



The Ultimate Guide to jumpstart digitalization with Low-Code

Creating high-impact with Low-Code in 10
essential steps

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Introduction

A lot of digital transformations are transformational in name only. Fear of change often stands in the way of bold and resolute transformations, and research from Forbes and McKinsey tells us that as many as 70 percent of digital transformations are bound to fail.

That results in a lot of wasted time, energy and resources. Deploying technology is no longer a choice for organizations, it should be part of a fundamental business strategy that must be integrated with all business initiatives, but it brings new challenges to these organizations. More business applications, more connected devices, and higher expectations from customers will make companies realize they really have to transform.

Why are so many failing at these digital transformation processes? There are several reasons for failure and luckily, there's also a great way to avoid pitfalls. Before we dive into the essential steps for a successful digital transformation, let's take a look at why so many companies fail.

Lacking the mindset

Not having the right transformation mindset is often the reason why digital transformation initiatives can either regress, underperform or fail outright. People are naturally averse to change, so the role of the board is critical; they can play an important role in bringing out the change mindset required for successful transformations.

No clear goals

Organizations need to understand what the key focus areas are and what they are trying to achieve from a business point of view. There are numerous legitimate reasons to transform, but the goals need to be clear from the start. Not defining clear goals means you will end up with your teams going in different directions which will, eventually, lead to failure.

Taking the wrong road

Why are capable teams often performing so much worse than expected? Many companies attempt to adopt an agile approach, replacing the more traditional 'waterfall' approach to software development. This 'old' approach tries to simplify the complex software development process by pre-recording software requirements. But once you have decided to follow an agile strategy, it means accepting

that you don't know everything up front. Agile working means choosing for more uncertainty in the long term but more clarity in the short term. The ultimate scope is not exactly determined in advance, but the project is managed on the basis of success criteria, planning, budget, and quality. Choosing agile requires a cultural pivot; when teams don't embrace agile totally, they will often find themselves 'water scrumming'; using agile and waterfall interchangeably. It usually occurs when organizations long for a sense of control.

Underperformance is lurking using the agile approach and should be managed instantly. In these cases businesses often fail to place bigger bets on their transformation efforts and don't put enough focus on these projects that can create new value for their business. Perhaps they still end up reaping digital transformation benefits, but on a much smaller scale.

Selecting the wrong technology

When the launch of a new digital product or service fails, many companies will choose to discontinue. The most expensive way to test your assumptions, is to turn them into software. Working on a project for months to find out it doesn't work is expensive and discouraging for everyone on the team.

At Bizzomate, we strongly believe low-code is the key to successful digital transformations. Low-code takes a visual approach to application development. By working closely together in one environment, various stakeholders can collaborate, create, iterate, and release solutions in a fraction of the time compared to traditional development methods. Low-code offers the opportunity to work fast and precisely.

Whether a company phases out or modernizes legacy systems, creates new digital solutions to enhance the engagement with customers or optimizes business processes, low-code application development will allow them to shorten the development cycle and create solutions with a perfect fit for business needs.

We believe in the power of low-code, because it allows us to build the right thing, to build the thing right and to build it fast. The following ten steps will provide you with the fundamentals for successful and sustainable digitalization at scale with low-code. The case of IHC will illustrate how the right implementation of low-code can optimize value for your business.

Marc Gelissen, CEO and founder Bizzomate

Create high-impact with Low-Code in 10 steps

Using low-code is a secure and fast way to transform your business digitally. Bizzomate designed a 10-step plan to help design the process of digitalization. Following these steps will help you plan your business goals, create an agile culture and align all involved team members. Fasten your seatbelts and get ready to race to the top with low-code.





I'm glad we all agree



Oh...



Ah ha!



I'm glad we all agree!

Business Design

STEP 01. Define the problem & create a common understanding

Step 1 seems like a simple step; just start with a project. Is it really that simple? Well, if you want to build the right thing, build the thing right and build it fast, you'll of course need to have a basic plan. Some companies start building without a plan, while others spend a lot of time on writing fantastic plans, but forget to start building.

First, make sure everybody in the team has the same objectives. Team members often think they have the same objectives to reach goals, but experience tells us it takes time to align everyone. To reach common understanding requires attention and dedication from the team. The chance of success increases dramatically when the team pays attention to this understanding.

