the project forwards, always supported by the consulting partner. Heads of department, the HR department and employees who embody various mind sets within the company are also all involved in the change process. Once the pilot project is complete, the company has a clear understanding of how teams need to be set up in order to work more efficiently. These changes are gradually rolled out throughout the entire company. Firstly in product development, in order to speed up the time to market. This lays the foundations so that the process can be scaled even further. However, since change often leads to fears and uncertainties, the consultant feels it is important to be fully aware of employees' feelings. Their needs are taken into consideration in multilevel workshops or HR breakfasts, or using boards set up within the company where those affected can voice their opinions and comments. Employees are becoming more and more open, can be motivated and can identify with the new improvement methods.

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ADDED VALUE BY ELIMINATING MEDIA DISCONTINUITIES

If business processes are consistent from start to finish in terms of their planning and the way they are modelled technically, they can run much faster and more efficiently.

The paperless office remains a utopia in those areas where change would be possible because existing structures prevent offices from converting completely to this new way of working. Yet it is worth businesses digitising their processes. By doing so, media discontinuities can be avoided, error rates reduced and, as a result, productivity and quality improved. The solutions are mostly customer-specific but do not always have to be newly developed from scratch.

BY YOANN PELÉ
AND PATRICK FAUQUET

On the path to digital transformation, companies are faced with the fundamental challenge of planning all of their business processes digitally and implementing them in this way. However, heterogeneous system landscapes too often get in the way of ensuring that workflows and data flows are consistent. The result is a multitude of interfaces and, frequently, media discontinuities between individual process steps. The company loses productivity if processes are not integrated and instead come to a stop, because information has to be — in the worst case, manually — transferred from one system to another. And it is not just productivity that suffers: Media discontinuities cause more errors and create a lack of transparency. If media discontinuities result in duplications at the front-end, this could annoy (*potential*) customers and have a negative impact on customer acquisition and retention.

If nothing else, the costs for support are higher when various different systems have to be maintained and kept up to date. For this reason, it is worth analysing system environments to determine where it could make sense to remove old systems and/or to consolidate systems. Consolidating system environments also automatically leads to higher data quality. On the topic of data: In this digital age,

it is becoming more and more common for customers to contact companies in the virtual world. They also leave digital tracks. Information that the customer discloses — either voluntarily or through their surfing habits — has become a new form of currency. Patterns, preferences and sensitivities are extrapolated from customer data. This information is then used in product development and marketing and can also lead to new business models being created. However, this is only possible if large amounts of data can be collected from different areas and analysed.

Furthermore, a radical customer focus integrates the customer as a central link in the digital supply chain. With the self-service approach, for example when filling out a form, customers voluntarily complete tasks that would previously have been undertaken by the company. If customers initiate a process by providing this input, they expect this process to be completed quickly. When there are media discontinuities, the real-time capability required cannot be guaranteed. Nothing makes a customer more unhappy than when their work takes twice as long as it should. If, for instance, a customer fills in their details on an online form, they should not subsequently receive any paper documentation requesting the same information again. For this reason, it is absolutely essential that front-end and back-end systems interact.



«Reducing media discontinuity increases customer friendliness and therefore also the competitiveness of companies.»



It is becoming increasingly common for that initial contact to be made in the networked world, with customers contacting the companies of their choice via websites and portals. Smartphones and tablets also enrich system and application landscapes. However, this increases the pressure to integrate more channels into existing infrastructure. The majority of CEOs and CIOs view mobile technology as strategically important for their business models. Yet, the complexity involved is overwhelming for many. Nowadays an app can be developed quickly; however, as a stand-alone solution, apps complicate the consistency and transparency of data flows. Therefore, if mobile solutions are to fulfil their purpose of aiding customer development and loyalty, it makes sense for development partners to not only bring experience in software and application

development, but also to assist in the set-up of integrated processes. With this fast-paced technology, it is also recommended that the development partner already has tried-and-tested templates and frameworks at their disposal that can be adapted quickly and cost-effectively in line with customer requirements. This is because technological advancement — particularly in the mobility sector — is so rapid that new features such as integrated digital signatures and geo-localisation or customer-specific adaptations have to be implemented quickly in line with existing standards. In order to save costs, and bearing in mind time to market and the availability of qualified resources, companies should consider a partner that offers both on-site consulting services and development capacity in near and offshore models. As customer requirements are

«A radical customer focus integrates the customer as a central link in the digital supply chain.»

collated through direct customer contact, resources for developing the solution can be scaled in line with customer needs.

