Mundipharma

An international network of pharmaceutical companies found their efficiency efforts hindered by dirty data. The supply chain team needed better data to improve their efficiency while the finance team wanted a view of products and regulatory entities across markets to ensure compliance.

Mundipharma chose Semarchy for a powerful MDM solution with the flexibility to provide enterprise-wide benefits.

Mundipharma is a unique player in the international pharmaceutical industry. The business operates as a network of over 60 independent associated companies across the world, and these companies work together to develop, manufacture, and sell pharmaceutical ingredients and end-products. While each entity is managed independently, the network shares IT and research capabilities, production facilities, and other core business functions.

This network structure gives Mundipharma flexibility and allows them to react quickly to changes in the marketplace. But it also presents challenges as the company must coordinate data across all its member organizations. Cliff Gibson is the primary Enterprise Architect with Mundipharma IT Services in Cambridge, UK, and he talks about a recent effort to address these issues.

Manual Matching and Merging

"We have a lot of information that moves between the network of companies," Gibson says, "and this was really the root of our challenge." In 2014, the manufacturing and supply chain teams within Mundipharma began an initiative to trace and improve the efficiency of products as they progressed through the supply chain.

"During that journey," Gibson explains, "a product can pass through ten different systems managed by different companies in different parts of the world. So there was no unique product SKU, there was no governance in place to decide how to name a product in these systems, and we would end up with data that didn't match." For example, Gibson says that the "form" attribute for a drug could be described as "tablet" in one system, "tablets" in another, and "tabs" in a third.

This type of variation was present even in the names of the drugs themselves, so the organization realized that to track and improve supply chain efficiency, they would need a consistent global view of each product.

"The supply chain team first tried to manually join these systems using the power of Excel," Gibson says with a smile. "It's fair to say that after three months they realized this wasn't the best way. They managed to gather the data, but it wasn't really a repeatable process. After their initial effort they came to the IT group and asked if we could help them find a better solution."

An Enterprise-Grade MDM Capability

As the Enterprise Architect, Gibson quickly recognized an opportunity to deploy a true Master Data Management (MDM) solution. "I had done a bit of research in the market," he says, "and I knew the problems we were looking to solve were classic MDM issues." As he began investigating solutions, he had a clear picture of what he was looking for.

"We wanted something that was technologically quite modern," Gibson says, "and this ruled out some of the more well-known platforms. We obviously looked at the likes of SAP, Informatica, and Oracle, I didn't feel they fit the brief that we had set out. I was also looking for a platform that we could stand up quite quickly, and something that supported the agile development methodologies that we try and use in-house."

"Semarchy came to my attention," Gibson says, "and during our initial conversations with them we explained the problem. The Semarchy team was very confident they could help us, and they thought they could provide tangible results on our product data within one week." Gibson thought the claim was a bold one, so he asked them to prove it.

"We set up a Proof of Value and we gave them a single product range that had data coming from six different sources. Within a week they managed to achieve what we struggled to do in three months, and they provided a lot more added value on top. They had cleansed and standardized the data, but then they also started to look at data profiling and data quality issues that were difficult to uncover using Excel."

Gibson says the Proof of Value accomplished two main things. "Well first," he says, "it obviously proved the capabilities of Semarchy in quite a dramatic fashion. But more importantly at the time, it proved the concept and the value of MDM for the organization. For some business users this was completely new, and the POV helped us demonstrate the value to the project board. We were able to show them the results, and they could see straightaway what we were trying to achieve."

"Semarchy had demonstrated their ability to address our issues," Gibson says, "but since this was a big investment in a long-term strategic platform, we wanted to make sure we did our due diligence when making our final platform selection." In early 2015, Mundipharma sent a Request for Proposal to five different vendors. Their final shortlist included Informatica, Information Builders, Talend, Orchestra Networks, and Semarchy.

Gibson says they chose Semarchy from the RFP for a number of reasons. "One of the biggest distinguishing factors," he says, "was the data integration capability. Because of the nature of our organization, we have a lot of different systems. We have Salesforce.com, we have SAP, and we have Oracle. We have