Visualizing your business plans will expose any misunderstanding among the team members. This is the time to organize workshops, use design thinking and ideation. In this phase, the Mendix Studio is perfect for prototyping and visualizing ideas. Using the Mendix Studio environment it's easy to create a working prototype, so every stakeholder has a common understanding of the ultimate delivery. Prototypes can even be tested in a controlled environment with end users to create a common 'validated' understanding.

STEP 02. Prioritize & Quantify

Once there's agreement on the plans, the team can start planning. Which activity should we start off with? What is the business value of the different parts of the transformation? Is the agreed order indeed the right order? During the business value assessment, the team will map out all decisions. During the transformation project, progress needs to be reviewed on a regular basis and the business value assessment will have to be updated. The chance projects will change along the way is considerable. Scaling up or down and adjusting future outcomes is a continuous process. Furthermore, the reviews will keep all team members involved.

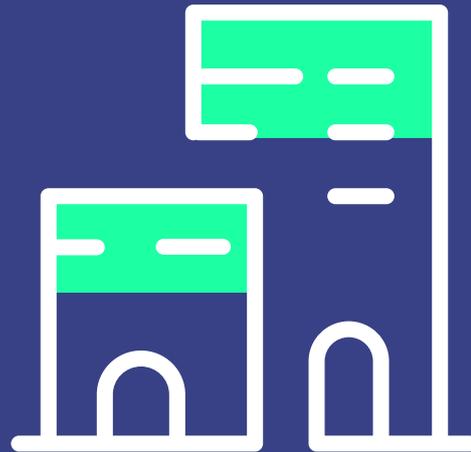
STEP 03. Align Business & IT

Make sure business and IT are present at all meetings; both skills should be involved during the complete project to form one team. If the business team makes plans and tries to explain these plans to the IT department afterwards, it's too late. IT will never understand exactly why and what the business team really wants, and there's a danger of dividing the team into two camps, resulting in irritation and misunderstanding. The team has to work on that 'we-feeling' everyday. Fortunately, this step will automatically occur when steps 1 and 2 are well executed.

In the end, these first three steps form the foundation of your success. The quality of the team or the applications may be excellent, but a slight mistake during these first steps can cause you to solve the wrong problem. Make sure to build the right thing!



Business solution factory



STEP 04. Set up an agile framework

Agile represents a philosophy for software development, emphasizing the value of iterating quickly. You can refer to any of these frameworks as methodologies or even processes. Most agile teams use frameworks as a starting point for their agile transformation, eventually customizing elements to meet their unique needs.

Setting up an agile framework actually means you will have to embrace agile. Working agile means an organization has to go all the way, there's no path that leads to working 'a little bit' agile. An agile way of working requires an open mind, and the will to change your

organization. Training is definitely needed, as becoming agile is often underestimated. It's a structurally different approach and will be a huge turnaround for an organization.

Agile is about letting go. Most companies are used to capturing all processes, building functional designs, but agile starts with empty sheets. The switch to agile should be a hundred percent. When companies start mixing agile and their trusted waterfall method, they will start 'water scrumming', and that's like picking the worst of two worlds.



STEP 05. Create agile teams

Composing the right agile teams is all about finding the right people. If the organization isn't used to working agile yet, try to find the people who are willing to learn the agile framework. Start with training to learn how to work in an agile way and find the best coach. An agile coach will get team members used to the new methods; he won't be part of the team, he will be circling around the team, making sure not only the team, but all stakeholders in the company will embrace the new agile work methods.

Prepare the team to learn low-code. Allow them the time to get acquainted with the Mendix platform. During the first project, Bizzomate will be in the driver's seat. For the next project, this role is handed over to your team and Bizzomate will be in the passenger's seat. Thereafter, Bizzomate's consultants will be available for help in complex tasks or when extra resources are needed.

