



Smart Company Project

HOSPITAL LOGISTICS

Hospital Logistics ensures that **healthcare institutions can focus on their core task of administering care to their patients**. Hospital Logistics provides everything needed to optimally fulfil this job. This ranges from consolidated purchasing through **stock management** and **picking & packing for all sterile and non-sterile medical consumables** to in-house delivery and administrative processing at departmental level. **Hospital Logistics helps healthcare institutions devise and implement the most optimal integrated process from supplier to patient.**

WHAT WAS NEEDED?

Hospital Logistics asked for an application that facilitates the process of ordering products. **Healthcare workers have to be able to easily and quickly replenish their department's stock of consumable goods (e.g. syringes, masks, gloves...).**

The second thing Hospital Logistics asked for was a web shop. A specific web environment where all of Hospital Logistics' products are displayed. On this web shop clients have to be able to order certain products (not just the ones their department needs) in larger quantities and across departments.



WHAT SIRUS PROVIDED

Sirus developed the Kanban application in collaboration with [Continuum](#). This app remembers the stock of every department (what are the exact quantities of a product needed in a specific department). Subsequently, when someone of a particular department places an order to refill a product, the app knows exactly how much to supply. **By scanning a barcode, the stock of the product that had run out is automatically supplemented.**

Throughout the project Sirus realised the Kanban application and web shop could be intertwined. Both systems are combined in AppSuite and use the same service and backend, but with different specifications and interfaces. The ordering process is different but the underlying flow is the same. Eventually, combining the Kanban application with the web shop also resulted in a time and efficiency gain for the project.



TECHNICALITIES OF THE PROJECT

Environment

- › Progressive Web Application
- › Azure Servicebus
- › Azure Serverless services
- › MSSQL
- › Docker Services
- › Keycloak

Frameworks

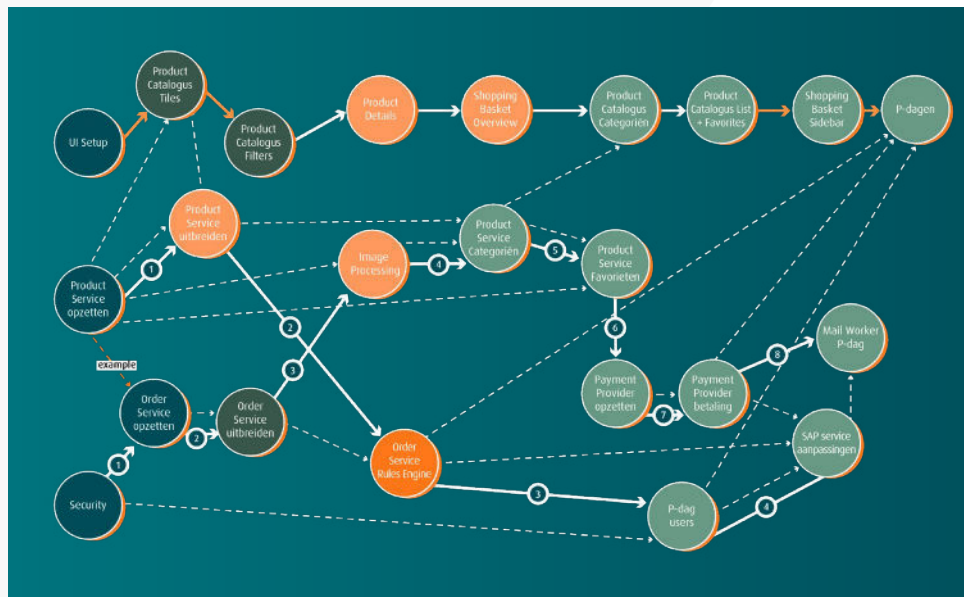
- › Angular
- › .NET Core 3.1/ .NET 5.0
- › EF Core
- › Ms test

Components

- › SAP

Tooling

- › Azure Cloud Services
- › Azure Devops



TIMELINE

1. Planning

- › First, we looked at how we were going to build these applications. Which pieces of functionality needed to be built and how do they operate towards each other?
- › Then we looked at what the customer was asking for and whether their request was the best solution or if we had a different solution in mind.