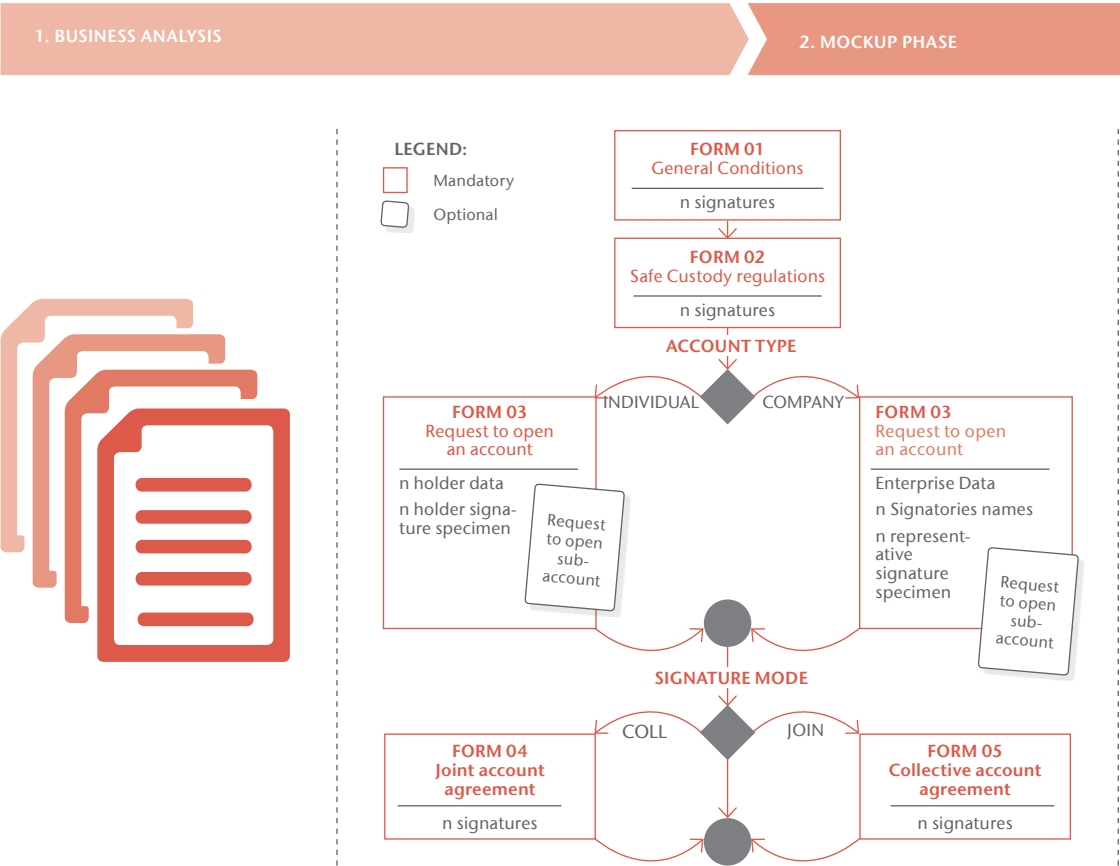
Example 1
**DIGITISING AND MOBILISING
 BUSINESS PROCESSES**

The on boarding process — registering a new customer for a private bank — is very complex because there are a large number of compliance regulations that need be followed. Up until now, when opening a bank account the relationship manager would help their customers with various paper forms. Sometimes, there may even be dozens of forms that need to be filled out, with every page having to be signed and the identity of the customer confirmed with a photo and identification. Due to the high level of dependency between the individual forms, the process is very complex. This means that the error rate is equally high because, for example, a mandatory field may be forgotten or data may not be consistent across different forms. Implementing corrections therefore comes with enormous costs and, if relationship managers find themselves spending all their time on admin rather than advising customers, their productivity decreases.

This is why a private bank is exploring the possibility of digitising and, simultaneously, mobilising this transaction process: With a tablet, this process can be carried out in a more compliant and customer-friendly way. The consultation

and development partner has experience in the digitisation of documents and the implementation of underlying business processes. Based on an existing framework, he rapidly and cost-effectively develops a mobile application that can be used to complete, validate and convert forms quickly and easily using specific templates. In this way, the exact information that needs to be completed for the next step in the process is displayed automatically through a rule-based process. The customer is led «intelligently» through the process, making the process as a whole more transparent. The integrated validation process ensures that errors are avoided as far as possible. And the application can do even more: Forms and contracts can be signed digitally on the spot, allowing for a continuous process without any interruptions. Proof of identity can also be ascertained with a high degree of reliability by means of an integrated photo function. Restrictions relating to country-specific compliance requirements can be pre-set using additional functions such as geo-localisation, ensuring that the relevant requirements are met. The best bit about the application? It works offline as well as online. The process can be completed during a consultation with the customer without a data link or Internet connection. At the next opportunity, perhaps at the hotel in the evening, the data is imported into the system in encrypted form and synchronised with the central database. Encryption and integration into the back-end system are important for security in case a laptop is lost or stolen, for example.

FIG. 2: PROCESS DESCRIPTION IN 4 STEPS



There are many advantages to the mobile solution: Customer data only has to be collated once and goes straight into the processing system. The business process is sped up enormously and is also more convenient for the customer. The relationship manager can concentrate more fully on advising customers because they are much better supported by the mobile solution. The bank also saves a substantial amount on printing costs as the paper forms are no longer needed.

The solution can be branded in a customer-specific way and gives the bank a modern, trendy image. The consultation and development partner has demonstrated that it cannot only design a business process, but can also create a technical model — taking into consideration compliance and security requirements — and enrich the process with great added value for the customer. The mobile application can also be easily adapted and can be rapidly and cost-effectively converted for other businesses facing the same challenge.

