



# Modernizing a Portal Critical to Operations

## DESIGNING AND DEVELOPING A SHAREPOINT 2013 SOLUTION FOR A GROWING POWER COMPANY

"Magenic both truly exceeded my expectations and are true professionals with the best SharePoint expertise I have ever come across." – Client Senior Director of IT.

### Challenge

A growing company within the Power Industry had an existing SharePoint 2010 installation that was critical to internal document management, employee collaboration, and surfacing of custom applications. The existing portal had a number of issues: 1) search did not work properly, 2) the look and feel made the site hard to use, 3) navigation was not intuitive, 4) the site did not work on tablets, and 5) adoption was low. The client required a redesign of the platform to fix all of these pain points. The client didn't have SharePoint expertise on staff, so Magenic was brought in to work with business and IT stakeholders to envision the new portal and bring it to fruition.

### Solution

The solution was broken down into four phases: analysis, envisioning, build, and delivery.

### Analysis Phase

During the analysis phase, custom scripts and industry accepted 3rd party software were run against the 2010 farm. The data collected from these tools was used to drive the technical requirements gathering for the SharePoint 2013 farm (i.e. authentication, zones, required features, required licensing, etc.).

### Envisioning Phase

The envisioning phase began with a deep dive into the information architecture—establishing the new navigation hierarchy throughout the portal, and documenting it via visual sitemap and content catalog. From there, Magenic Studios began the design phase with interactive wireframes and high fidelity UI mockups. Each iteration of wireframes and UI design was reviewed with the team to capture next steps and compile revisions until the final vision was complete.

### Build Phase

The build phase started by standing up and configuring the development and production SharePoint farms. That was followed by writing more than a dozen custom solutions—each set of requirements initially interrogated by the Magenic team to determine if an OOTB solution would be adequate. Typically an OOTB solution was not sufficient, and further interrogation was performed to determine whether to use a no-code sandbox solution or a farm-deployed, fulltrust solution. The Magenic team worked closely together to build highly usable, custom applications that satisfied the business' needs. Once deployed, Magenic worked closely with a subset of the client's users on quality assurance and user acceptance testing.

### Delivery Phase

The delivery phase was driven by a detailed plan to go live. There were many moving parts, and it was crucial to the success of the project that these steps be done without error and in the proper order. This journey started by building out the production farm's site collections, content databases, sites, taxonomy, lists, and libraries. This was done using a series of PowerShell scripts that had been hardened in the development environment. Once the sites and lists existed, Magenic was able to deploy and integrate all custom solutions and stylings. One of the big challenges was to successfully migrate content and security from the existing SharePoint 2010 environment. The first step of migration was to migrate all permissions on a site by site basis. Once this was complete, only the content was migrated (i.e. not web applications, site collections, and sites). This was done to provide a very clean migration, as migrating entire site collections typically results in bringing over lots of unnecessary junk that will inevitably destabilize the new environment. The final step was to perform an incremental migration just prior to going live. This ensured that all changes made to content since the initial migration were brought over to the new farm. Once the migration was complete, a series of manual and scripted final configurations were applied to the new farm and the new SharePoint 2013 custom-built portal went live.

### Results

The result was a stable SharePoint 2013 portal that boasted: an attractive UI, responsive structure that worked on an array of devices, search feature like Amazon.com, and custom solutions to facilitate streamlined business processes. In the initial days of going live, Magenic monitored server performance and was available on site to end users and IT staff alike. Finally, Magenic conducted a series of training sessions for IT showing the client's staff how to administer the SharePoint 2013 farm, how to update and redeploy custom code, and how to troubleshoot any issues that may arise.

### SharePoint Challenges

- Custom code written for SharePoint 2010 had to work in SharePoint 2013
- Make search work like Amazon and Google
- Provide a custom design to SharePoint to match the organization's brand
- Provide responsive design to allow SharePoint to display properly on an array of screen sizes, devices, and browsers
- There were no SharePoint technologists on the client's staff, making Magenic responsible for all aspects of the redesign (Farm sizing, SharePoint installation and configuration, licensing, upgrading 3rd party components to SharePoint 2013, custom design and development, QA, project management, migration planning and execution, and stabilizing the live environment)
- The migration of 200+ GB of content had to work the first time; no excuses. There were no do overs

### Summary

The client had an existing SharePoint 2010 portal that did not fit the business' needs. Search did not work, the site was not usable on tablets, usability and branding needed improvements, and a custom solution was required. Magenic was able to implement all of the business needs and [deliver a custom](#) SharePoint 2013 portal on time and within budget—leaving a very happy client.

### Technology Used

- SharePoint 2013
- ASP.NET
- JavaScript
- JQuery
- CSS
- C#
- TFS
- AvePoint DocAve SharePoint Migrator
- SPDocKit