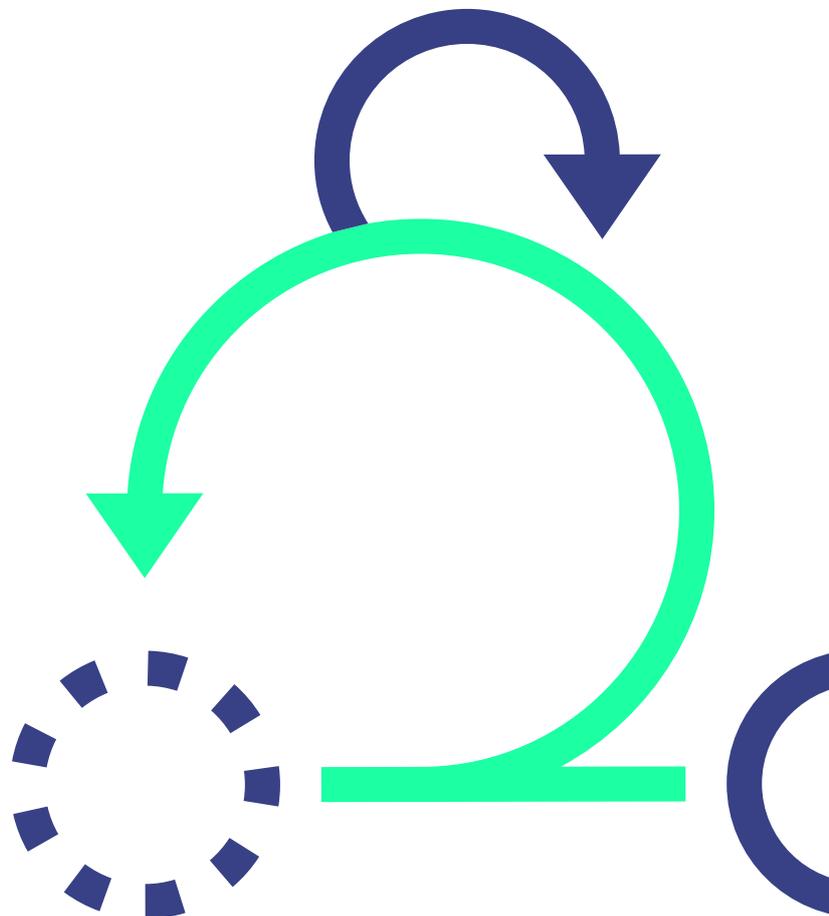
STEP 06. Build and maintain first app

It's time to really start building. By now, the team has identified the company's problems that have to be solved. It's easy to start with the biggest problem; the sooner this gets out of the way, the better, isn't it? No, please start with a smaller, less significant project. Find a project that doesn't require much time, but has showcase potential; a project that can convince C-level executives and colleagues of the power of low-code. The proof of the pudding is in the eating, right?

STEP 07. Deploy / Release

This is a quick step, literally. Deploy your first app as soon as possible. Do not try to go for the perfect ten, but settle for a nice seven. The speed will give you insight into the capitalization of the app; will it work as planned? Do end users like it? And will it save costs or earn money for the company?

During this phase, you will learn why it's so important to combine the strengths of business and development. Business people know about the end users' needs. Low-code allows them to develop new solutions, and combining both roles will make the team stronger.





Business Improvement

STEP 08. Digitalize at scale: Reuse how to repeat success and reduce costs

Now your first project is live and successful, it's time to switch to the more complex problems. Define the major issues the company is struggling with, varying from better customer care, faster purchasing methods, integration of business partners, an improved supply chain; anything that will contribute to the success of the company. You'll probably find a lot of possibilities: select those that will have the biggest impact with the smallest effort.

Now you'll start to build a portfolio of digital solutions. A single app, or even a collection of projects is not a digital transformation; the transformation is all about building a portfolio of solutions, targeting the vision the company wants to reach in the coming years. And yes, the journey starts with that first app.

STEP 09. Improve continuously secure sustainable digitalization

Hardly any solution is perfect in the first draft. Every app and every solution can be tweaked and improved. Step by step, the team will work on the bottlenecks that have popped up.