3. ERGONOMY AND UX PROPOSAL

4. AGILE DEVELOPMENT AND INTEGRATION

LOGO

Type

IndividualCompany

Customer Location

SwitzerlandOther

Number of Signatories

1234

Bank account

A/C:

Name or Number:

UpdateCreate

REQUEST TO OPEN AN ACCOUNT

Request process for corporate bodies

ACCOUNT NUMBER

1

Family name

Company name

Address

Registration Office

Subsidiary

State of origin

Place of incorporation

Business registration

Mobile

E-Mail

Responsible person

Identify and no

2

Family name

Company name

Address

Registration Office

Subsidiary

State of origin

Place of incorporation

Business registration

Mobile

E-Mail

Responsible person

Identify and no

3

Family name

Company name

Address

Registration Office

Subsidiary

State of origin

Place of incorporation

Business registration

Mobile

E-Mail

Responsible person

Identify and no



Example 2

SUPPORTING THE CUSTOMER – FROM CONCEPTION TO IMPLEMENTATION

A shipping company is executing central business processes using a system that has been in use for 25 years. The data collected in the system has to be converted by means of a complex process so that it can be used. It is becoming increasingly difficult to maintain the system and replacing hardware components is more and more of a challenge. With a new solution, all essential data

should be consolidated into a single system. Replacing the entire technology stack should also simplify processes and simultaneously increase system performance.

The company calls on its longstanding development partner, who is able to support its customer from the conception stage through to implementation.

The partner assists its customer with requirements engineering, device evaluation, as well as integrating and coordinating



«By choosing a partner that employs tried-and-tested frameworks, customer-specific applications can be developed at lower costs.»

with partners when developing the system and its interfaces, and finally testing. The mobile application is initially tested with a pilot project before being rolled out. Even at this stage, the partner supports the customer with his experience and expertise. The system is now successfully in operation. It is so well-designed that even during the fine-tuning stage new features can still be added. The process is consistent and all data can be found in the same system. The process runs much quicker, and the customer can work better with the data as it is more complete and maps the process from start to finish. All the relevant functions required by users have been implemented and the company can cater to its customers, in a more efficient and informed way. Its customers, in turn, value the rapid, professional support they receive from the transport company.

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INTEGRATED CUSTOMER PORTALS AS WORK AND SERVICE TOOLS

Customer service is increasingly becoming a differentiating factor in competition, and digitalisation is a good way of increasing the quality of this service.

If a customer consultant is able to provide his customers with quick and comprehensive support then both parties will be happy with the result: The consultant can concentrate on the customer and their needs. The customer receives a bespoke service in a quick, personal and professional way. However, the service portals required to do this need to be set up in an equally professional way.

BY MATEUSZ KASPRZAK
AND BEKIM META

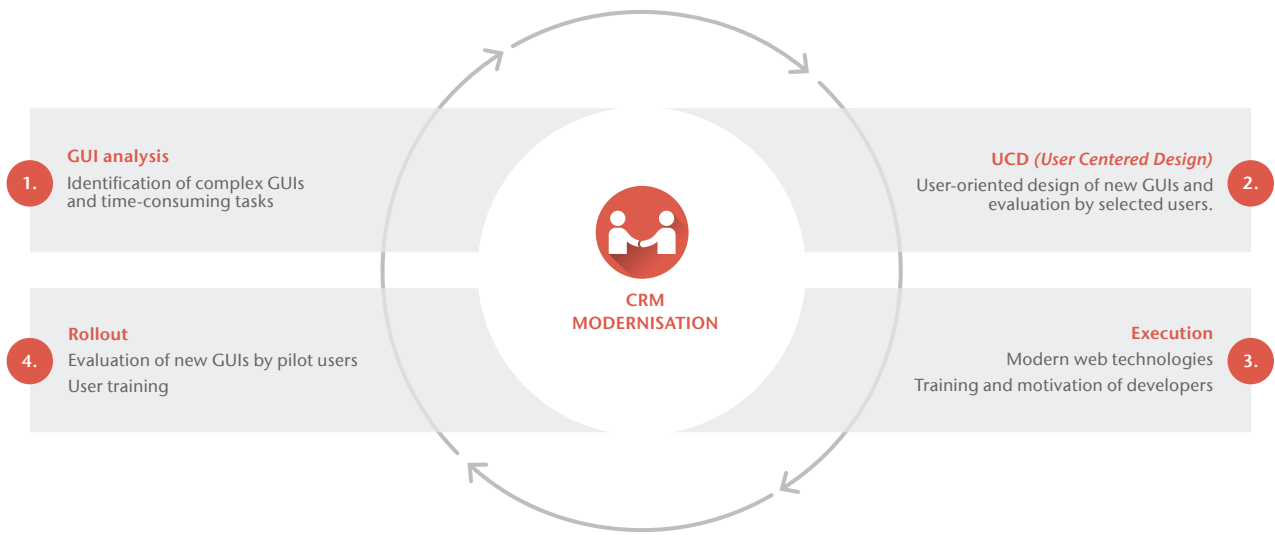
Digital transformation brings with it greater pressure to change and increased cost pressure for the company. The new, multifaceted channels for customer contact and retention give customers the understanding that their requirements will be met immediately and in an appropriate manner as soon as they reach out to the company — regardless of which method they choose, whether they take a more traditional route via a call centre or email, or they choose the increasingly common method of contacting companies via social media or a self-service portal. In any case, companies must deliver a consistent quality of service across all these possible contact platforms and ensure that the various sources of information are consolidated. After all, happy customers are loyal customers. If customers' expectations regarding the company's customer focus and the service provided are fulfilled, they will not go to a competitor and are, if anything, more open to additional services offered by their original supplier. Customer satisfaction is a complex issue affected by all kinds of factors: How quickly and how comprehensively is an enquiry resolved? How much attention did the company pay to the customer's personal preferences and requirements? How friendly and professional is the customer's contact person in the company? And does the company manage to impress the customer so much with its service that it sets itself apart from the mass of competitors?

