

CASE STUDY

ExPED – how Telerik's RadControls for Silverlight helped Dextera create the ExPED economic data dashboard for local government

DEXTERA

OVERVIEW

COUNTRY

Greece

INDUSTRY

Finance, Public Sector

CUSTOMER PROFILE

Dextera is an independent consulting firm that specializes in economic analysis for public and private sector clients.

BUSINESS SITUATION

Dextera's new product, the ExPED economic dashboarding suite for governmental bodies, needed an attractive and engaging UI while being able to handle large volumes of statistical data.

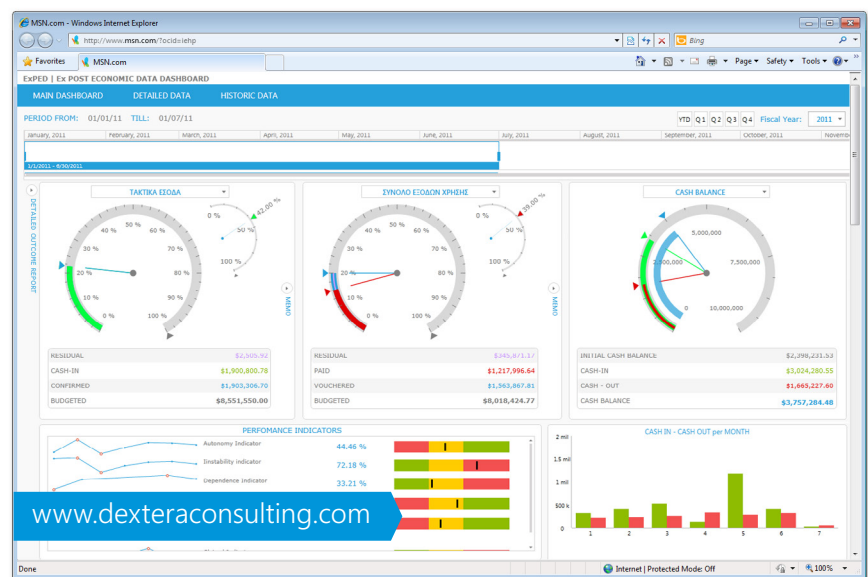
SOLUTION

Dextera used the RadControls for Silverlight by Telerik to create a slick user interface, making ExPED a natural choice for municipalities across Greece.

BENEFITS

- Rapid development of user interface.
- Support for MVVM development model.
- Abundant example code accelerated development. RadControls for Silverlight

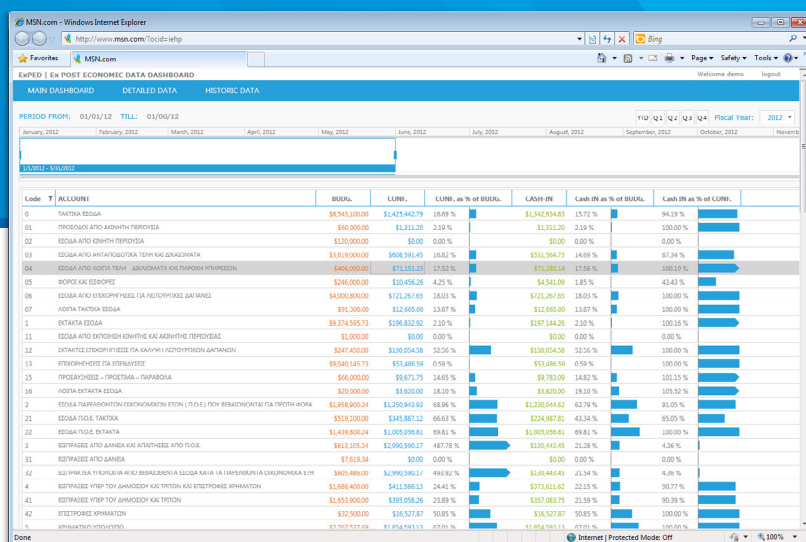
With an ambitious economic dashboard product to deliver, Athens-based Dextera chose the [RadControls for Silverlight](#) by Telerik to create a sophisticated user interface while making the development process easier.



BACKGROUND

Data is the lifeblood of any organization. But how do you cope when it comes flooding in? For many municipalities in Greece, tracking financial data is time consuming, complicated and – for non-experts – sometimes overwhelming.

Athens-based economic consultancy Dextera decided to solve this problem. Putting themselves in the shoes of municipal executives from the Mayor down, Dextera set out to create a simple, easy-to-use and easy-to-deploy business intelligence solution.



“This project would never have been completed if we did not have the help of Telerik tools.”

Athanasios Zannos,
Managing Partner, Dextera

RADCONTROLS FOR SILVERLIGHT AND MVVM: HOW THE TECHNOLOGY DELIVERS

Telerik controls are engineered to be as MVVM compliant as possible. Two examples of this embedded support for the MVVM pattern are the ViewModelBase and DelegateCommand implementation. When using MVVM, the UI needs to update according to changes within the ViewModel. ViewModelBase includes an implementation of INotifyPropertyChanged, allowing notification of the UI when updates occur.