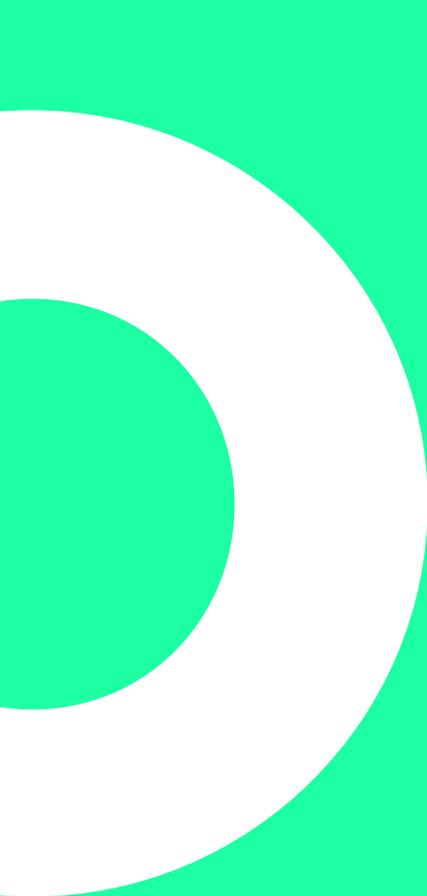
To keep improving, it's time to scale up and build more teams. One team will keep improving the built solutions,

the new team will search for new challenges. Splitting up the team will prevent the company from blindstaring; the new team will search for new horizons, while the first team keeps improving the quality of the portfolio.

STEP 10. Foster a culture of innovation

You've almost reached your goal of building a new culture of innovation. Let go of all commercial innovation, forget about the business case, leave the thought behind that every innovation should make money. Think outside the box, experiment! The low-code platform is a technology with endless possibilities, so use it. Along the way, you will get to know the platform better, giving you the opportunity to experiment.

And yes, you'll make mistakes. But by now, unlike the first days of the digital transformation, the team will know the platform so mistakes can be solved quickly. Using the low-code platform doesn't mean a change of IT-systems, it's a change of culture. It all starts with building the right thing, building the thing right and build it fast.



Business case

Learn how Royal IHC drove digitalization to new heights

Curious how the 10-step approach can work for a company? The business case of [Royal IHC](#) shows the strategy of this offshore company. To execute on the strategy, IHC worked with Bizzomate on the 10-step plan to drive digitalization.

Royal IHC is an international supplier of innovative and efficient equipment, vessels and services for the offshore, dredging and wet mining markets. More than 3.000 employees work on site and from offices worldwide to offer customer support on every continent. The company is facing continuous change in customer requirements and global competitive pressure. In order to maintain its leadership and provide customers with innovative solutions, digitalization is an important part of IHC's strategy.

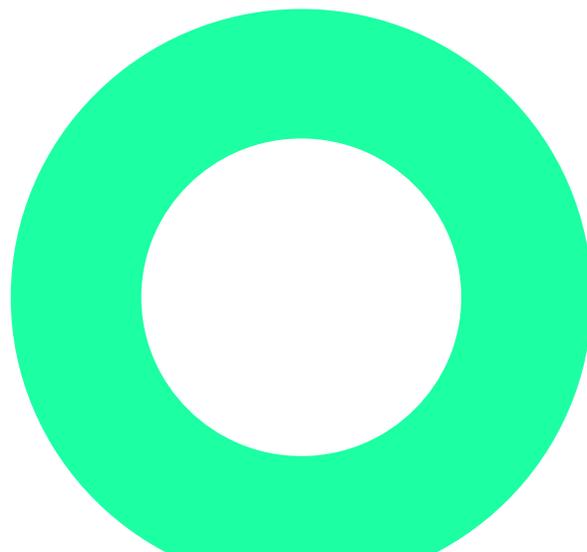
“We’ve launched a specific digitalization program aimed at digitalizing existing processes and developing new solutions, called OneIHC”, says Jan van der Wouw, Director Digital Business at Royal IHC. **“To achieve our ambitions, we needed a long-term partner and a low-code platform enabling us to scale the delivery of new applications in a faster and more efficient manner.”**



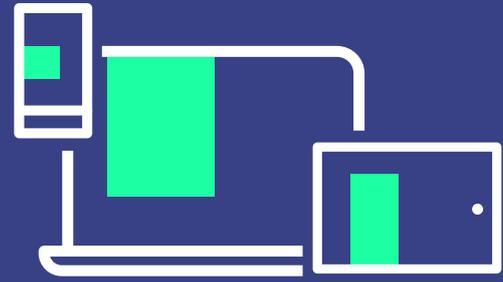
Aligning business stakeholders and IT

As the company saw a growing demand for applications, dashboards and portals, the new low-code platform had to enhance the collaboration between business stakeholders and IT to meet these requests. After several low-code platforms were evaluated, IHC chose to join forces with Mendix and business partner Bizzomate. Key factors were the superior online and offline mobile capabilities, a shared vision on how to support component-based architectures and the extensive knowledge and experience of the Bizzomate team.

