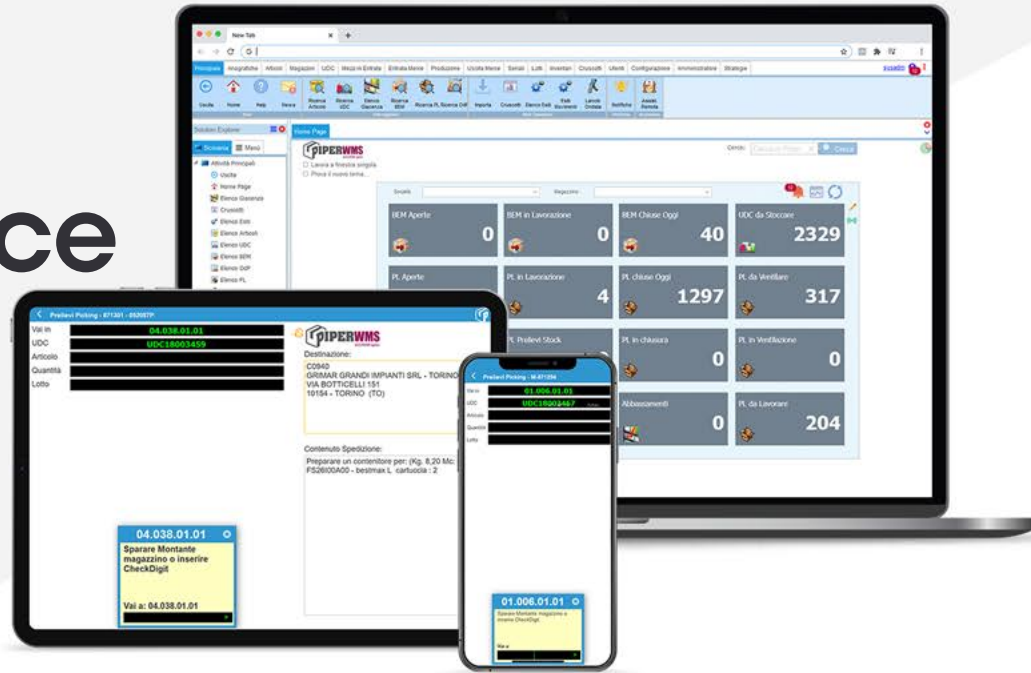# Wisej.NET

XData
E-commerce
solution

Windows to Cloud
Migration in just 9 Months

XData

Wisej.NET enables the successful cloud migration of PiperWMS, a Windows-based Warehouse Management System, turning it from a Visual Basic Windows application into a browser-based solution in just 9 months.

Italian IT consulting company XData has been providing solutions for warehouse logistics management and production since 1998. Their flagship product PiperWMS is in use by some of the most important companies in Italy (ENEL, FastWeb, Postal Service). XData's customers ship over 2 million packages every year that are handled by PiperWMS.

Technical Evolution

PiperWMS was based on Visual Basic 6 and .NET Framework which was being used on premise at customers sites. The team at XData looked at various ways to bring their application to the web, following customer requirements and technology evolvement.

An application developed for more than 20 years has a long track-record of features and functionalities that are not easy to replace or rewrite. When Microsoft announced end-of-life for Visual Basic 6 and stopped providing support for the Windows CE/Windows Mobile operating systems, XData had to rethink the future of their solutions. The team defined the idea of moving the desktop application to the web and turning cloud-native

Warehouse Management System that's running in the browser. As a replacement for Windows CE/Windows Mobile applications, XData preferred to use Android devices.

