



## Irish Public Sector Body Commits to Open Source BI with System Dynamics and Jaspersoft

### Abstract

In an austere climate, an Irish public sector body needed to replace an aging reporting tool with one that could cope with an increasing and constant business need for timely accurate data while at the same time dramatically reducing costs. System Dynamics had to prove to the body that Jaspersoft's JasperReports Server was an inexpensive, enterprise class solution that could compete with competitors not just technically but also in terms of support.

### Background

The Irish public sector faces a torrid time for the foreseeable future; with the public in general handling huge austerity measures, the public sector as a body must really make every cent count. One large Irish public sector body is looking to information technology as well as other measures to deliver a quality service while reducing costs and is seen to be at the forefront of IT strategy and thought leadership, not only in Ireland but worldwide.

### Challenge

In an environment where all public sector bodies must be seen to be transparent and accountable, the ability to provide timely, accurate data is vital to satisfy all stakeholders' need to know that the organisation is delivering to targets.

Back in 2009, the organisation's ability to provide this reporting was severely hampered by an incumbent, old reporting tool. The software was no longer supported and consequently troublesome to maintain. Each user's machine had to have a piece of the software physically installed on it and it could take up to 20 days to access specific information. There was no way to facilitate a quick turnaround of information, so much so that business users were finding other ways of getting the information required and avoiding using the tool at all costs. Duplication was also an issue in terms of the actual reports produced, there were hundreds of different reports for very similar requirements – there was no re-usability.

Aside from not being fit-for-purpose the organisation's existing reporting processes and architecture were at odds with its strategy. In 2009 this public sector body

### FAST FACTS

#### ORGANIZATION

Irish Public Sector body with System Dynamics Business Intelligence Team

#### INDUSTRY

Public Sector

#### SOLUTION

Data Warehouse developed on Ingres DB  
 Jaspersoft ETL for all data integration  
 JasperReports Server for BI Portal  
 Jaspersoft OLAP for Interactive OLAP Analysis  
 JasperReports Server Dashboards & iReport Designer for management information  
 SSO and AD integration  
 Resilient & Scalable Technical Architecture  
 BI Centre of Excellence

#### RESULTS

First full production open source business intelligence project undertaken by a public sector body in Ireland

introduced a strategy of implementing open source technology, where appropriate, to cut costs and create innovation. A bold move when traditionally public sector bodies are typically risk averse and prone to using proven proprietary software backed-up by Tier 1 software vendors.

## Options

The body decided that in order to dramatically cut costs, this usual route was not desirable for its new enterprise data warehouse and business intelligence (BI) solution. System Dynamics' Business Intelligence Team was selected to deliver the project because of its previous experience in enterprise BI programs with new BI technologies as well as its ongoing successful relationship with the client. System Dynamics, Ireland's largest indigenous IT business solutions company, has 10 years public sector experience and has developed a comprehensive understanding of the business of the public sector and the unique challenges it faces in information management.

Although an open source solution was the most desirable, quotes were sought from other competitors but licensing costs alone mitigated against using them. After evaluating a number of open source BI platforms System Dynamics decided on JasperReports Server because it would provide over 500 information consumers with up-to-date data and allow business users to become more self-sufficient.

## Solution

Convinced itself that Jaspersoft was the right partner to deliver the body's solution, System Dynamics still had to address its client's business concerns – open source was deemed ideal ideologically but could it cope in the real world? Specifically the body asked the questions:

- How does it compare to commercial BI tools?
- Will it work for us?
- Will it be accepted by the business users?
- Is the tool customisable?
- What are the functionality gaps?
- Is the tool user friendly?
- Will the solution scale?
- What support will we get?

To reassure the client, System Dynamics initially produced a feasibility report that fully identified the advantages and disadvantages of using open source BI generally and Jaspersoft software in particular. Once this had been digested and agreed in theory by the client System Dynamics then moved to a pilot stage where the software would be proved technically in practice.