Nowadays, companies have more information than ever before on what their customers are looking for, how they find information and what they expect. As mentioned in the previous article: Customers who contact a company in the virtual world leave digital tracks. Their surfing habits give some indication of which offers they spend more time looking at and what information interests them. A lot of other data that companies collect on their customers via other methods is also relevant for marketing and sales. CRM systems track what the customer has bought to date, which promotional campaigns they have been involved in and how often they have been contacted — and by which customer consultants. In order to provide customers with a tailored, comprehensive service, companies need an overview of the customer history that contains as much information as possible. This system only works if the employees who have direct contact with the customers have access to all relevant information, yet this data is often spread across multiple systems and platforms. A heterogeneous system landscape with fragmented data not only makes advising and retaining customers more difficult, but also generates high operating and maintenance costs. With this in mind, it makes sense to look more closely at the systems required for customer service. Portals using modern web technology can provide a solution here, and are growing in popularity for this reason. If set up professionally, following the logic of the decision-making and sales process, these portals can



« Professional customer portals based on modern web technology increase quality of service while simultaneously reducing operating costs. »

FIG. 3: CONTINUOUS OPTIMISATION PROCESS



be a powerful tool for delivering a higher-quality service and greater customer satisfaction. The more individually a customer's needs can be met, the more attractive the offer will be to them. And this works the other way too: If customer consultants have a working tool that provides them with quick, simple support during the sales process then they can concentrate more on consultation. The more effective and transparent the technical support, the less time customer consultants have to spend on admin and the more time they can give to customer service. What's more, if the tool succeeds at impressing the customer consultant then the chances are good that this enthusiasm will transfer over to the customer. In this respect, internal company software solutions can also contribute enormously to increased customer satisfaction.

The portals' true appeal unfolds, however, when both the front and back-end are integrated. In other words, when both the customer (*via the web portal*) and the agent or customer consultant access the same system. Data then only has to be populated and updated in once place. The process for different user groups can also be differentiated through varying levels of authorisation: An agent has access to more options than a customer does in the self-service portal. On the other hand, the customer can contact a web assistant, if needed, to be guided through the process.

In most cases it is worth obtaining external help when developing and implementing such a tool. An outside perspective of the process can reveal weaknesses that are hindering the consultation and

sales process. Companies often have work processes that are established and integrated in the company and are not questioned, yet are no longer up to date. In this respect, it is an advantage to have a partner on site who can not only map out the processes technically but can also design new ones.

Example 1

OPTIMISING USABILITY TO IMPROVE PERFORMANCE

A company from the insurance sector works with a very complex, old CRM system. Its usability and performance no longer meet modern requirements. Employees who use the system on a daily basis to process customer requests criticise its poor usability. Countless clicks are needed to compile the information necessary for the customer consultation. As a consequence, the quality of the consultation service provided suffers. The company has decided to modernise the system's user interface, amongst other things. The goal is to properly map the various processes and to display the necessary information in a consolidated way. The company has been working in strategic partnership with a consultant for quite some time. The consultant brings with him the necessary experience in modern web technology. They are entrusted with redesigning the existing CRM system in such a way that the focus is on customer benefits. To this end, the pages in the CRM system that are used most often and that are most important are pragmatically identified so that visible success can be achieved at a manageable cost and as quickly as possible. Furthermore, company employees need to be trained in how the project can be

developed further and maintained. The partner also offers the necessary mentoring and coaching skills to do this.

During implementation, the consultant focuses on laying the foundations for the new solution and assessing the different options in terms of feasibility and maintenance. He advises on design and architecture decisions, prepares prototypes and style guides and defines best practices. Based on prototypes, different versions of the solution are developed and then compared and assessed. Through his knowledge of methodology and technology, the partner also ensures that the processes are set up correctly on a technical level.

For the second task of not just training but also motivating and inspiring the employees, the partner arranges paired programming sessions. These sessions enable employees to gradually take over responsibility for the system themselves. The partner ensures quality through unit and integration tests. Even while the project is underway, follow-on projects are already being initiated that also aim to improve both customer service and the quality of service. (see Fig. 3)

Example 2

INTEGRATING SYSTEMS FOR A COMPREHENSIVE OVERVIEW OF THE CUSTOMER

Another company, also from the insurance sector, has offices across the country and works with many product-specific systems designed to enable customer contact. These systems need to be better coordinated and consolidated. In doing so, the company aims to increase data



«In the best case, when developing customer portals for tailored customer service everything will come from a single source – from the business analysis through to implementation. The development partner can then ensure consistent integration from the front-end to the back-end.»

quality, gain a comprehensive overview of customers and consequently be able to manage the sales process better. The company receives a recommendation for a consultation partner who can demonstrate comprehensive experience with complex integration projects. Since a variety of specialist and technical departments are involved in the project, the acceptance and system integration tests are of the utmost importance. Firstly, tests should be carried out from the user's perspective to ascertain whether the integrated system maps the work processes in the exact way that will be required in day-to-day work. Secondly, specialist requirements also need to be examined from a technical perspective. The tests from both perspectives have to be carried out thoroughly from end to end. To this end, the partner reviews the solution concepts and the input documents, clarifies any specialist and technical inconsistencies and flaws, devises the test cases and organises the test environments. The partner familiarises himself with the customer requirements, ensuring he understands which services should be integrated and how. He then checks against the specification to determine whether the system also delivers the various functions in the manner and quality that the customer had imagined.

