Onboard network participants at any scale fast and frictionless.

Case Study

CLIENT PROFILE

Industry: Chemical
Company: The DOW Company
Employees: 98,000
Elemica Solution: Digital Supply Network for Mergers & Acquisitions

BUSINESS BACKGROUND

The Dow Chemical Company (Dow) combines science and technology knowledge to develop premier materials science solutions. Dow’s industry-leading portfolio of advanced materials, industrial intermediates, and plastics businesses deliver a broad range of differentiated technology-based products and solutions for customers in high-growth markets.

CHALLENGE

The combined organization of Dow and Dupont needed to be highly focused on creating and developing three growth businesses from a complementary portfolio in areas of Agriculture, Materials Science, and Specialty Products.

A unique challenge to the integration was to execute on digitizing the supply chain and leverage overall flexibility and portability of software. Dow had adopted a tenant strategy to foster their ability to nimbly execute M&A that began in the early 2000s. Despite the capability of Dow’s systems, they still sought a way to gain more flexibility outside of their system. Enter Elemica into the picture.

“How this works in practice is Elemica provides Dow a lot of flexibility”

– Larry Weiner, IS Architect,
  The Dow Chemical Company

SOLUTION

Dow created logical and sometimes physical separations in their systems to house other company’s operations. Often, Dow leverages common applications and codebases for many partners but maintain back end separation. This enables their M&A department to manage partners quickly at a relatively low cost. This gave rise to Dow Corning, Dow AgroSciences, Union Carbide, Rohm and Haas and DuPont.

Despite the capabilities of Dow’s systems and constant focus on M&A, Dow still needed a way to gain flexibility and system portability. Through the Elemica network, Dow leverages the network effect of connected partners.Elemica acts as an abstraction layer allowing for dynamic routing to logically and physically separate systems, by
housing the cross-reference tables externally Dow easily manages different sets of master data. Through standardized programming modules they transform messages creating additional system portability allowing for adapting to different ERP and partner requirements.

Elemica helps to extend our multi-tenant design for business messaging by already connecting to chemical and logistical partners that are common in the industry. DUNS Numbers by Dun and Bradstreet are used for routing business messages and providing portability for messaging.

**BENEFIT**

Through the merger and intended separations, The Dow Chemical company is enabling these three business entities to allocate capital more effectively, apply powerful innovation capabilities that are more focused, productive and expand value-added products and solutions to more customers worldwide.

In the last 20 years one of Dow Chemical’s primary growth strategies has been through Joint Ventures/Partnerships, Acquisition and Mergers. Dow Corning, Dow AgroSciences, Union Carbide, Rohm and Haas and DuPont were some of the larger companies that punctuated this strategy. Dow through their multi-tenant architecture has extended their core ERP systems and the Elemica Digital Supply Network to allow other businesses to run on their infrastructure.

There are many ways to segregate data using a multi-tenant solution, depending on the business need. Instance Replication, for systems like SAP’s business warehouse where data isn’t easily segregated into role-based security or when the customer requirements need physical segregation has been used by Dow for some of their Joint Ventures and other partners, where the partners have or may want to eventually move their systems to their own data center.

Other deployments capitalized are leveraging common applications for many partners where the backend databases are either logically or physically separated. An example of this approach is using a multi-schema database for an ERP system that contains multiple clients. This logical separation is very common in the industry.

Finally, an alternative approach leverages common applications while the separation at the database layer is physical allowing for better security and easier portability.

**LESSONS LEARNED**

Nimble IT processes enable business strategy.

During a divestiture we are looking to maximize value for our shareholders by selling a large business to a smaller company that can afford the deal but lack the IT resources to close in a timely manner. Another example where having this environment has benefited Dow is allowing us to create tenants for Joint Ventures quickly where we want to take advantage of different work processes, partners, and master data.

The Dow Chemical Company remains focused on capitalizing on the synergies, and the significant growth opportunities in front of them. They look forward to positioning and launching three growth companies that will deliver long-term rewards for their shareholders while using the Elemica Digital Supply Network.