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Jens Kawelke is the head of the business analysis team in the insurance section at NTT DATA in Germany. The team consults insurance clients and mainly supports in agile software development projects. It consists of experts in requirements engineering, user interface and user experience design, supplemented with deep knowledge of insurance and reinsurance processes and divisions. This article is a result of a joint effort of the team. Apart from Jens, Jan Pensel, Josephine Tan, Sarah Lempert, Janika Pelz, Elisa Olalde and Tim Looke were the main contributors.

This article is based on a research on motor insurance portals in Germany, Switzerland and Austria by the NTT DATA team. They analysed the reasons for poor customer experience in some of those portals and share their experience with developing successful websites.

You want more customers to sign up online! This is how...

The Customer Journey Funnel

A customer journey is the end-to-end process of a customer looking to meet their needs. It includes all points of interaction between existing or potential customers and a brand, product or service. These touch points must be clearly identifiable so that a strategy and its measures can be derived from them. The focus is to optimise the customer journey, so that the needs of existing or potential customers are fully met, while generating positive experiences. In the end, this approach should lead to customer loyalty.

How can this approach be implemented in practice?

According to the current GDV (Association of Insurers in Germany) sales statistics, almost 20% of all car insurance policies are concluded online.

It is therefore important for insurance providers to take a closer look at this customer journey and to optimise it if necessary.

The Customer Journey progresses through five stages, shown here as the Customer Journey Funnel. At each stage, the insurance provider tries to gain new and retain existing customers. In order to achieve this, each stage must be fully comprehended and measures must be taken to build loyalty, so that customer loss is minimal.

The Customer Journey starts at the **Discovery** stage, where potential customers explore the brand and its business.

Is the customer aware of your business and credibility through positive experiences?

At the second stage – **Advice**, potential customers examine the offer and compare similar products.

Is the customer able to access and compare all the relevant and convincing information to consider purchasing your product with minimum effort?

Next, at the **Quote** stage, customers evaluate the results of the Advice stage.

CUSTOMER JOURNEY FUNNEL



Is the customer reassured and happy before the final step is taken?

At the **Sign-up** stage, a potential customer becomes an existing customer by accepting a convincing offer.

Is it easy for the customer to make the purchase on the spot with minimum risk or hassle?

If the customer is enthusiastic about the product, add-ons or other products at the **Repeat Purchase** stage are made and the insurer is recommended to others.

Is it easy for the customer to modify the product or purchase additional products as required anytime and anywhere?

Accompanying existing or potential customers on their online journey is a challenge that requires a sophisticated user interface and a user experience concept, starting with an attractive website.

What makes a successful website

There are two well-known website design principles to keep in mind in order to deliver enjoyable customer experience:

- ▶▶ Meeting the needs of your customers
- ▶▶ Making the workflow completely intuitive

Those websites, which incorporate the above principles, are easy and fun to use. Also, a clear structure, which takes the customer's natural and cultural behaviour into account, is important, such as size, colour, hierarchy, placement, behaviour of user interface (UI) elements etc.. All elements have their function and purpose. Let us consider them in more detail.

Navigation must be effortless and easily understood, so that potential customers or users do not feel lost. A lost user will simply leave. Users visit platforms and websites with a clear goal, so it is particularly important that the navigation structure does not confuse them. The main navigation must be always visible, without the need to scroll up or down. In addition, using animated scroll anchors is likely to attract the user's eye and lead them to the next element.

Another point to keep in mind is our need for safety or risk reduction. As insurance insiders, we are aware that individual

needs for safety can differ, but in general, people tend to avoid taking risks. This is also the case when dealing with unknown companies, products and services. Customers trust other customers' product feedback if they have no experience with the product under review. Prominently displayed reviews, certificates and assurances that the statutory standards are maintained help people build mutual trust. This means that communication between customers is crucial and should be enabled and maintained.

The third point may be a hard pill to swallow: we rarely commit to in-depth reading online. We scan. Thank you for staying with us for so long... According to the Nielsen Norman Group, website visitors only read 28% of the text and leave after 10-20 seconds. With this in mind, all website text must be kept as short as possible. Online users have a short attention span, and smart calculators and tables can help users find suitable products and quickly grasp the most suitable insurance premium. Where long paragraphs of text are inevitable, break them up with graphics and images to help users stay focused. Ask yourself: are the advantages of my selling point summarized enough for any potential customers to make their decision to join at the Quote stage within 10-20 seconds of looking at the offer? Does your customer go from Advice stage to the Quote stage in 10 to 20 seconds?