Through his methodological expertise, external perspective and experience in dealing with project participants from both specialist and technical fields, the partner ensures that the new system enables users to look after their customers in a more efficient way. The respective agent can see more information faster, find additional information quicker and generally meet the customer's needs more swiftly.

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THE FIRST FEW CLICKS ARE DECISIVE

With the self-service mentality among users growing when it comes to applications, greater focus is now being placed on the usability of these applications.

Just as quickly as an application can be installed, it can also be deleted if it does not meet the user's demands in terms of intuitive usability. To ensure that customers do not leave companies for a competitor and to make sure that employees are using internal company applications in a focused manner, users' requirements should be incorporated as methodically as possible and «translated» into practical, technical solutions.

BY SASCHA NUSSBAUMER
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The word «user manual» may well disappear from usage in the near future — at least as far digital technology goes. This is because, when it comes to devices and apps, one feature is important above all else: intuitive usability. Just the first few minutes that users spend using an app, portal or other application will determine its success or failure. If users cannot immediately find their way around, they will not continue to use the tool. If the application is aimed at customers, there is a danger that they will go to a competitor that will better meet their needs. If it is an internal platform, and this platform complicates consultation, customer service or other work rather than making this work easier for employees, this will result in rejection and frustration, mistakes will slip in and the applications will not be maintained to a level sufficient for processes to run smoothly.

Thus, «usability» is becoming increasingly important. To ensure that applications are planned and designed in a user-friendly way right from the outset, the user needs to take centre stage: With user-centred design (*UCD*), the objectives of the user and the context in which the application is to be used are the main focus at the software development stage. Although this sounds like it would be the logical approach to take, nowadays these considerations tend to be carelessly neglected more and more frequently in

development projects. By incorporating the user at an early stage in a project, user interfaces can be developed that intuitively follow work processes. As a result, the level of acceptance for the system among users increases and costs for subsequent changes can be minimised or even completely avoided.

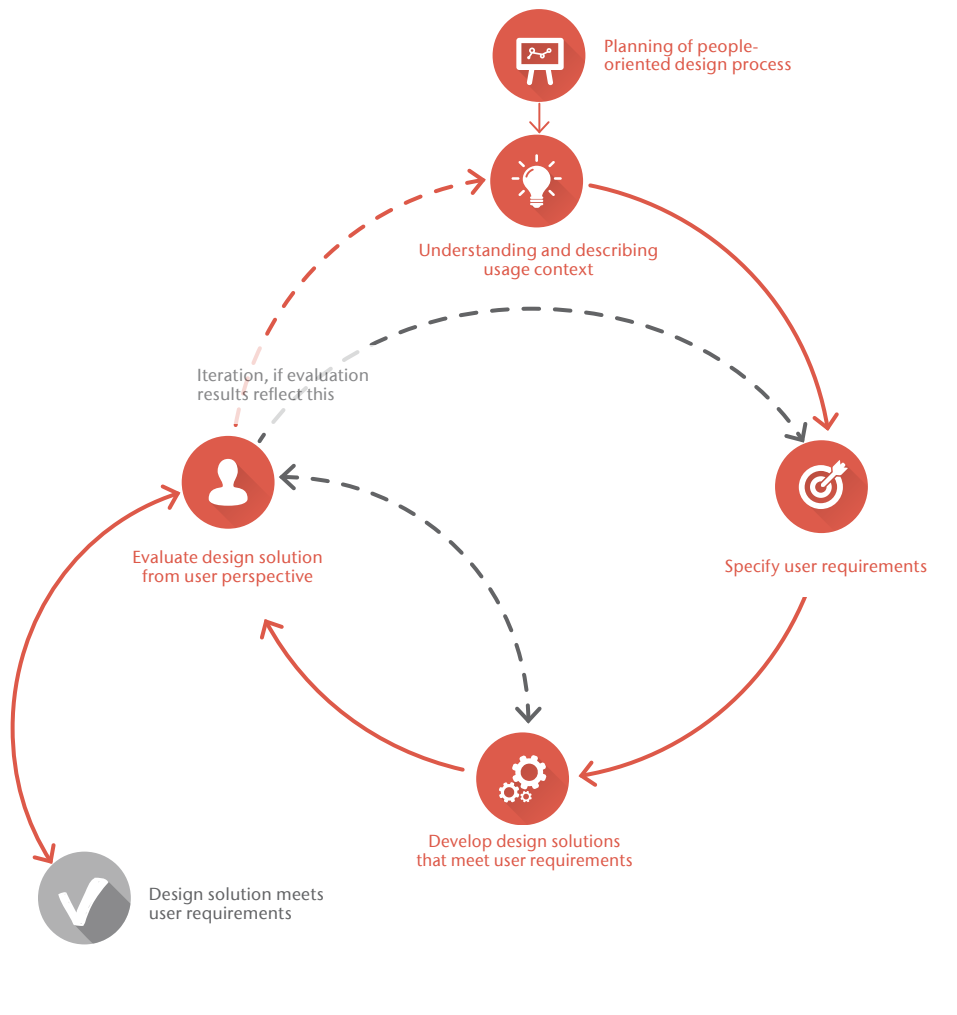
With this approach, the potential user needs to be involved throughout the entire design and development phase of the project. Agile development supports this approach as frequent iterations enable user feedback to be fed back immediately and then taken into account during the rest of the development process.

