Chapter 10
Practitioner Case Study: Practical Challenges in Portal Implementation Projects

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ABSTRACT

This interview-based case study describes current portal project practices based on a diverse set of projects, including B2B, B2C, B2E, E2E and mobile. Since 2000 portals have increased their functionality, and widespread availability of portal software has encouraged organisations to install and experiment with them. Portals are adding value by drawing applications together, particularly through search, and assembling existing tools for a user in a way that enhances their value. Operational challenges include support and security. Success has depended on beginning with support and security frameworks based on similar industry experience. Performance has been the key project success factor, and project sponsors are beginning to understand non-functional requirements: portability, scalability, availability, reliability and security. SOA principles are only partially applied, due to investment in existing systems. A recent trend is Microsoft SharePoint’s rapid market growth through ease of implementation.

INTRODUCTION

As the range of portal products grows, and initial technology challenges are understood, the focus of interest in portals starts to move to on-the-ground challenges faced by portal implementations. These challenges include identifying the success factors for projects, understanding the business drivers for portal projects, seeing what user behaviors benefit from portal functionality and which functions are of less value, and the practical limits in implementing Service Oriented Architecture through portal projects. This research examined these and related questions through the experiences of an industry practitioner in portal implementation, Daniel Brewer. He has worked with portal implementations in cross-industry, cross-vendor environments, and is interviewed by Dr Greg
Adamson, co-Editor-in-Chief of the *International Journal of Web Portals*.

**Question:** Can you describe the portal projects you have been involved in terms of industry, size, length of project, vendor product, whether it was for internal users or customers?

**Answer:** For the last five years I have worked on projects with WebSphere and Microsoft portal products in the telco [telecommunications], financial services, manufacturing, retail, and most recently defence industries. Each project has been at least 12 months. My role has been in designing solution architectures or troubleshooting failed projects. The failed projects were implementations that had been done poorly or where there was a mismatch of technical solution to business problem, mainly due to methodological rather than technical problems.

The portals I have worked on would be an equal mix of B2B [business-to-business], B2C [business-to-consumer], B2E [business-to-employee] and E2E [employee-to-employee]. Half of the projects are just one of these, for example a mobile one that was B2C for a subscription audience. The retailer was for an internal audience. The Australian Federal Government portal that I designed was B2B for procurement audiences from one person right up to large construction companies. The most interesting projects have had a combination, such as B2E for fulfillment and then B2B out into the market. They involved publicly exposed portals that needed to be secured, and portals interfacing to business partners for supply chain for procurement, or for whatever the transaction might be.

I have done one mobile portal project using a BEA [www.bea.com] solution with Mobile Aware [www.mobileaware.com], a composite package that rendered portal content over any mobile handset. That was done for a major Australian telco, primarily to stream movies on a subscription basis. The systems integrator I was working with specialises in telecommunications-based infrastructure. They recently created a multimedia division to leverage their customer base, which was turning to content-based services. That portal was a composite of about 20 different products, primarily Documentum [www.documentum.com], which supplied the content, BEA, as the mobile framework, and Mobile Aware, the specialist product which ran this content through various handset technologies. That is a successful commercial service.

**For these projects, why did the customer choose to use a portal rather than other existing technologies?**

That question is answered by two transitions in the market place over the last seven years. In the dot-com crash, we had what could be called Web 1.0. The business view was “we have to be in the Internet, although we don’t understand the business reasons,” even though there were some solid business examples and businesses that are still around today. By 2006-07 people were talking about Web 2.0, and businesses realised that transactions and security were not such a big threat on the Internet. They began to see it as a viable medium.

Portal technology that developed in 2001 to 2002 represented a thin framework, pulling applications together and offering a common skin or common single sign on methodology. This was a step forward from having multiple web applications engineered to look the same, in a non-portal framework with different log-ins for each application. Now we are seeing portals swallowing up other areas of technology such as content management and document and records management. They are also leveraging underpinning applications such as security and authentication. Portals, particularly with Microsoft [www.microsoft.com] and IBM [www.ibm.com], are combining the web browser and collaboration, backed up by line-of-business applications into a