Windows Desktop and
Microsoft Compact Framework

Several studies and pilot projects with different technologies were conducted that did not lead to a usable result. When the team started looking into Wisej.NET, they immediately saw the benefits of the Wisej.NET framework and it's toolset.
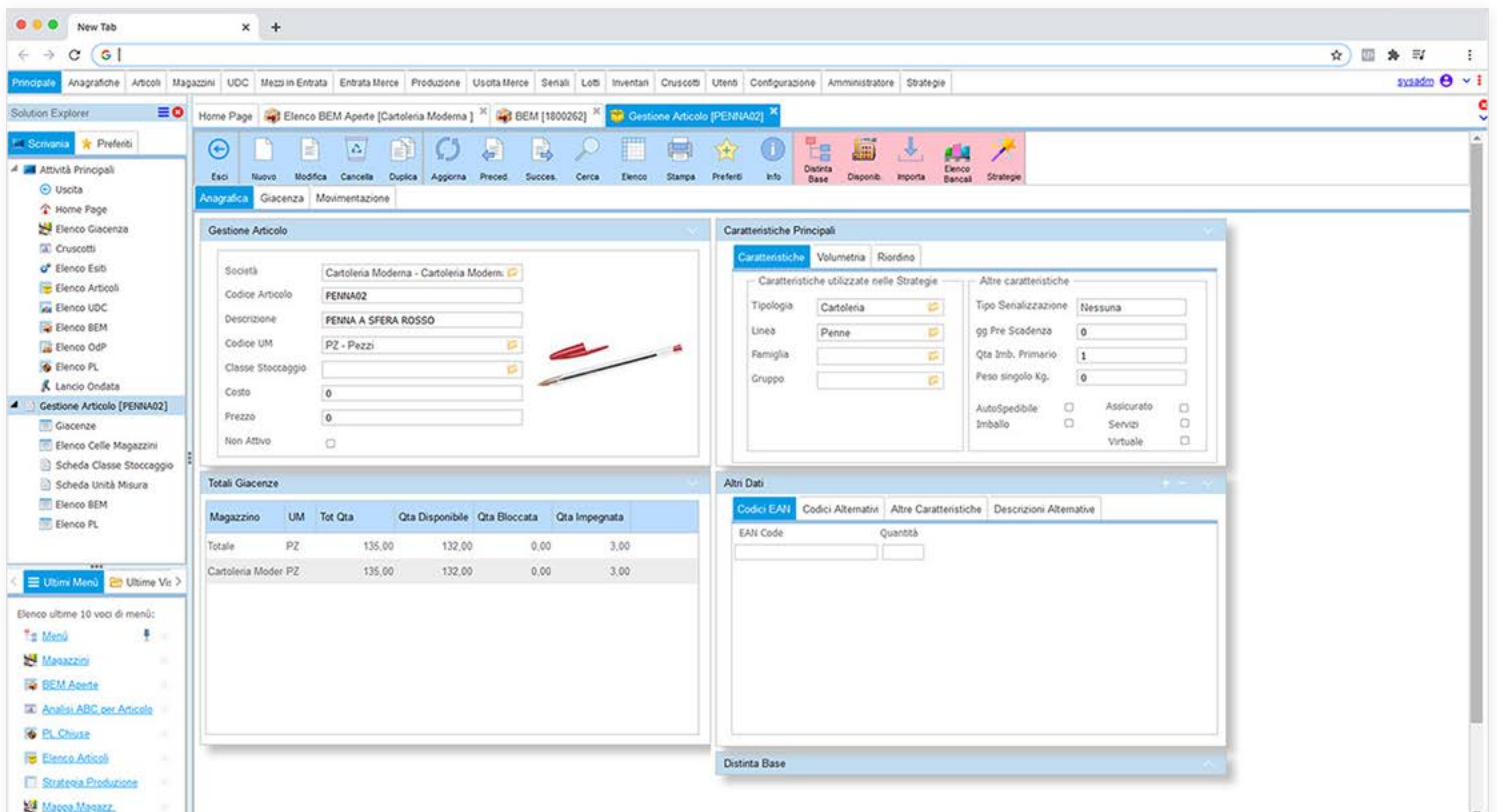
The use of Wisej.NET made it possible to simplify the rewriting of the desktop application but, above all, to also rewrite the Microsoft Compact Framework application as a web app now operating on Android mobile devices. This led to a consistent single-code approach, providing hybrid and cross-platform features across different operating systems.

Main Advantages of Wisej.NET

Wisej.NET has greatly simplified the process of rewriting the current legacy application stack.

The team at XData was able to focus exclusively on application logic and user interface design. Wisej.NET took care of the underlying aspects of web application handling like HTML, CSS, JavaScript, session handling, state management, etc.

The team in Milan was able to build upon their skill set coming from Windows Desktop-oriented software development. Thanks to Wisej.NET's pixel-perfect designer and the great development productivity, the team was able to reuse application logic ported from Visual Basic 6 to VB.NET, which was then wired to the new Wisej.NET-based user interface in the browser, turning PiperWMS into a true web application that runs across different devices and operating systems.