The usability of a system can, of course, be evaluated retrospectively and areas of improvement identified. But companies can save time and money if they are advised and supported in a methodical way right from the outset, i.e. when first collating requirements. With the right methods and tools, a people-orientated development process can be planned in such a way that the perspective of the future user is taken into consideration from the word go. The user requirements that are subsequently developed into design solutions are derived from an understanding of the context in which the application will be used. Again, these requirements are evaluated from the user's perspective until a design solution that best fulfils the user requirements has been produced.



« Whether for customer or internal applications:
When it comes to usability, maximum benefit
can often be achieved with minimal costs.
Employing the correct methodology is key. »

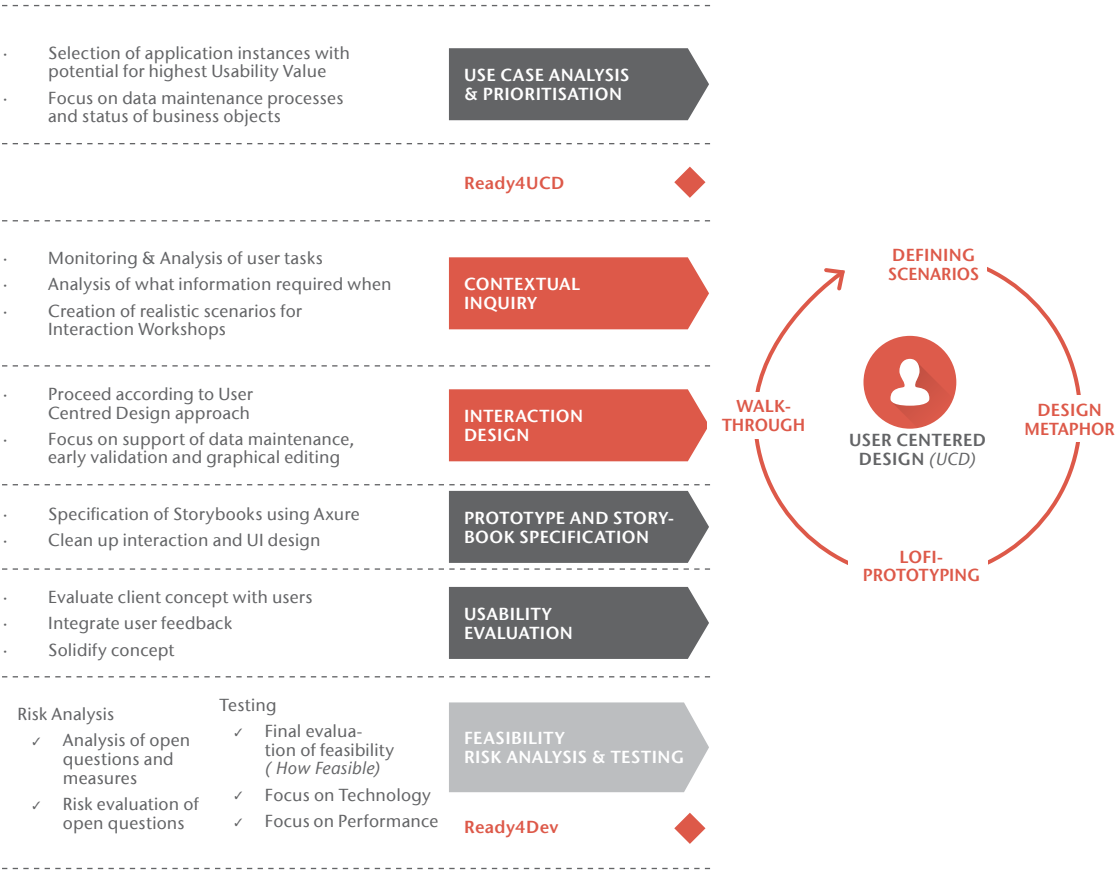
FIG. 4: USER-CENTERED DESIGN METHODOLOGY



To this end, the company must first know who the future users will be, collate their requirements — whether internally or from market research — and develop the specific use cases in consultation with them beyond the technical specification. External consultation can prove particularly successful at this stage, consulting individual stakeholders in a targeted manner by means of interviews or contextual analysis,

thereby bringing them on board. Before even thinking about technical implementation, stakeholders' request should be recorded, prioritised and incorporated in scenarios that represent reality as closely as possible. When prioritising, preference should be given to those use cases that will cost the least but will have the greatest impact on user-friendliness. Visual representations and metaphors have proven