A digital transformation does not influence a single department, but should be company-wide to have the greatest impact. IHC wanted to build digital solutions that improved the development of products, but also supported customer services when these products were in use. This difficult challenge led to a rather simple two step strategy: 'Doing things right' and 'Do the right things'.

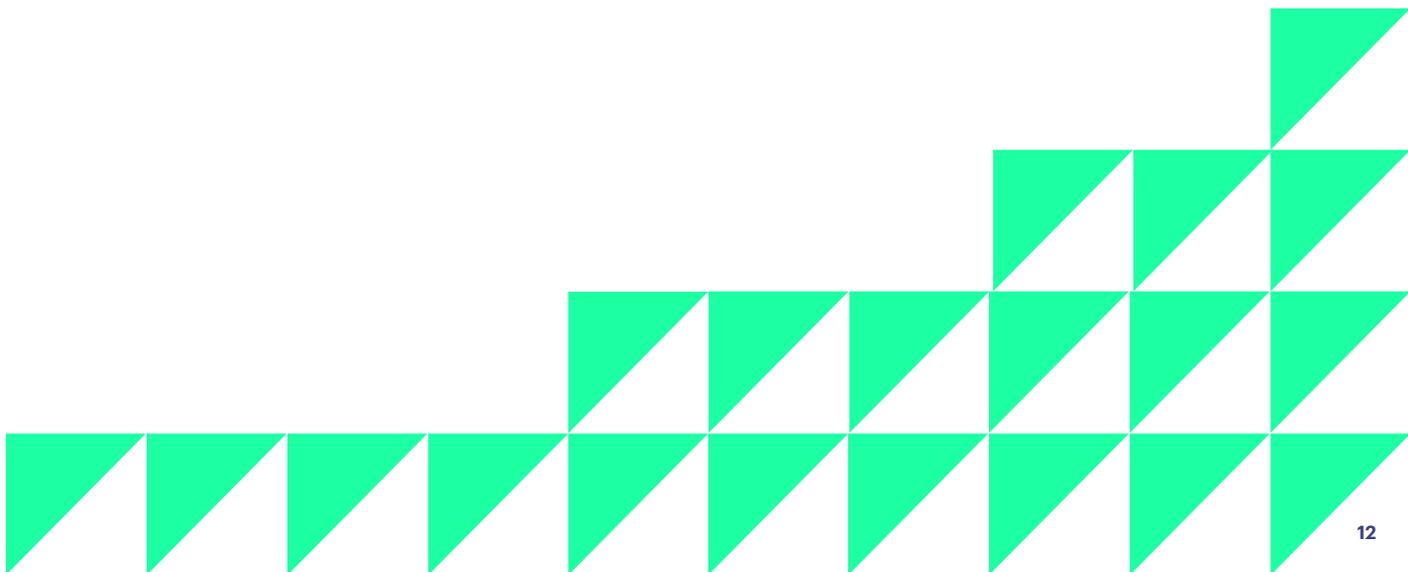


Putting the platform to work

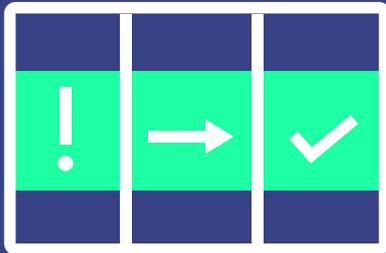


Many years ago, IHC started with the unification of processes and supporting systems. This resulted in a strong foundation. In order to speed up application development, they started building digital solutions on the Mendix platform. It lowered the time of creating, iterating and releasing applications from around six months to six weeks. Plus it created reusable software components that further decreased the development time of other new solutions.

All vessels, or entities reside in the IHC ERP system. These entities are exposed to the digital solutions created in Mendix via one API and subsequently used in different apps, like IRIS for operational intelligence, Searchlight for market intelligence and Optimus for asset condition management. This unification and standardisation of the ERP system and the API result in a development time for apps of just a few weeks possible.