Application Modernization

The mobile part on Windows CE/Windows Mobile, named PiperMobile, was rewritten by hand. This part of the application suite wasn't as complex as the desktop version, and automated migration tools for the deprecated Windows mobile platforms weren't available anymore.

The team at XData worked step by step, initially building the new web platform with Wisej.NET (user interface and supporting features) and then, once this was consolidated, the application logic was rewritten as well, now serving Android devices on the shopfloor.
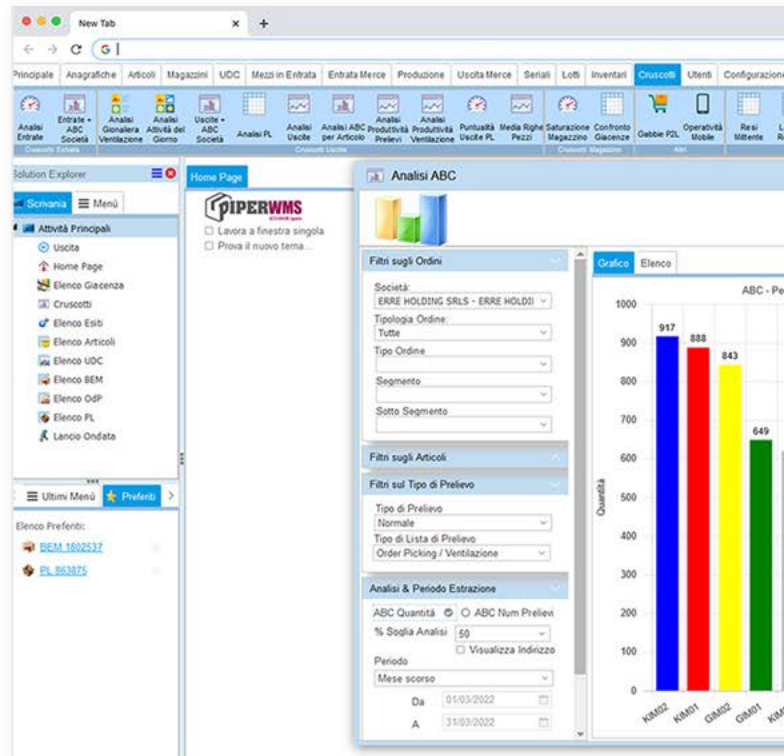
Initially, the team evaluated different approaches and prepared for the actual project. Once that was complete, the actual migration of the Windows Desktop application and the rewriting of PiperMobile took only nine months for an application that is over 20 years old.

Roberto Fenoglio, CEO at XData says: "It's great to be able to write web applications using only Visual Studio C# / VB.NET and Wisej.NET, without having to revert to additional frameworks or technologies."

Satisfy Customer Needs

Customers now benefit from a modern system with a new web, office-like and multi-tab interface. Key requirements were the ease-of-use and reduced training efforts when deploying PiperWMS to customers. The application is fast and responsive in all aspects. The use of Wisej.NET extensions allowed XData to integrate graphics, voice search, calendars, tour panels and features objects in a simple and effective way.