2. The first steps

- › What are the priorities? Which are the first important steps to take?
- › While Sirius focused on the Backend development, Continuum worked on creating the optimal user interface. By presenting the end user with a clickable design first before developing the complete platform, both teams were able to directly incorporate the customer's feedback when creating the final web and app interface.

3. Designing a roadmap

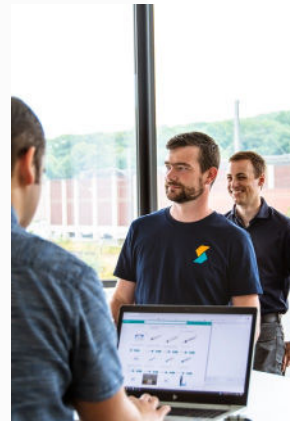
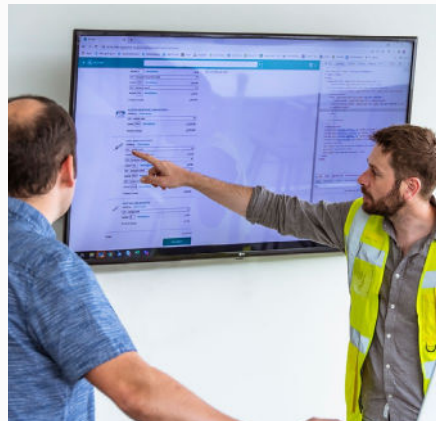
- › By following a **clear roadmap** everything runs according to schedule. By logically following the steps and building the platform, mistakes are avoided.

4. Estimate the duration of the project

- › In order to estimate the duration of the project a **critical path diagram** was designed. This scheme determines which steps need to be followed and how the different features are related to each other. An **MVP** was distilled from this critical path: when will there be enough features to go live?

5. Offer support

- › We remain present if further questions arise.
- › We foresee expansions of the project in the future.
- › We continue to serve as a sounding board and listen to the customer's needs.



WHAT'S NEXT?

Even though the primary demand of the company has been met, Sirius still has a lot of possible innovations and expansions up its sleeve. As an example, **the app can also be opened up to consumers (B2C) instead of only to companies (B2B)**. Providing special promotions for consumers adds a meaningful functionality to the app. As for what follows, we will also provide an overview of all deliveries. In short, we continue to look at further customer requirements and how to implement these solutions in the existing platform.

WHAT OUR SIRUS' MEMBERS THINK ABOUT THE CASE?

"One of the best things I take with me from this project is the day when Thomas – the contact person at HL – took us through the hall and showed us what we were working for. We could really see how Hospital Logistics processes the orders and then prepares those deliveries. You're not normally involved with that. You come into a hospital and the plasters, wipes and syringes are all there, but you don't realize it all comes from the same warehouse in Aarschot. It's nice to see the business behind it. I always like to have a project where you really see what you're doing. It's different than developing an application without knowing its purpose. For me, it was one of the first projects I really worked for as a full-time architect. Being a full-time architect for once was really fun."

 **Tim Langens**
Solution Architect, Sirius

"For me, the setup in Azure was the most challenging. I knew a lot about it, but I hadn't really put the theory into practice yet. And now we added those Docker containers in Azure, another thing I hadn't practiced yet. So that made this project very challenging and interesting." -

 **Sam Van Den Berge**
.NET Consultant, Sirius

"As a Junior profile, everything is a challenge for me. But thanks to Tim's and Sam's expertise there was a solution to every problem and I liked working together towards one goal."

 **Valentin Ponthieu**
.NET Consultant, Sirius

"We make clear arrangements with the Sirius team. And it almost seems like we are colleagues working in different companies. So, the whole collaboration feels natural and works perfectly."

The Continuum Team

WHAT THE CLIENT THINKS ABOUT THE CASE

"I am really satisfied with this project. The Sirius and Continuum team really put a lot of effort in this case. We had worked with Continuum before when they mentioned to bring in Sirius for the backend development of the webshop and Kanban application. They turned out to be the right partner for this job."

 **Thomas Havermans,**
Business Analyst IBP

