

SharePoint Online Migrations Helps Automate Business Processes and Facilitate Collaboration

Customer: A Swiss firm specializing in reciprocating compressors.

Size: 1001-5000 employees

Region: Zurich, Switzerland

Industry: Manufacturing

Profile: A worldwide market leader for reciprocating compressor systems and the only manufacturer and service provider that covers a full range of reciprocating compressor technologies and services

Services: Microsoft Office 365/SharePoint Online, Microsoft Azure

Business Need

The manufacturer provides leading technology and a broad portfolio of compressor components. Their full range of services helps customers find the optimized solution for reciprocating compressor systems, used in upstream oil and gas, refinery, chemical, industrial gas sectors, to minimize lifecycle costs, worldwide.

The manufacturer used SharePoint on-premises to manage multiple documents like quotes, cases, compressor details, visit reports, CRM emails, and notes. The SharePoint portal was integrated with Dynamics CRM, where any account created in CRM gets automatically updated in SharePoint. Various users located in USA, China, India, Switzerland and other European countries managed all their documents on the SharePoint portal. Gradually, the number of users reached over 10,000. As a result, the older version of SharePoint architecture became too clumsy and unpleasing in terms of performance, usability, and accessibility.

With the continuous increase in users and their data, the SharePoint portal that supported collaboration, file upload, task tracking, and content management, was becoming inefficient which caused it to run sluggishly and potentially fail more frequently. This led to higher cost and overall productivity issues.

In order to get an enterprise scalable solution to address the challenges faced by their end users, the

manufacturer approached Synoptek (formerly Indusa), since we've provided expert-level SharePoint administration services to the client in the past.

Solution and Approach

Initially, Synoptek studied the manufacturer's existing SharePoint architecture/farm and understood their requirements. Considering their pain areas and needs we planned to migrate their SharePoint on-premises portal to the cloud version i.e. SharePoint Online.

Starting with the pre-migration phase, we designed and developed the migration plan considering the governance information architecture as a reference. We also researched for some third-party migration tools for a secured and swift migration. However, since no such tool provided support for migration, Synoptek chose to design a migration tool. The tool was developed by applying 40+ customization rules using SCOM (System Centre Operations Manager), Client Side Object Model (CSOM), and PowerShell scripting. The tool helped us:

- Easily automate the process of consolidating 2TB of data to SharePoint Online.
- Granularly migrate the content down to individual SharePoint items in real-time, or through dynamic scheduling.
- Retain all associated metadata and permissions throughout the migration process.

Migration Process

The major challenge for Synoptek was to migrate a huge amount of data from the on-premises version to the cloud. The manufacturer was already using Symantec Vault, an enterprise application archive tool, for archiving huge number of files and documents to SharePoint Online.

Synoptek performed the following in the migration process: 1) Migration of archived documents from Symantec Vault to SharePoint Online, and 2) Incremental migration that migrates the added, modified, and/or failed data to the destination based on time.

Additional Customizations

Apart from migration, Synoptek also performed a few customizations on the new SharePoint Online Portal:

- We redesigned the UI of SharePoint Online considering the best practices and the actual branding of the manufacturer. To get a better understanding of their needs, we performed detailed research and analysis during the initial phase of the project to understand the manufacturer's business goals and end user challenges while using the existing on-premises version.
- We enhanced the search functionality, where users can easily search for required files/documents across multiple sites. We also enabled proper filtration of information based on the configured criteria, making the search capability more appropriate.
- We designed standard templates for files and documents that are uploaded on SharePoint Online.
- Moreover, we developed a functionality called 'Copy Tool' where the user can create a copy of the master template of files/documents and can use for his own purpose. This will not affect or make any changes in the original template.

Tools and Technologies:

The migration process was planned, piloted, and coordinated using the following components:

- SSOM
- CSOM

- PowerShell Script
- Microsoft SQL
- Windows application C#

We used PnP (Practices and Patterns) tool for performing complex provisioning related to site collection and site branding and later created similar sites. This reduced complexity and long term operational costs. In addition, the use of HTML 5, CSS 3.0, JavaScript, JS Framework, and REST APIs offered a better UI/ UX for SharePoint Online.

Dynamics CRM Online Integration

With CRM integration, the user encapsulates the document management capabilities of SharePoint from CRM. The documents can be stored and managed in the context of Dynamics CRM (now Dynamics 365 Customer Engagement) record on a SharePoint Server and leverage the SharePoint infrastructure to share, manage, and collaborate efficiently. Because the documents are stored on the SharePoint Server, the users can directly access the data with appropriate permissions. This integration of SharePoint with CRM helped to leverage the capabilities of advanced search functionality through the CRM document library as well.

All the user rights and permissions were retained during the migration and integration processes. For this we designed a user permission matrix that defines the permission rules based on the user type and his location. This matrix was designed considering the overall security of both SharePoint and Dynamics CRM systems.

Business Results

The migration to the Online version gives immediate access to an enhanced UI, better document collaboration and cutting-edge search and mobile responsive displays.

SharePoint Online has also reduced administrative costs related to ongoing maintenance by cutting down the cost of maintaining patches, repairing hardware, and security options.

With the migration of 2TB data and files to SharePoint Online, it became a go-to tool for both high volume

migrations and day-to-day content management. This enables business continuity on the new platform by migrating all data with full reliability, including version history and all associated metadata. That allows for minimal interruption of end-user productivity.

Functionality and performance related issues were successfully addressed as they came up. This has resulted in high uptime of the system and reduced the resolution timescale. With the improved user experiences, compliance and reporting functionalities, migrating SharePoint on-premises to SharePoint

Online proved out to be smart and logical business move.

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About Synoptek

Synoptek is a Global Systems Integrator and Managed IT Services Provider offering Comprehensive IT Management and Consultancy Services to organizations worldwide. Our focus is to provide maximum "business value" to our clients enabling them to grow their businesses, manage their risk/compliance, and increase their competitive position by delivering improved business results.