

Chapter 2.3

Creating Successful Portals with a Design Framework

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ABSTRACT

Portal designers and managers face the difficulties of creating effective information architectures for portals, dashboards, and tile-based platforms for delivering business information and functionality using only flat portlets. This article introduces the idea of a system of standardized building blocks that can simplify portal design and management, and effectively support growth in content, functionality, and users over time. In enterprise and other large scale social settings, using standardized components allows for the creation of a library of tiles that can be shared across communities of users. It then outlines the design principles underlying the building block system, and the simple guidelines for combining blocks together to create any type of tile-based environment.

THE CHALLENGE OF INTEGRATION

All portals integrate a variety of content and functionality. Integration lowers the acquisition costs of finding items from multiple sources and increases the value of the individual tool or content assets by grouping them together to help decision-making and understanding. But integration also emphasizes the differing – and sometimes conflicting – origins of this content, highlighting the differences in the contexts, forms, and behaviors of often confusing portal offerings. The challenge is creating an effective user experience unifying these variations within a cohesive whole, while preserving the meaning and identity of individual assets. These challenges exist in all stages of the portal lifecycle, from defining the initial user experience, to sustaining the viability of the portal's information architecture over time. Establishing

sound information architecture capable of providing a consistent structure for growth and evolution for portals is particularly challenging.

Portlets: MIA (Missing Information Architecture)

The portal paradigm, collections of individual portlets in a single environment is so far, the most useful and familiar approach to these user experience challenges. I call it the ‘box of chocolates’ school, because it packages a large number of different elements, while keeping each piece in its own compartment. The portal paradigm has two great strengths. First, it is a simple design approach, easily understood by users, business sponsors, and development teams. Second, it addresses many of the user experience design challenges associated with portals. It does this by breaking large collections of widely varying content into a series of well-defined and self-contained units. These units then become individual information design and interaction design problems that can be solved one at a time, independently. It’s a classic divide and conquer strategy that is successful because it is simple and effective.

From the perspective of information architecture, however, depending on compartmentalization and self-containment is not a complete solution. Separating items this way helps manage some of the user experience complexity in the short term, but over the long term, it results in two significant weaknesses.

First, self-contained portlets cannot easily be combined to address the need for communication larger and more flexible than a single chunk of information. Portlets are a one-size-fits-all solution to the many-sizes-at-the-same-time problem of aggregated content.

Second, portlets are inherently flat, or two-dimensional. Flat portlets alone cannot provide a scalable, adaptable framework for growth and change within a consistent information architecture. Two-dimensional portlets will work when

information architecture is not a challenge, i.e. when a dashboard shows a small set of critical KPIs or functions to a select audience on a single page or screen. But as the amount of content and functionality (hereafter content) grows (the case with many successful enterprise portals and executive dashboards), the number of portlets increases. As word of the usefulness of the Portal spreads, new audiences and users with differing information needs will join the early adopters challenging the single view of the portal’s range of content offerings.

Portal teams stand to face issues of poorly integrated or conflicting content, reduced usability, navigability, and findability, and a drop in user experience quality. Portlets can only sprawl horizontally to deal with unmanaged growth. Though convenient in the short term, flat portlets lack the capability to provide useful and adaptable structure in the long term. Such horizontal sprawl is similar to the real world example of unmanaged residential growth around major cities; a pattern resulting in urban sprawl, traffic congestion, social isolation, and high ecological impact combined with low energy efficiency.

ESCAPING FLATLAND

After encountering these weaknesses in a number of dashboards, I’ve developed a simple set of information architecture building blocks introducing depth and structure to flat portals (Lamantia, 2006). These building blocks allow for the rapid creation of larger units of content from smaller chunks of information, and support the goal of easily managed portal architectures. The building blocks offer design teams modular information architecture components designed for assembly into larger combinations that scale effectively, and respond to change. In the same way that you can create a unique but cost-effective kitchen from a standard components such as cabinets, islands, fittings, and appliances, it is possible to

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