Finally, if, despite all the effort you put into the customer experience, your user gets lost, make support straightforward with one easy click. Build in chat functions or even chatbots which will provide answers automatically and efficiently at any time.

Naturally, the product has to appeal to the potential customers but this is something the product experts are responsible for. However, the possibilities offered by web design allow integration of non-traditional elements so that the platform is not just a tedious digital replacement for a paper brochure.

How can we increase the chances of our insurance portal "converting" prospective customers into actual customers? Summarized, below are some properties and examples found on successful portals:

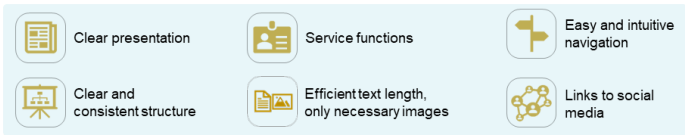
Property	Example
Easy and fun usage	Icons, Scales, Comics
Intuitive Navigation	Breadcrumbs
Reduced Risk and uncertainty for the customer	References and customer ratings
Detailed visualisation	Graphical elements
Help with specific questions	Contact details, chat functions, chatbots, FAQs
Moderate social media links	Show them discreetly at the bottom
Transparent info on products and pricing	Must be easily accessible and clearly arranged
Clear comparison of options and products	Comparison tables or charts

Motor insurance portals: quality analysis

What are motor insurance portals good at and how can they be optimised?

To clarify this question, NTT DATA evaluated and analysed the websites of various motor insurance providers in Germany, Austria and Switzerland. The analysis was conducted in three stages.

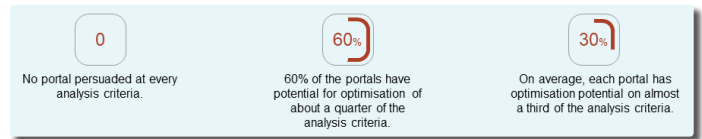
1. The first stage was all about defining the criteria used to analyse websites. Based on the considerations above, twenty analysis criteria were selected, further subdivided into six categories. One example is the "Easy and intuitive navigation" category. The criteria "Users can see where on the website they are at any time" and "Users can easily navigate to their destination" are part of that category. Below is the chart representing six different website analysis categories.



2. The selection of motor insurance providers, whose portals were analysed, was the aim of the second stage. The focus was on the companies, which are established on the DACH market. The selection was based both on the analysis of the Kölner Institut für Versicherungsinformation & Wirtschaftsdienste and on the market share data of the Austrian motor insurance market from 2019.

3. The analysis was performed as part of the third stage, where the analysis criteria from stage one were applied to the portals of the motor insurance providers selected in stage two. To achieve the best quality results, the evaluation was undertaken exclusively by the experts with relevant experience in the area of UX and UI.

The most striking about the outcomes of the analysis where only established providers were taken into account was the range of distribution of quality of different motor insurance portals. While top-performers implemented nearly 94% of the analysis criteria, the worst performing portals boasted only 44% of the criteria. On average, the selected motor insurance portals were positively evaluated only at 73% of the criteria. The following figure shows three key takeaways of the analysis.



Only in the categories of "Service functions" and "Links to social media" over half of the analysed websites performed well. The worst performance could be observed in the category "Easy and intuitive navigation", while the categories "Clear presentation", "Clear and consistent structure" and "Efficient text length, only necessary images" also showed great potential for optimisation. The percentage of the companies who scored well for each analysis category is displayed below.

Category	% of portals with positive evaluation
Clear presentation	31%
Clear and consistent structure	31%
Easy and intuitive navigation	8%
Efficient text length, only necessary images	46%
Service functions	69%
Links to social media	69%

Motor insurance portals: objective analysis

In addition to a subjective analysis of motor insurance portals, user behaviour and the portal performance can also be analysed objectively. Various analytics tools are used to measure performance and uncover the portals' weak points.

With the help of sophisticated analytics tools that record user errors, behavioural anomalies and other relevant events directly in the clients browser, NTT DATA and their technology partners are able to measure performance and analyse user experience of any website in real-time. With such advanced Java Script instrumentation, we would filter errors or frustrating user experiences and drop offs and analyse their root causes.

First, hypotheses are set up and questions are raised. These are checked and answered, respectively, by tracking and analytics. In cooperation with our partners, session recordings, form analytics, click paths, time, number of clicks, anger clicks, scrolling behavior, heat maps and error detection are collected, filters applied and used to test the hypotheses. These different analytics and tracking tools are selected and used depending on the hypotheses and questions raised.