PiperWMS is now usable on different devices (PC, Tablet, Mobile), adapting the interface at any time to the available presentation space.
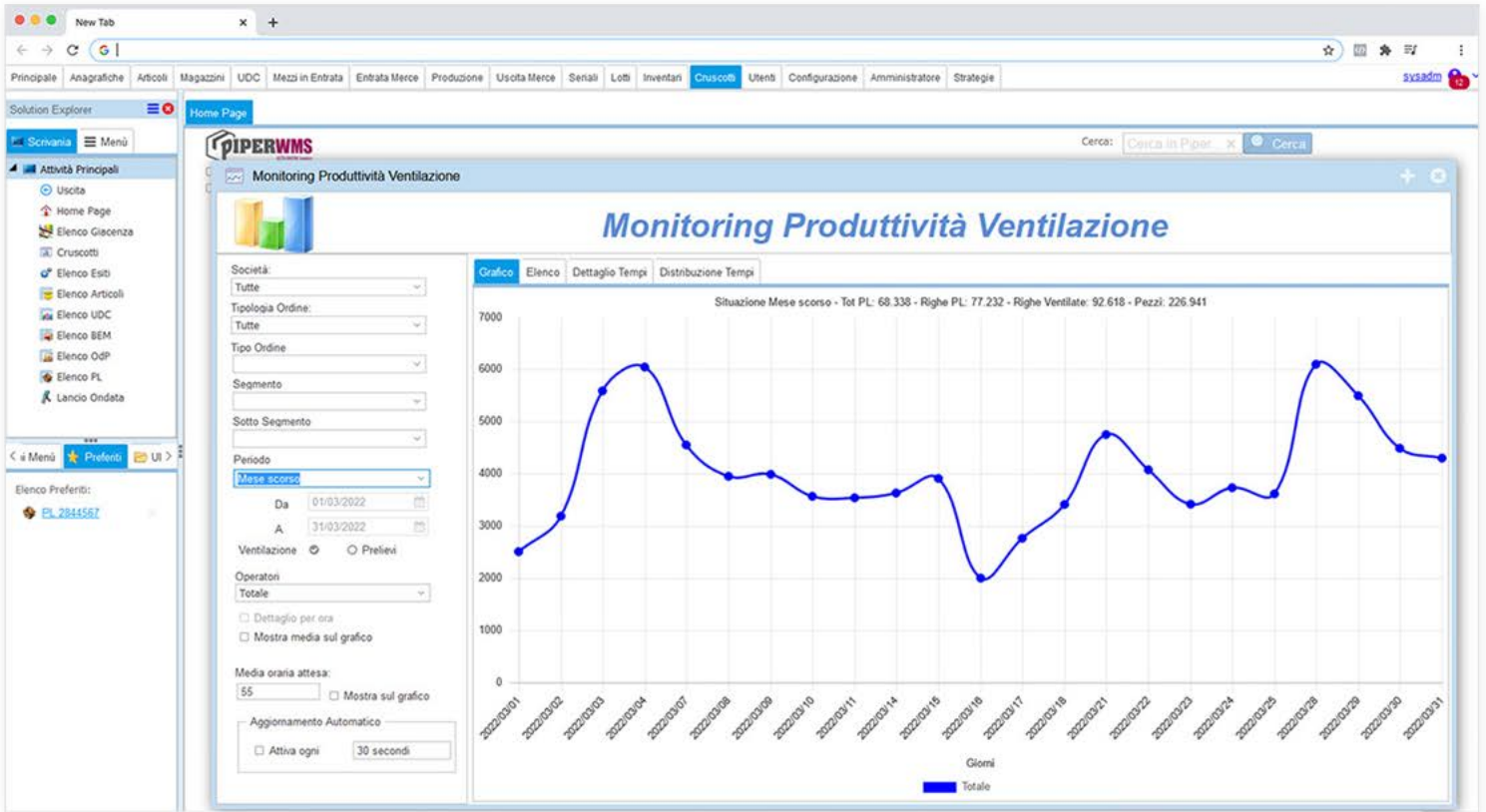

Results Achieved

- Application modernization from Windows Desktop to Web & Cloud in just 9 months

- New browser-based technology

- Updated user interface with a modern look

- Cross-browser / cross-device support

- Development team flat learning curve

- Very high productivity in development and debugging

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About XData

XData Sas is an IT consulting company based in Milan, Italy. Since 1998 XData has been providing solutions for warehouse logistics management and production. The team has worked with some most important logistics companies in Italy. With their PiperWMS application, customers ship over 2 million packages every year.

XData used to specialize in traditional logistics but has enhanced their solution for native integration with both the main international players of electronic commerce platforms and with the main national and international logistics carriers.

www.x-data.com - www.piperwms.it

About Ice Tea Group

Ice Tea Group LLC, located in Washington DC, is a worldwide specialist for enterprise application modernization and business web frameworks.

We help developers and organizations stay competitive. Our mission is to strengthen and increase the value of enterprise-scale software assets by providing modernization paths throughout technology changes.

Since 1998, our services and frameworks have been used by more than 600 companies, in 4,800+ applications, over 50 countries. Some of our clients are: Fujitsu, Lidl, Goodyear, Xerox, Skanska, Volvo, Merck, GE Healthcare, IFS, Air New Zealand, CBS, SAGE, Ericsson, Siemens, ASFINAG, Markel, Ameriprise, Europ Assistance.

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