DelegateCommand is an implementation of the ICommand interface that allows for using commands between the View and ViewModel. As MVVM discourages use of code-behind, DelegateCommand allows events to populate through to the ViewModel so users can interact with the application.

In addition, Telerik has also created a rich and powerful routed command framework that enables codeless interactions with our controls. One great example is the RadGridViewCommand, which allows commands to be fired off within RadGridView by use of simple element-to-element binding.

THE CHALLENGE

Delivering a simple solution to a complex problem is never easy. Drawing on their experience supplying financial tools to the public sector, Dextera developed an ambitious specification for the product, which they named ‘Ex-Post Economic Dashboard’ (ExpED).

With a potential market of more than 1200 public bodies in Greece who are working under the Public Accounting System, Dextera needed to make ExpED as easy as possible to deploy and maintain. For this reason, the decision was made early on to make ExpED a cloud-hosted SAAS solution. This provides a zero-infrastructure footprint and a zero-effort support requirement for customer IT departments.

For the end user, ExpED would be a collection of dashboards presented in the browser. To deliver this successfully, Dextera needed to find a technology that would enable them to reconcile two objectives. First, the practical challenge of presenting large volumes of complex economic data in a responsive way. Second, the need to make the product as

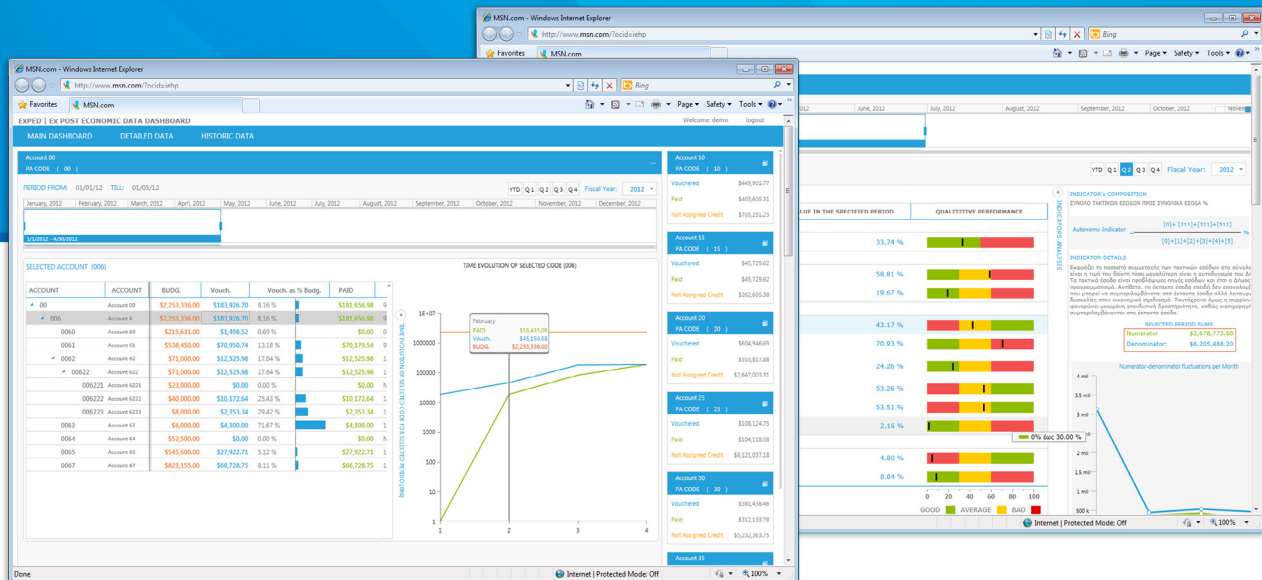
appealing as possible by providing an attractive user interface with a professional, sophisticated look and feel.

Given these requirements, Dextera needed tools which would enable them to develop ExpED quickly so that they could take the product to market in a timely fashion.

THE SOLUTION

The Dextera team were already familiar with .NET development, having previously created other economics-related solutions. One of these solutions is the MiniMap geo-economic decision support application. Having had a positive experience developing MiniMap, it was natural for Dextera to continue using the same toolset.

“It made sense to use the technologies which had served us so well with MiniMap,” says Athanasios Zannos, Managing Partner at Dextera. “When we developed MiniMap, we evaluated UI components for .NET from several companies including Telerik. Telerik outperformed the other three in almost every way, especially in documentation and working examples. Using Telerik



components, we completed development of MiniMap in almost no time – we bought the Telerik Ultimate Collection (now DevCraft Complete) and in only eight days we finished the UI development.”

When it came to developing ExpED, Dextera used the RadControls for Silverlight by Telerik throughout the application. Having decided to follow the Model-View-ViewModel (MVVM) design pattern, the Dextera development team benefited from the native support for MVVM built into the RadControls for Silverlight.