To illustrate, here are two examples of the benefits, these analytics tools can deliver:

1. A hypothesis that there is a certain point where most users drop out of the journey can be tested by analysing the drop-off rate at that point.

2. If, on the other hand, a new UX design is to be tested with A/B testing, it can be hypothesised, that with the new UX design users will need only half as much time to get to a product, compared to the old design. The testing of this hypothesis could be done by time tracking the journey, comparing the timings for the old website and the optimised UX version.

Therefore,

- » the hypotheses are tried by tracking and analytics, resulting in confirmations or refutations;
- » adjustments to the portal are made;
- » conclusions are drawn about their success.

The process of objective analysis is iterative. After testing, new hypotheses are again established and verified by data. With this iterative approach we evaluate the website's performance with each new release and make sure that the development leads to increased user experience and simplified customer journeys.

The basis for success

To be successful, the right approach in the software development of the portal is crucial.

Before going into detail, let us consider very important roles on the project: requirements engineers (RE) and designers.

In RE, the focus is on elaboration, documentation, validation and management of requirements. There are functional and quality requirements as well as requirements related to boundary conditions. The documentation can be produced in a text or model-based format, ideally using a combination of both. Modelling languages, such as the UML (Unified Modeling Language) and BPMN (Business Process Model and Notation), are used.

In design, the main goals are creating and optimising the system design. Here, design can be split again in user experience (UX) and user interface (UI) design. Apart from some traditional aspects of software development, the UX design features ergonomics and psychology. International standards are summarised in the Web content accessibility guidelines. The basis for UI design elements is the so-called "Design System" that should be specifically defined for a company.

Coming back to the qualitative portal analysis, each of the negative findings was placed in one of three categories:

- » Not enough investment in requirements engineering;
- » Not enough investment in design;
- » Not enough collaboration between RE and designers

Not enough investment in requirements engineering

It took many years to establish professional RE in software development because the return on investment was hard to quantify. However, in the first decade of the century, the importance of RE was widely recognized as this was also the time when a triumphal march of mobile devices and apps started and with them the importance of an easy-to-use user interface was established.

User Experience and User Interface Design for mobile apps and

web applications quickly gained traction. With this, willingness to invest in professional RE, which has a much more specialised understanding of the underlying business background, declined. As it became clear from the analysis, there are motor insurance platforms in Austria and Germany, where this lack of business understanding is obvious.

Lack of product presentation on a website is one of the classic examples of not enough RE. However, a potential client can only make a purchase if the product is clearly laid out and is easy to buy.

Missing premium calculators for customer-specific quotes lead to low engagement and missed contracts, which serves as another example seen on some car insurance portals. Instead, users have to download additional information or request a callback.

Not enough investment in design

On the other hand, there are still insurance providers, who tend to believe that their products speak for themselves and their lead in the market share will never be challenged. They show a failure to invest in professional UX design on their platforms. They might employ front-end developers who have experience in designing web interfaces but no deep knowledge of UX or even use cheap customised templates for their needs.

One example of insufficient UX design is the lack of layout adjustment for the mobile versions of some providers' online portals. When this happens, contact details are overlaid with text and tables are not optimised for mobile devices.

Not enough collaboration between requirements engineers and designers

Straightforward investment in requirements engineering and design is not enough. Sometimes very experienced design agencies are taken onboard to design a very modern website or app interface. After they delivered, the requirements engineers add the necessary business underpinnings without ever talking to the designers. At the final stage, the front-end developers merge both aspects for publishing. The result is predictably far from a coherent product, expected by the client with so many experts involved but instead feels unstructured and difficult to use.

Insufficient use of a well-known design element called "breadcrumbs" is one example of such poor collaboration between UX & RE. Breadcrumbs enable the user to find the way back to the homepage easily, or to quickly navigate to different website levels.

On one of the analysed portals, some breadcrumb elements were clickable and some were not. This might result from reusing the hierarchy of the navigation sidebar.

