

# Thomas International® integrates RealObjects PDFreactor®

#### **About Thomas International**

Thomas International provides people assessments which empower business leaders to transform the performance of their teams and individuals – and deliver an immediate impact on their organisation.

We help our clients recruit, retain, develop and manage their people. We'll give you insight into your staff – what motivates them, their core strengths and limitations, and their potential. And we'll add a high level of certainty to all your people-related decisions.

Thomas is different because our assessments are straightforward to understand and quick to use, with rapid results. Our client service teams will train you, advise you and provide practical assistance. Their aim is to empower you to use people assessments to create maximum value for your organisation.

From our inception in 1981, Thomas has grown to encompass more than just the business world. We are now present in business, education and sport, empowering staff, leaders, students and sporting professionals to achieve excellence.



## The challenge

Thomas products include many different types of custom reports which are dynamically generated from a large bank of text-based content and driven by personalised assessment data. These also include many specialised data visualisations. Reports are requested in real time by globally dispersed online end users, so they need to be generated and delivered speedily.

The existing report creation technology was old, inflexible and reports were very basic because more complex layouts were impossible to create. We needed a faster, more flexible and modern way to create reports. We also needed to support most global languages including RTL (right-to-left) languages. Data visualisations were also simplistic because it was not possible to exploit better technologies. One of the few good things about our old technology was that it is based on a low level PDF API so would render documents quickly.

#### The solution

HTML5 and CSS3 were chosen as the core technologies for creating reports since this allowed us to finally design and create sophisticated, modern report layouts safe in the knowledge that they would paginate correctly and have pixel perfect accuracy when printed. We could also now design very sophisticated data visualisations using SVG and Javascript to use in our online applications and know that they would also print perfectly when we re-used them inside reports.



We designed and built a new highly object oriented .NET based reporting engine that dynamically constructs and outputs the HTML5/CSS3 based documents and injects the SVG/Javsascript visualisations where required.

We now needed a third party product to convert these to PDF. We evaluated several vendor offerings and chose to go with PDFreactor.

### Why RealObjects PDFreactor®?

We chose PDFreactor for several reasons: It appeared the most modern and well architected; documentation was great; technical support was top notch and performance and throughput was good (at peak times we need to support real-time creation of up to several hundreds of reports per minute with a sub 2 second render time using 2 web servers).

Full multi-language and multi-culture support is also excellent. For example, by setting overall document direction to RTL most things worked out of the box with only a few minor workarounds needed. We have also managed to deliver reports in Farsi which previously, we had never been able to properly support.

We also discovered that PDFreactor could handle practically everything we threw at it including complex SVGs and Javascript based manipulations. Indeed although not officially supported, we discovered that many of our d3.js visualisations worked with some minor refactoring.

Our only slight concern was that it was a Java based technology that we are .NET shop. We don't need to worry as this is very easy to integrate and plays fine with .NET.

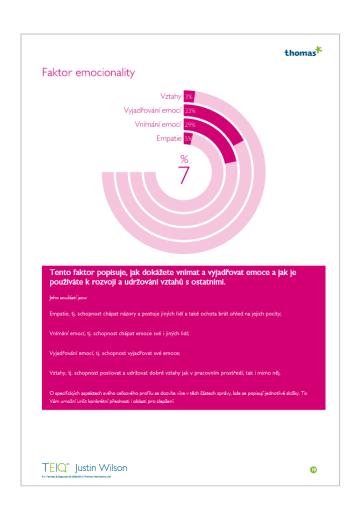
The PDFreactor preview tool also allows our report designers to prototype a new report very quickly and separately to our reporting engine. This has given us the unexpected bonus of creating a very streamlined work-flow for report origination, development and deployment.

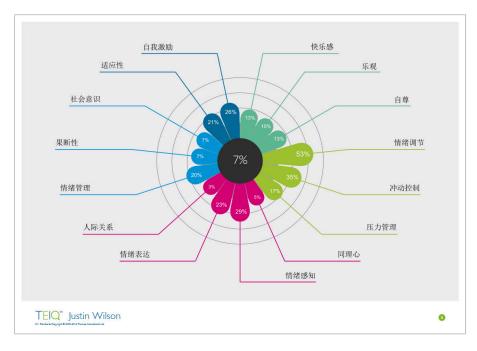
The RealObjects support team have always responded quickly and expertly to any issues we have had and on one occasion even rolled out a rapid PDFreactor patch release to fix a problem we had.



### **Example pages from new reports**









Quote from Lyndon Fitzgerald, Project Leader: "PDFreactor benefited our development team through its ease of use and powerful functionality. Practically anything we could conceive and create in HTML5, CSS3, SVG and Javascript would render flawlessly in PDF. Also the quality and speed of support from the team at RealObjects is very impressive"

For more information about RealObjects PDFreactor, please visit www.pdfreactor.com

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