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Customer: A leading multinational health, home, post-natal and hygiene products company with global manufacturing, distribution and fulfillment operations. Efficient and consistent order entry and fulfillment is a key business capability and success factor.

Challenge:

Complex order management processes spanning over a large number of order channels, source applications and ERP's in multiple countries. Over time, the customer's IT and vendor teams developed a large number of country and channel specific point to point integrations. The resulting tight coupling and redundant management overhead, led to an increase in operating costs causing difficulties when onboarding new channels and distributors. In addition, both governance and operational efficiency were limited. As the number of channels and fulfillment options grew, the problem became more and more evident.

Additionally, the customer operated many markets on JDE World – IBM i (AS/400) ERP. With no out of the box order entry and status capture plug-in available, each system is heavily customized for each country.

Solution:

Infoview Systems professional services team developed a unified global order integration solution based on the Mulesoft *Anypoint Platform*. The new solution decouples channel applications from order fulfillment systems. It maximizes reuse and self-service, while accelerating the time of both market and channel onboarding.

The integration design followed an API-led connectivity approach. Distinct API layers were developed for front-end channels, orchestration flows and target system specific components. This separation helped achieve a much higher level of reusability. Already established channels and fulfillment systems for new markets and distributors were quickly adopted without *"reinventing the wheel"*. The resulting APIs were then published to the Mulesoft *Anypoint Exchange*, where the customer's endpoint IT teams can discover and use them to implement new order process flows in a self-service mode.

Infoview Systems team leveraged a unique blend of our Mulesoft expertise, IBM I (AS400), Web Transaction Framework and AS400 connector for Mulesoft to rapidly develop fit-for-purpose integration assets for JDE World ERP. For the inbound order flows, Infoview Systems development team adopted and expanded the JDE EDI import process to preserve the already developed country specific business rules. This enabled real time order enrichment, validation and posting capabilities. For the order status updates and outbound data flows, the team built an IBM i (AS400) journal based change data capture component. The new component streams order status changes to Mulesoft components in near real time.



Results: The multitude of ad-hoc point to point integrations were replaced with a unified, flexible and secure global order integration solution. The onboarding of new channels is now only taking weeks. Enabling new markets within those existing channels can be achieved in days. The Process API layer exposes common channel and endpoint capabilities, as well as data models in a system-agnostic formats. This hides the complexity of integrating with JDE and other order fulfillment systems. The solution can easily be extended to support new channel or market specific requirements without the need to rebuild the entire integration.

IBM i (AS400) integration components support most market specific JDE customizations and enable near real time event based integrations at a fraction of the cost of established CDC tools.

Conclusions: The professional services team at Infoview Systems were the ideal candidates for this challenging project. A unique combination of integration architecture partnered with their Mulesoft and IBM i (AS400) expertise, resulted in faster delivery and lower project costs. Mulesoft's *Anypoint Platform*, combined with Infoview Systems *AS400 Connector* for Mulesoft and *Web Transaction Framework*, was the ideal technology stack that streamlined the integration asset delivery cycle from the design, to operations, all the way to adoption by the endpoint teams.