Defining customer needs



Enhancing collaboration with customers was one of the key targets. Implementing customer validation into the development process has turned out to be very successful. For this IHC is using projects of two-week development sprints, after which they demonstrate working solutions. These are reviewed with internal and external stakeholders. The feedback obtained is addressed in the next development sprint, while the benefits of the released software immediately drives return on investment.

While customer insights are important, the company also conducts research into the behaviour of the intended user groups. This data should help in answering vital questions, such as: to what extent is the solution desired by the customer? Is there a

positive business case (is the solution viable)? And can we realise the solution given the constraints (is it feasible)? With this information, they can build better solutions, or not build something at all which is sometimes the better option.

As an example, one of the solutions is a mobile application that gives customers access to their list of vessels, related parts and documents. During the initial review, customers appreciated the result, but requested additional functionality such as an easier search option. While the product was already released and in use, the development of this search function was started immediately. More importantly, by incorporating customer feedback, it generated buy-in for the solution, making it much easier to be adopted.



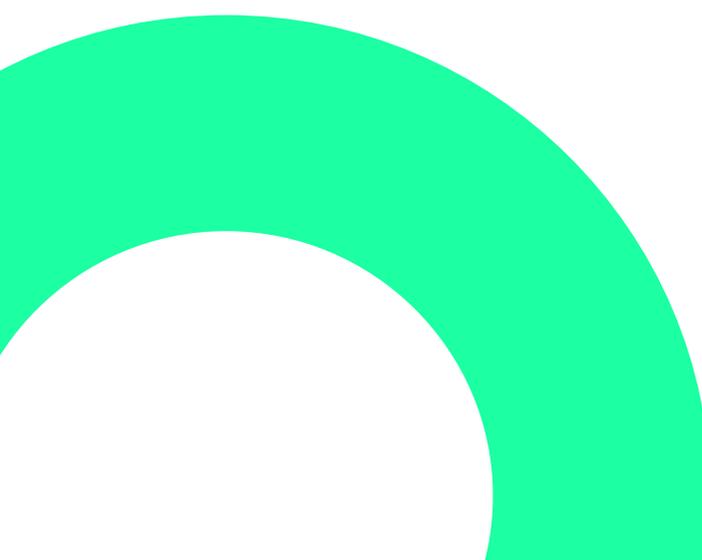
Get the customer on board

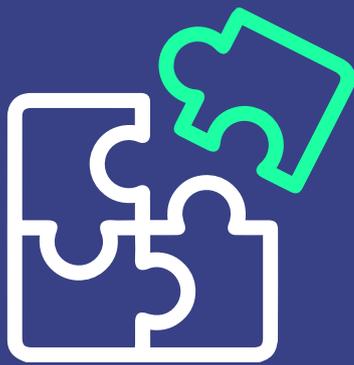
Customers expect IHC to rapidly deliver new ways to maximise uptime and performance, reduce total cost of ownership and improve the experience.

For the latter, IHC works in three phases: cooperating closely with customers to understand their problems, and start to ideate about how to help them; developing prototypes and a solution as quickly as possible; and the operational phase with a focus on having the customer on board. This last step is all about working with people. The users that will work with the app, should be able to make valuable decisions based on the information in their dashboards or other overviews.

Although the maritime industry has long been a stable environment, the changes in other industries, the integration of supply chains, and the regulatory environments in different countries, have their impact on the maritime sector, leading to a higher level of complexity. Customers of IHC need to report on their carbon footprints and comply with a wide range of security regulations. So, when IHC Digital Business delivers a solution, they have an entire team ready to work with and analyse new data.

The challenge is to provide data in such a way that it leads to usable and actionable insights. This can only be achieved by actively discussing the wishes and possibilities together with the customer. Therefore, the IHC digital team needs a combination of tech skills and soft skills; they need the knowledge to build a dashboard, but also the ability to analyze the product and the customer.





Developing in collaboration with the client

One great example of delivered applications including customer validation and co-creation is Optimus, a condition monitoring system. Customers were involved in every phase of the development. IHC organised workshops with different groups of customers, to discover whether there was an external need for a digital condition monitoring solution, and if so, what the finer details should be. It showed that instead of developing a solution to support the condition monitoring process, which was the initial plan, customers preferred a digital solution that would help them prove the value of a condition monitoring programme.