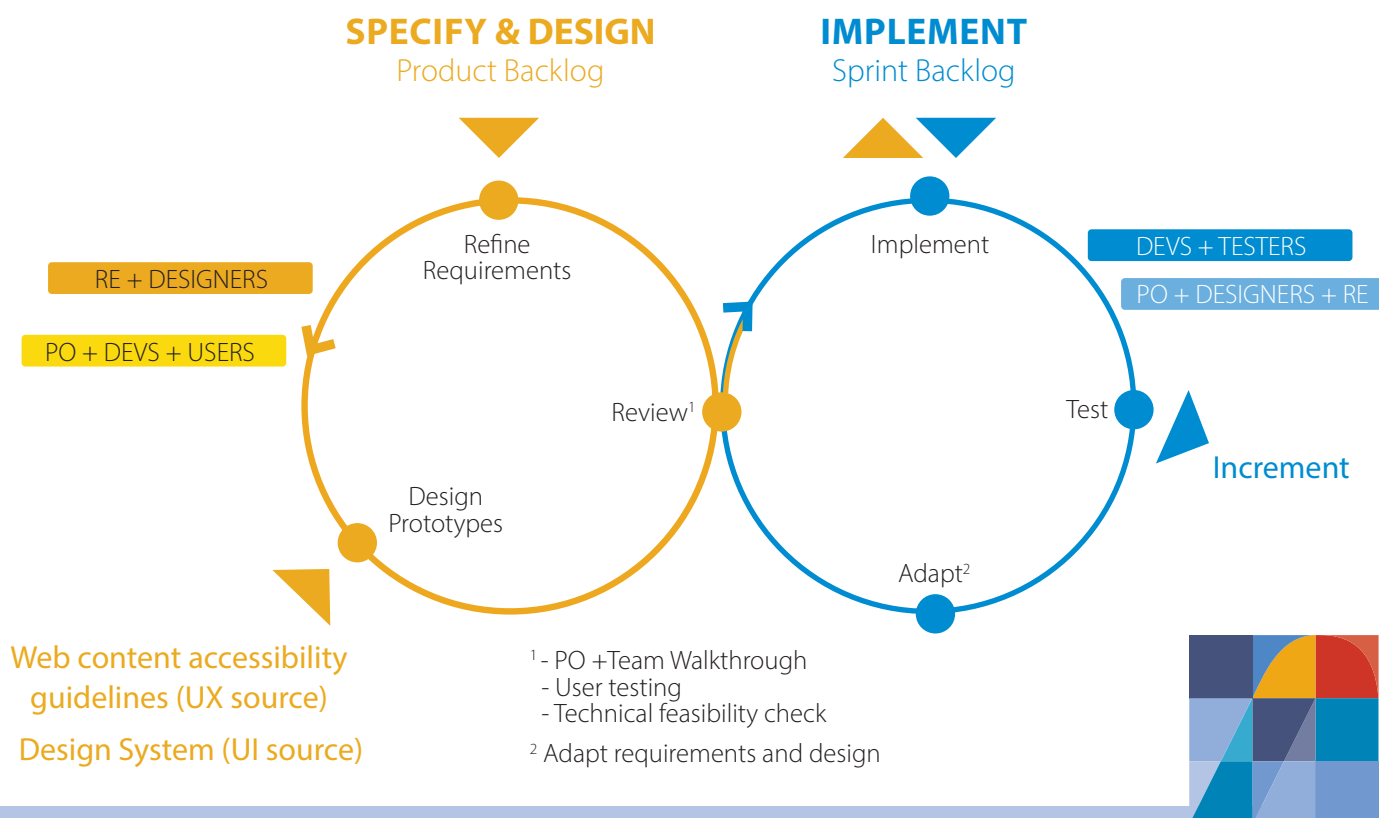


What is the solution?

How should a good collaboration work? First, make sure that requirement engineers and designers are integrated in your project from the outset. We have had good experience with splitting the agile development of User Stories from the product backlog into a “specify and design sprint” and an “implementation sprint” (see graph below). At the beginning of the “specify and design sprint”, the requirements engineers start by elaborating,

analysing and documenting the requirements on a high level. All visual prototypes created by the designers are based on these requirements. They are used again to refine the requirements further through a close collaboration of RE’s and designers with the product owner. Technical feasibility is under constant review by the developers. In addition, user acceptance tests using prototypes are performed with potential users for early feedback. This continuously applied approach is the basis for a successful application or portal.

USER STORY IMPLEMENTATION CYCLE



Summary

Encouraging customers to sign a contract requires a clearly structured website, intuitive navigation, convincing product presentation and an easy-to-use portal design. Only then prospective customers can be convinced of signing up to your offer. Motor insurance portals are only successful with a high completion rate, if they meet a set of criteria. These are worked out and implemented only as a result of cooperation between developers, requirements engineers, designers and users and supported by the appropriate tools.

Implement our success ABC in order to develop and maintain a proficient system to bring in more customers:

By applying these principles, a successful portal to drive your business forward will be developed. Remember the Customer Journey Funnel? Let us work together to widen it, making it a clear pathway for every user from the first visit to a successful sign-up.

A

Use of **A**nalytics tools

B

Invest in **B**oth, RE and design

C

Close **C**ollaboration of requirements engineers and designers in an agile project