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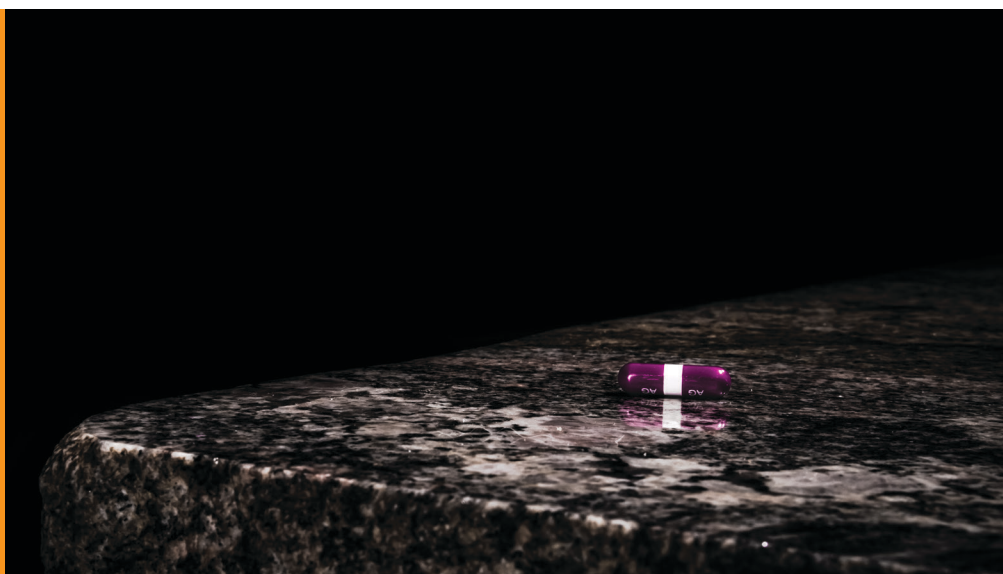
JD Edwards lots of SQL databases, and REST APIs. So the data integration layer was very key, and Semarchy was able to handle all of these integrations with ease."

"Rapid deployment was another important factor in Semarchy's favour," Gibson continues. "Some of the other vendors were coming to us with a complex technical implementation with multiple components that we would need to deploy on many different servers. Semarchy had a very simple and clean implementation, and we also liked how intuitive the interface itself was."

Mundipharma began working on their Semarchy deployment in July 2015 with more focused discovery pilots running in Supply Chain during the third quarter and Research in the final quarter of 2015. They used the UK service provider Entity as an implementation partner under Gibson's direction.

"We were able to realize the value of Semarchy's agile approach right away," Gibson says. "Semarchy is a system that allows you to sit down and basically make changes on the fly. We would spend a day modelling on a whiteboard, and by the end of the second day we would be able to see some of that work and get data in the system. On day three we would revisit the modelling, and we could quickly go through that iterative process. It fit our development model very well. You're not writing a specification, sending it away, and then seeing the result three months later."

Benefits Across the Organization

The initial build and deployment of Semarchy for Mundipharma's product data is now complete. "The supply chain team is using our cleansed reference data from Mundipharma Research to manage their products and support tracking whilst improving efficiency," Gibson says, "so we have achieved one of our initial goals. We've started to drive consistency in our data, and reduced the error rate in the transactions between systems, and we've now given the company a single place to reference products between the different systems."

Business stakeholders including the marketing and finance departments are also now able to see a holistic view of all the products and their

interactions across markets, pricing tiers, and regulatory entities. "Before we implemented Semarchy," he says, "they weren't able to answer questions where data resided in different systems. Now this type of analysis is possible because they can accurately join and roll up the data." He says even the logistics team has seen benefits. "Consistent data means they can see accurate daily stock quantities by country, and this means they are able to do more accurate planning and forecasting."

Another major benefit of the Semarchy MDM implementation is an increased ability to respond to regulatory requirements. "When we started our project," Gibson explains, "we were just beginning to respond to new legislation from the European Medicines Agency called 'Identification of Medicinal Products' (IDMP). This is something that is now written into European law, and every pharmaceutical organization will need to submit a set of data about their products to the European Medicines Agency."

"Previously, most of the data that is needed for IDMP compliance was in different systems or managed in various Word documents," Gibson says. "Now we have this need to send that data to the EMA in a very structured format and the MDM platform is the tool we'll be using. We didn't expect this when the project began, but Semarchy has been a crucial tool to help us maintain compliance with these new regulations and adapt quickly to the changing requirements as they are published without impacting operational systems."

A third benefit Gibson highlights is an improved reporting capability across Mundipharma's research organization. "We've struggled in the past to accurately join clinical trial data with research projects and products without manual intervention," he explains. "Again, these are areas that have been managed in different parts of the business and with different systems. The reporting mechanism across those systems used to be a manual process, but now we have data governance in place and we can completely auto-

mate the reporting. This saves us several days per month, and it has practically eliminated manual rework of our reports."

Gibson emphasizes the relative ease of working with Semarchy. "We've done this entire project with only myself as an internal resource alongside business experts," he says. "I've done most of the design and concept work, and we've had just a couple technical resources from Entity over the course of nine months. So the project team has been very small, and we've still managed to accomplish what a lot of larger projects with bigger budgets could not achieve."

"Through it all, Semarchy has been excellent," Gibson concludes. "They've been very positive, and very quick to react and make changes. I think they quite enjoy being disruptive in the market, and I must say that they certainly are. They are extremely passionate about what they're doing."