Dextera used many controls from the RadControls for Silverlight collection. Unsurprisingly for such a data-heavy application, the RadGrid was used extensively. “Using this control, we could easily connect the user interface to the underlying database and focus on the specific function the user needs in that part of the application. With all basic grid functions - sort, group, reorder, search, etc - already embedded into the control, our team could create fully functional grids in just minutes.”

With a hierarchical data set, the RadTreeView was a natural choice. “It provided an

excellent multipurpose control for calculations on the client side and combined with RadDataBar gave us a nice data presentation result in no time. Extensive use of RadChart and RadCharting was also necessary in order to depict charts of various types. The result is high quality and speed.”

“We decided to manipulate the Time Dimension (fundamental aspect of data at hand) by making use of RadTimeBar in almost all of applications’ views. The intuitive representation of time and the ease of Data Binding proved to be a correct choice. The user can manipulate time in an easy way and can reproduce the whole timeline of data at hand, click by click.”

“We evaluated UI components for .NET from several companies including Telerik. Telerik outperformed the other three in almost every way, especially in documentation and working examples.”

Athanasios Zannos,
Managing Partner, Dextera

Providing an interactive linear representation of the data over time was a key objective. Dextera also used the RadPivotMap, RadGauge, RadBulletGraph, RadSparklines, RadTileView, RadExpander and RadSlider to create a rich, intuitive user experience.

Dextera achieved their aim of creating a zero-footprint application by hosting ExpED in Azure. The data which feed the dashboard through services is stored in SQL Azure. This provides a scalable, flexible solution which requires no dedicated IT infrastructure implementation by the customer.

THE RESULT

Dextera identified four major benefits from using the RadControls for Silverlight by Telerik. “The first benefit can be easily identified during the design phase,” says Athanasios. “Setting mockup screens was never easier and faster. Mock ups were fundamental for the collaboration between matter experts and developers and Telerik controls proved valuable during this stage.”

The second benefit for Dextera came from the large quantity of example code available through the Telerik website. By taking inspiration from the example code, Dextera were able to create a more engaging user experience and do so quickly and efficiently.

Third, Dextera benefited from the RadControls' support for easy data binding. "This should be considered a major benefit. Since our application is a set of dashboards representing an ever-growing number of data sets, easy data binding was a valuable ally."

Finally, the architecture of the project means that Dextera can easily adapt ExPed for customers who have a requirement to visualize different data sets. Using the RadControls, new versions of the dashboards can be rapidly developed and deployed.

For Dextera customers, Dextera's decision to use the RadControls means that ExPED is an intuitive and easy to use application which

visualizes a huge amount of data in a concrete and compact way. From the Mayor down, exploring a municipality's financial data – both current and historic – has never been easier.

ExPED minimizes disputes over financial data as there is a single version of the 'financial truth' delivered to all municipal executives through the dashboards. Significant time savings are achieved by reducing the reporting burden, and the interactive presentation of the data makes it possible for users to travel through the data history. ExPED's ease of use has helped engage executives with no financial background and the system can also be used as a training platform.

THE VERDICT

Following the success of the ExPED project, Dextera plan to continue using Telerik products as the foundation of their development strategy.

“ Our application is a set of dashboards representing an ever-growing number of data sets. Ease of data binding was a major benefit.”

Athanasios Zannos,
Managing Partner, Dextera

Says Athanasios: "This project would never have been completed if we did not have the help of Telerik tools. We know that Telerik's RadControls can help us deliver the broad user capabilities our applications require, at a fraction of the time and cost necessary to build out that functionality ourselves."

ABOUT DEXTERA

Based in Athens Greece, Dextera is an independent consulting firm that specializes in economic analysis for public and private sector clients. Dextera believes that business is not just about expertise and numbers and procedures: it is more about people. We are committed in developing a vivid network of professionals which will bring added value to our clients not only due to our profound expertise but also through our unique way of thinking beyond conventional barriers.

ABOUT RADCONTROLS FOR SILVERLIGHT BY TELERIK

RadControls for Silverlight is the industry-leading development suite of UI controls for creating engaging, interactive user experiences for Web and Desktop. With more than 65 controls, there's a control

for every need – whether the objective is powerful, responsive LOB applications or vivid, interactive UI. Coupled with industry leading 24-hour turnaround support and a world of resources including 300+ online demos, the RadControls for Silverlight represent the best Silverlight development experience and industry-best technical support.

ABOUT TELERIK

Telerik is the market-leading provider of end-to-end solutions for application development, automated software testing, agile project management, reporting, and content management across all major Microsoft development platforms. Telerik is trusted by more than 100,000 customers worldwide for its innovation and industry-best technical support.

FIND OUT MORE

Go to www.telerik.com

Call us +1-888-365-2779

Email sales@telerik.com

Copyright Telerik 2013. All rights reserved. RadControls for Silverlight is a trademark of Telerik AD. All other trademarks are properties of their respective owners. All information believed correct at time of printing.