*“By our calculations, this project will work out 67% cheaper over five years by using Jaspersoft rather than a proprietary solution. This is because of the low licence and support costs as well as its low service costs.”*

**Emmet Burke**  
Business Development Team  
Lead with System Dynamics

## CASE STUDY

System Dynamics along with the client selected one discrete business process to deliver an end-to-end solution using JasperReports Server to demonstrate the software's suitability. This pilot phase delivered an Ingres open source data warehouse, Jaspersoft ETL and JasperReports Server as the open source BI application server. This pilot proved that open source BI was a viable option and that the delivery of JasperReports Server was comparable to that of Tier 1 software options.

During this three month project System Dynamics provided an analysis of requirements, the technology solution design along with the relevant documentation and also provided a list of requirements for the body to develop an open source BI competency centre to enable them to deliver the technology throughout its organisation.

Further than this, System Dynamics had to prove that Jaspersoft as an organisation could offer the support that was equal to that of a Tier One Solution provider, for example. To demonstrate this, System Dynamics developed an issues list – modifications needed to the software to exactly fit the client needs – which Jaspersoft rapidly responded to with staff of appropriate seniority and experience. System Dynamics and Jaspersoft demonstrated that they could work together seamlessly as a team providing unrivalled support to ensure the solution met both business and technical requirements and delivered innovation.

The System Dynamics/Jaspersoft team delivered functionality that allowed users to create ad-hoc reports using a 'drag and drop' interface from within a JasperAnalysis OLAP view and also added functionality that allowed the tool to breakout from the cube and retrieve external data at the appropriate level in a hierarchy. The team also integrated Google Maps API and multi-channel consumption such as SOA, mobile and embedded BI without additional software cost.

## Results

It took just nine months to deliver this the first full production open source BI project undertaken by a public sector body in Ireland and has proved extremely beneficial since its launch in January 2010. The client has found that the solution can be extended and customised to meet all of its business requirements and it has not been constrained in its desire to employ the full functionality of the software by the need to use costly vendor consultants.

The organisation has used Java developers to tailor the software's functionality and has been delighted not only by their ability to make real progress quicker than comparable developers experienced in competitor products but also by their costs. Typically a Java developer's daily rate is lower than a proprietary software developer.

According to Emmet Burke, Business Development Team Lead with System Dynamics, "By our calculations, this project will work out 67% cheaper over five years by using Jaspersoft rather

than a proprietary solution. This is because of the low licence and support costs as well as its low service costs.”

The public sector body is now engaged in rolling out the Jaspersoft-based solution to all areas of its business and is delighted that its innovative stance of being the only Irish government department to fully embrace open source technology is paying off. The Public Sector’s ICT head said, “We have been very pleased with the deployment of the Jaspersoft software; not only does it dovetail with our open source strategy and so reduce costs but also it is satisfying our business stakeholder’s voracious need for right up-to-the-minute data delivered in a readily digestible manner.”

The project has also proved valuable to System Dynamics; “This was our first exposure to Jaspersoft and it was a pleasure to work with the product and the people. Jaspersoft is now a core System Dynamics offering and we have been delighted to provide technical consultancy and pre-sales support in several recent Jaspersoft projects,” said Emmet Burke.

## About Jaspersoft Corporation

Jaspersoft provides the most flexible, cost effective and widely deployed Business Intelligence suite in the world, enabling better decision making through highly interactive, web-based reports, dashboards and analysis. Leveraging a commercial open source business model, Jaspersoft provides end-to-end BI capabilities at a fraction of the cost of other vendors. The BI suite includes pixel-perfect enterprise reporting, ad hoc query, dashboards, OLAP and in-memory analysis, and data integration. Jaspersoft is the only BI vendor that enables companies to adapt to the new, virtualized world by providing a complete spectrum of on-premise, multi-tenant SaaS and cloud-based deployment options for both embedded and standalone business intelligence. Unlike traditional BI vendors, Jaspersoft is built on a modern, lightweight, standards-based architecture and offers greater vendor independence thanks to its open source codebase. Unlike niche BI vendors, Jaspersoft represents a safe choice with tens of thousands of production deployments across a wide range of industries.

Jaspersoft’s open source business intelligence software has more than 14 million product downloads worldwide, 165,000 production deployments and over 14,000 commercial customers in 100 countries. Its BI suite is advanced regularly by a development community of more than 200,000 registered members. For more information visit: <http://www.jaspersoft.com> and <http://www.jasperforge.org>.

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