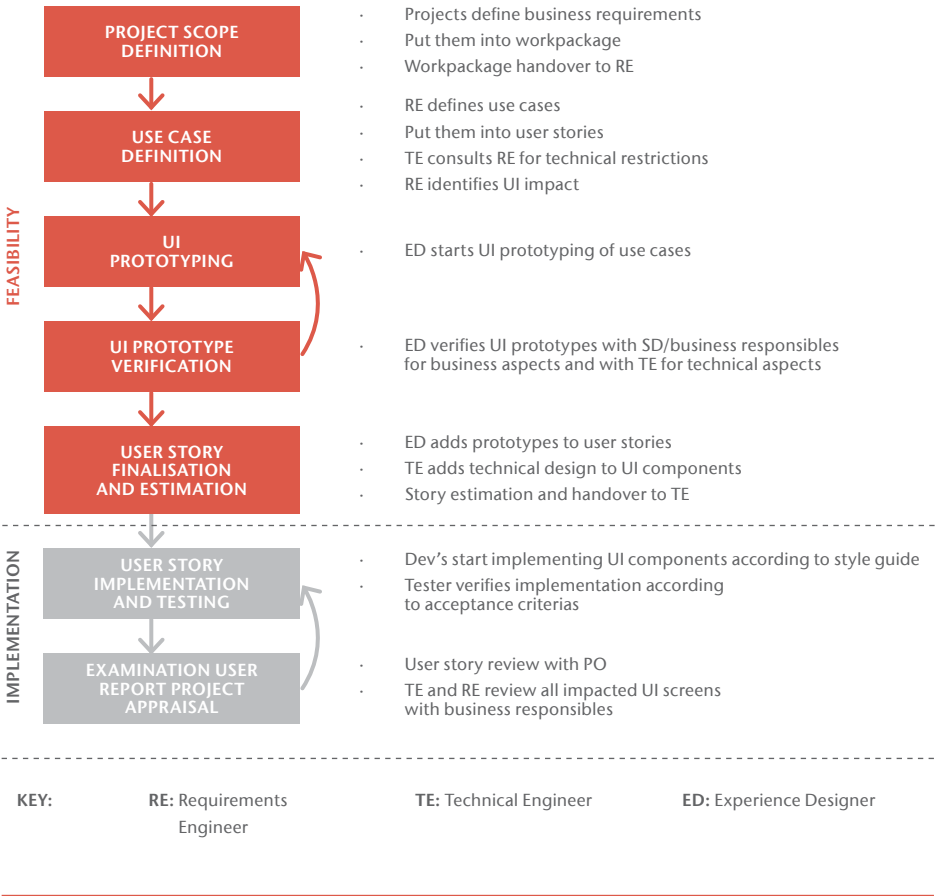
FIG. 5: UX ROADMAP



to be reliable tools when striving to represent reality: Through graphic visualisations and by breaking down complex issues into memorable analogies related to everyday situations, the path to an intuitive application is sketched out. An experienced consultant will replicate, test and further perfect the UCD process step-by-step in successive workshops before even starting to develop the software.

If users can be involved right from the conceptual phase, they will be able to identify with the application from the outset. The time actually required for development will also be reduced, resulting in lower development costs. In addition, it is easier to maintain and expand the application if it is optimally designed around the needs of its users right from the start.