Alongside insights, speed is the key when it comes to innovation. It is necessary to rapidly bring products to market and continue innovating

afterwards. IHC sped up the process by using an 'agile' way of working, not only during development, but also in the solution validation phase. Thanks to the development platform and phased approach, a prototype was built in only one week, which could be again validated with customers. After four 'sprints' (across eight weeks of development) the first minimal viable product (MVP) was ready and given the name 'Optimus'.

The investment in customer validations meant that IHC not only rapidly developed a first MVP of the digital solution, but also had customer cooperation during the implementation process.

From months to weeks



One other application developed on the new platform with the new approach is IRIS, which provides customers the ability to quickly respond to deviations in asset performance and take corrective actions immediately. Previous attempts with other software developers to develop a solution took over 18 months with no actual working solution as a result.

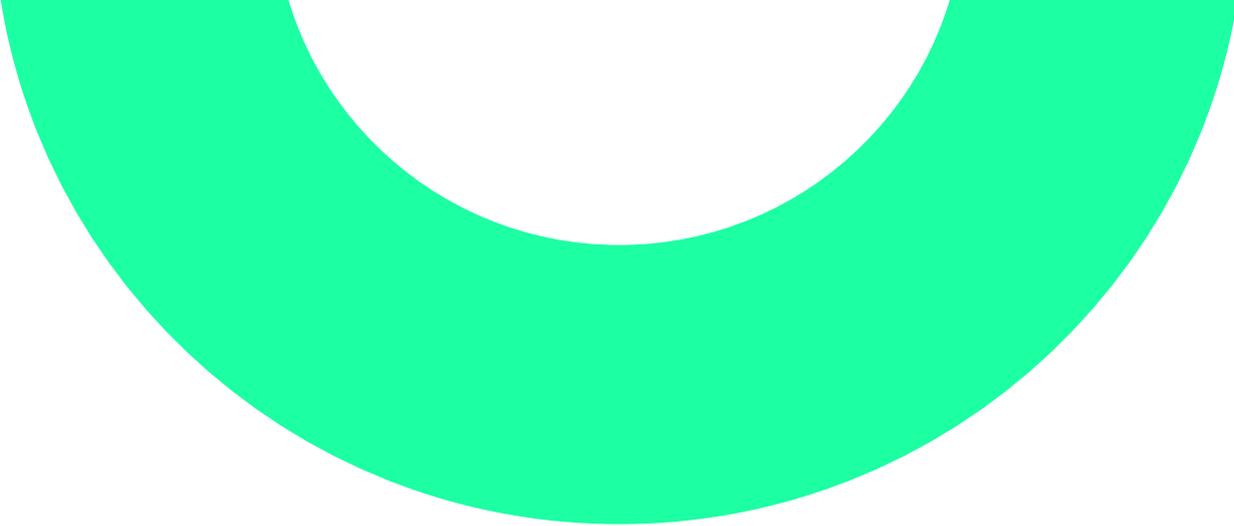
Bizzomate developed a responsive web app, intended for mobile use within a few weeks which gives users access to real-time operational parameters of vessels and projects in different views. These parameters are calculated by combining sensor data retrieved from the ship with manual input from the vessel operator. To accomplish this, IRIS has integrations with IFS (Backend) for vessel names and OSIsoft PI system (IoT solution on the vessel).

The sum of these parameters is combined in a daily report which is sent to the owner to update him on the progress of his projects. The app is continuously improved and regular practice is the most crucial factor for optimisations.

Time to market has significantly decreased. Bizzomate was able to create a workable prototype in weeks. Business-wise it allowed IHC to outrun their competitors in moving towards a more service-centred supplier as well as providing their customers with better advice and support based on newly captured data.

Arjan van Limborgh, Product Owner Digital Business at Royal IHC: **“Our job in Digital Business is to drive the digitalization of IHC while continuously validating the value with our colleagues and customers. Throughout this development we’ve received feedback on actual working software as opposed to abstract ideas or concepts, which proved to be rich insights, and we’ve been able to adjust our developments to further increase the value.”**





Bizzomate stands for **Low-Code high-impact.** Contact us now to boost your organization with **Low-Code.**

Would you like to fire up your digital transformation process? Is your organization considering low-code? We would love to share our lessons learned and customer stories! Contact us through:

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