



## REFERENCE CASE

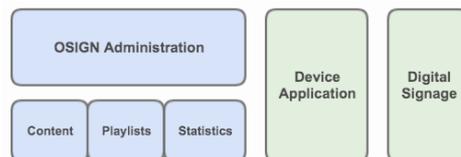
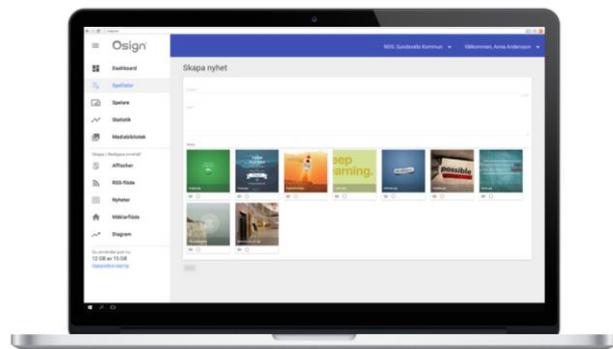
### Viendo Digital Signage Platform, OSIGN

#### SUMMARY

Dewire has provided further development of Viendos Digital Signage Platform, OSIGN aimed at providing the next generation of digital communication.

This means an easy and user-friendly application in areas ranging from marketing and in store communication to management and human resources.

Through planning and innovative solutions, a coherent and flexible solution has been created with ability to support administrators in effective creation, management and tracking of screen content.



## ABOUT VIENDO

Viendo is a comprehensive partner in digital signage - from concept and installation to education and support. Using the digital signage software OSIGN will give messages quickly and easily - whether the customer have two or a hundred screens.

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## BACKGROUND

Viendo has a strategy to provide a flexible solution for each customer. Moving from a customized software to flexible customer offers was needed to prepare the solution for an expanding customer base. Enabling fast delivery of new content design, without the need for separate releases and installations in combination with empowering customers to administrate users and share content would lead to higher customer satisfaction and less need for support.

In 2016, it was decided to upgrade the existing Digital Signage Platform, OSIGN and Dewire was contracted to implement the solution.

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## OUR SOLUTION AND DELIVERY

The project lasted from January to March 2017 with the goal of creating a modern and stable solution fostering maintainability as well as eventual adjustments to upcoming innovations. The software design was focused on a coherent and flexible solution to consolidate customers to a common platform. A modern application design and profound focus on safety throughout the design and implementation process has strengthen the applications maintainability as well as security level.

The Dewire team focused on framing a solution that would:

- Centralize updates in an effective way
- Give instant feedback
- Provide easy administration and publication of content
- Facilitate customizations for specific customers without the need for separate releases
- Improve the aesthetics of the application

In order to facilitate expansion in customer base, the application design is focused on providing a reproducible but still flexible and outstanding customer experience. Language support was also added to prepare the application for new markets.

The Digital Signage administration now provides a better editorial experience including instant feedback when editing content, sharing and tagging of content, features for administrating publishing on multiple screens, statistics of content displayed and user management. Screen viewers now enjoys instant publication without disturbance from loading content.

In this project, Dewire designed and implemented both frontend and backend solutions for the administrations application as well as the Digital Signage Device application. The new graphical profile was implemented based on sketches delivered by the product owner. Dewire worked in agile teams with planned sprints, carefully prioritizing the requirements in daily cooperation with the customer.

Thorough agile work methods, planning, process fine tuning, and innovative solutions guaranteed a high-quality delivery within the desired timeframe. The resulting product gave Viendo increased administrative efficiency and marketing advantages by adding control, convenience, flexibility and new content possibilities to editors.

## TECHNICAL SOLUTION

The technical bases of the project were: Amazon Web Services (AWS), continuous integration (CI), large-scale instant communication and security.

Scripted development environments and continuous integration allowed all team members to work autonomously in a structured way at full pace from day one.

Developers had a full-stack local environment, testers could deploy the latest code at will, and the flow of features - from planning and development to testing and deployment - was visible to customer and PM at all times.

Instant communication across thousands of geographically spread-out connected devices was achieved by drawing inspiration from the field of Internet of Things (IoT).

More specifically, the MQTT protocol was used to broadcast editorial, scheduling and media-changes to all affected devices, allowing all screens to show the latest content within milliseconds of updating content in the CMS.

Security throughout the system was kept by:

- Using encryption on all connection between administrators, servers and devices
- Not shipping any credentials on the actual devices
- Designing and implementing user- and role-management as well as a flexible media- and content-sharing system
- Designing and implementing a logging system where an auditor can view and export all system events on a per-user and per-object basis.

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## ROLE

Dewire provides development and maintenance using in-house teams. The development is done using an agile team following the Scrum discipline. Support and maintenance is handled by the support-team following the ITIL discipline.

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## KEY SUCCESS FACTORS

- High responsiveness and continual adjustment to customer needs and priority
- A stable and flexible initial design to facilitate new innovation and exceed initial requirements
- The team stayed efficient by daily meetings with the customer giving insight to the most current priorities in order to meet a tight deadline
- Using modern frameworks for interactive web applications
- Integrating the practice of continual documentation in the design-implementation cycle

## CONTACT

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