FIG. 6: UI DEVELOPMENT PROCESS EXAMPLE



Example 1**SATISFYING VARIOUS STAKEHOLDERS**

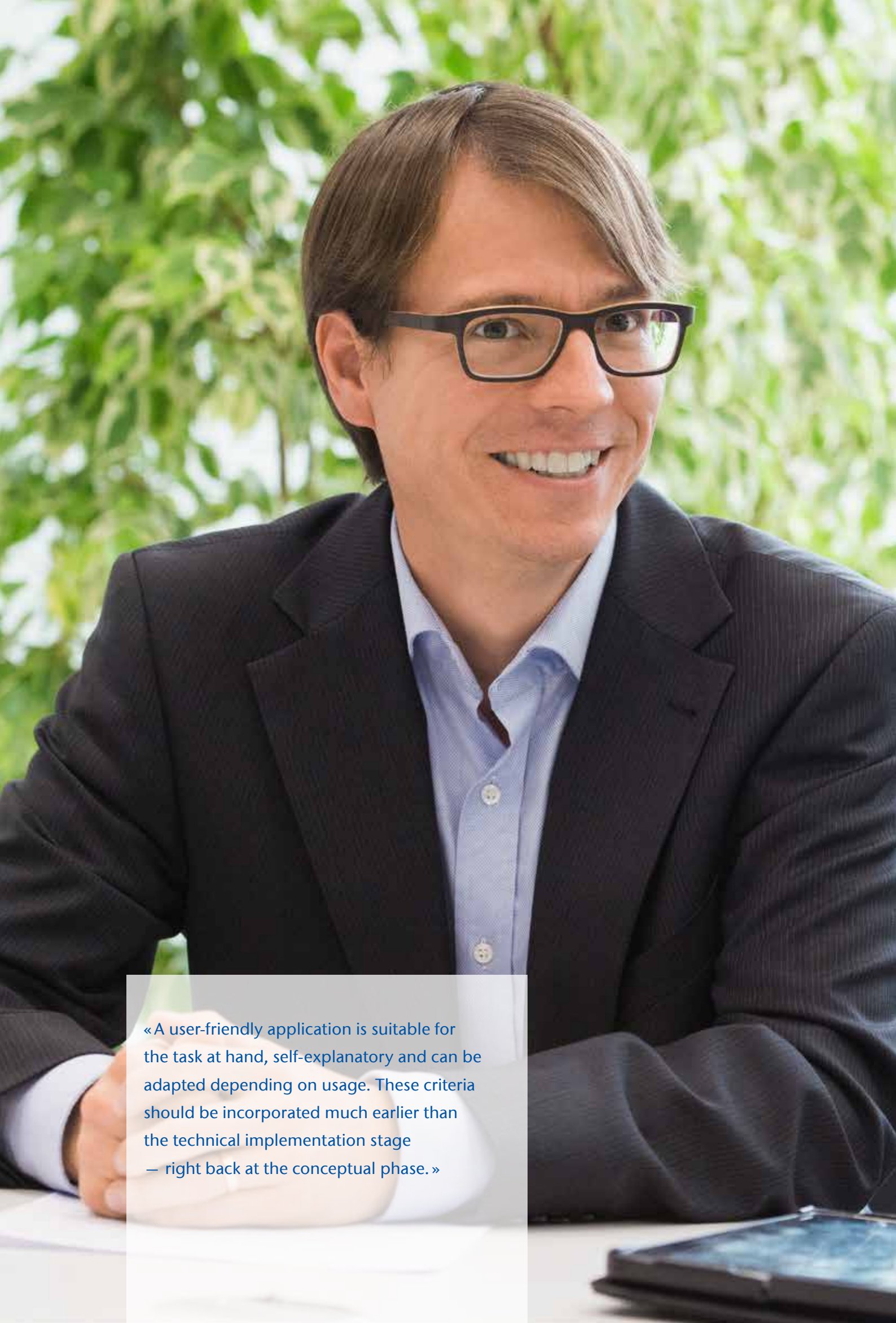
A service provider is planning to develop an application that will be accessed by various stakeholders. In addition to a self-service portal — where users can manage and configure their services themselves — users should have the option of being guided through the ordering process in a shop by an agent. Order management for resellers and customer support as well as the call centre for telephone orders should operate using the same fundamental application. The application should also be designed responsively for various output channels.

Although the company has developed the concept for the application, a reliable, external partner has been tasked with the feasibility study and implementation of the application. This partner has methodological competence and comes with suggestions for improvement. At once, the partner takes over both software engineering and technical requirements engineering. At the interface between the specialist department and development, the partner « translates » the business requirements into a technical solution design and manages the Kanban backlog in cooperation with the product owner. This comprehensive role allows the partner to pay attention to usability from the outset when creating the solution design. In use cases, the partner defines the various roles that stakeholders will have when accessing the application. For each role, a different objective is planned: Overall, an application should be designed that can fulfil a wide range of functions and that works as a platform for all services. To achieve this, a filter system is designed for the various application stakeholders that enable a check to be performed on a channel-specific basis to determine who has

which rights, and therefore who can execute which process steps. At every step of the process up to the ordering stage, the individual user groups will only see the options that are relevant to them. The page design is also adapted to the output medium. What's more, the development partner has created the user interface in a modular design so that the modules for individual process steps can be reused. This ensures that, despite the varying user needs, all components that are required in the same context are consistent. Through this standardisation, an ordering process is developed that is coherent and logical and can be understood by all users at each respective level of authorisation. The application, available in four languages, is now up and running and proving to be very popular with all users thanks to its simplicity.

Example 2**A MULTISTAGE PROCESS FOR OPTIMUM RESULTS**

A shipping company is executing internal processes using a tool that is seen as unintuitive, inefficient and costly to incorporate. An external consultant has been brought in to work with the company to define and prioritise usability objectives, focusing on efficiency, effectiveness and error tolerance. A user experience roadmap is drawn up based on these priorities, mapping out the need for action and optimisation from users' perspectives. For this reason, users are interviewed and asked about their responsibilities, and the work environment is analysed. Based on this analysis, scenarios are developed that describe the process via user stories. It is only after the user requirements are defined in this way that the consultant begins developing an interactive solution in cooperation with



«A user-friendly application is suitable for the task at hand, self-explanatory and can be adapted depending on usage. These criteria should be incorporated much earlier than the technical implementation stage — right back at the conceptual phase.»

the users. Also at this stage, the consultant opts for a multistage process that he then supervises. For example, screen mock-ups for individual process steps are first drawn up on paper and metaphors and analogies taken from everyday life are used to visualise them. This simplifies complex issues and clarifies interdependencies. The first clickable prototype is then produced from the paper prototypes: It can be navigated just like a finished application but does not require any costly programming work. Based on tests performed using the clickable prototype, potential areas for optimisation in relation to usability are identified. The application's usability can now be improved in the conceptual phase itself without having to pump time and money into development. The functionality of the concept is rigorously tested during the subsequent usability evaluation and a feasibility analysis is performed. Technical implementation is then only executed once these steps are complete. This coordinated, modular procedure helps future users identify with the application from the very beginning and enables any potential flaws in the usability of the application to be virtually eliminated.

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