SDI Point of View

Game-changing Integration Shortens the Distance Between Promise and Performance

The Maintenance, Repair and Operations (MRO) business process – the demand and supply chain of parts, materials, equipment and consumables necessary to keep plants and facilities operating safely and productively – is historically underfunded and typically mismanaged. Far too many companies believe that MRO is a necessary evil and a cost of doing business.

The good news is that perceptions are beginning to change.

More and more business leaders in procurement and maintenance are making the connection between quality MRO processes and production reliability. At SDI, we live and breathe MRO, but the cold hard reality is that MRO isn't viewed as important when compared to direct spend. As a result, many companies do not place great value on automating MRO and instead redirect their limited IT resources to "higher value" business initiatives.

As we, and other industry leaders, work hard to change MRO perceptions and practices - we also have to be practical and deal with current realities. The reality is that manufacturers' IT organizations are under-staffed and over-worked. They have more potential initiatives on their project list than they can realistically complete. If and when we change procurement and maintenance leaders' perception of MRO, we still face the daunting obstacle of motivating the IT organization into action.

Our response to overcoming this daunting obstacle is to deliver a compelling, can't-miss promise to seamlessly integrate disparate systems, provide reliable and transparent end-to-end data, reduce manual interventions and workarounds, and facilitate better resource conversations between procurement, maintenance, planning and production. In addition, we condense the timeframe of SAP integrations from an average of 9 months to 1 month - with minimal involvement of the client's already stressed and stretched IT organization. A can't miss value proposition…right?

Not exactly. Here's the new perception gap that we need to work on closing. IT organizations have heard these promises before and have become conditioned not to believe the claims of fast, low-cost, integrations with little IT involvement. The engrained IT perception, especially when it comes to SAP integrations, is

that the process will be slow, difficult and expensive due to custom coding – that it will require a great deal of support from corporate IT.   Most IT leaders are very suspicious of integrator claims. This leads to delayed decisions or no decision, and since MRO is viewed as cost of doing business, the promise of a fully integrated MRO process to support the reliability goals of the organization gets buried deep on the list of IT priorities.

We have to change the context of MRO to change perceptions of MRO. MRO isn't just about piece price or the cost of parts. MRO is a key element of production reliability and uptime management. Through our 45 years of client work, market intelligence and industry benchmark studies, we have found that maintenance represents from 15 to 40% of the total product cost (source Vesta Partners) and 40-60% of overall maintenance cost is MRO related (SDI).

Supporting Insights from IHS Research and Aberdeen Research

- 4.7% unscheduled asset downtime for best-in-class vs. 16.2% for laggards
- 11% decrease year-over-year maintenance cost for best-in-class vs. 5% increase for laggards
- 50% of work order cannot be completed because of

technicians are waiting on parts
- 55% of MRO inventory has not moved in 3 years and 30% of MRO inventory will never be used
- 62% of stock order points are wrong
- 87% of order quantities are not accurate
- 97% of lead times are incorrect
- 86% of storeroom attendants have had no formal training in inventory management

They don't call them Game Changers because processes are widely accepted and outcome expectations are low. Game Changers always begin with a good amount of skepticism, a great amount of pain, and an overwhelming drive to make things better.

Case Example of Skepticism, Pain and Drive to Improve

As a global manufacturer of the nylon, plastics, and synthetic fibers that are found in thousands of different commercial and industrial products, Ascend Performance Materials touches everything from carpeting to tires, apparel to agricultural products, and animal feed to personal care products.

Intent on always being a "reliable supplier" for its global customer base, Ascend completed an internal assessment of its indirect supply chain needs in 2009

and realized that it required a better way not only to manage its maintenance, repair, and operations (MRO) procurement and the costs associated with it, but also to align its MRO supply chain with its overall production reliability strategy. Not an easy task. Ascend's manufacturing sites are vast and complex. Most plants are 1000+ acre petrochemical sites where consistency and control - especially in health, safety and environment - are critical.

Procurement led the strategic MRO initiative to reduce costs, optimize inventory, and improve reliability. The team had early success, but quickly realized that their ability to sustain process improvements, deliver on-going cost savings and leverage spend across the enterprise would be limited without integrating systems, improving data integrity, and reducing the number of manual interventions. To deliver on the original goal, Ascend had to fully integrate into SDI's MRO Platform, ZEUS (formerly called SDiExchange).

Sheree Fields, Sr. IT Director of Enterprise Applications, joined Ascend in 2011. By the time Sheree joined the organization the integration was well underway. Entering into the process, she defined herself as a skeptical leader of the initiative.

She had many concerns including:

- Is Ascend comfortable allowing a vendor to manage its procurement?

- How will Ascend maintain control while shifting MRO process ownership and data management via the cloud?

- What impact will the integration have on the IT and maintenance organizations?

- What is the expected time to additional value from the new MRO platform?

- Is the MRO integration worth the time and attention of the IT organization?

While apprehensive in changing models, Sheree was also aware that the performance targets defined by procurement couldn't be achieved unless Ascend fully integrated its SAP system with SDiExchange. The IT organization had trouble with master data ownership and updates. The process of tracking and updating material costs in the system was cumbersome, redundant and time consuming.

On the backend, Ascend had a huge invoice backlog where it had a really hard time reconciling invoices back to procurement… and paying its thousands of MRO vendors. The process of tying the 3-way match detail back to

both the SAP and SDiExchange systems perpetuated a lack of confidence in the data. Finally, the lack of visibility and real time data severely impacted the relationship between procurement, planning and maintenance.

Sheree understood that a lack of trust and credibility with the business would continue unless something was done to dramatically improve MRO processes, data integrity, and the relationship with procurement, planning and maintenance functions.

Emergence of a Game Changer to Move IT from Inspiration to Action
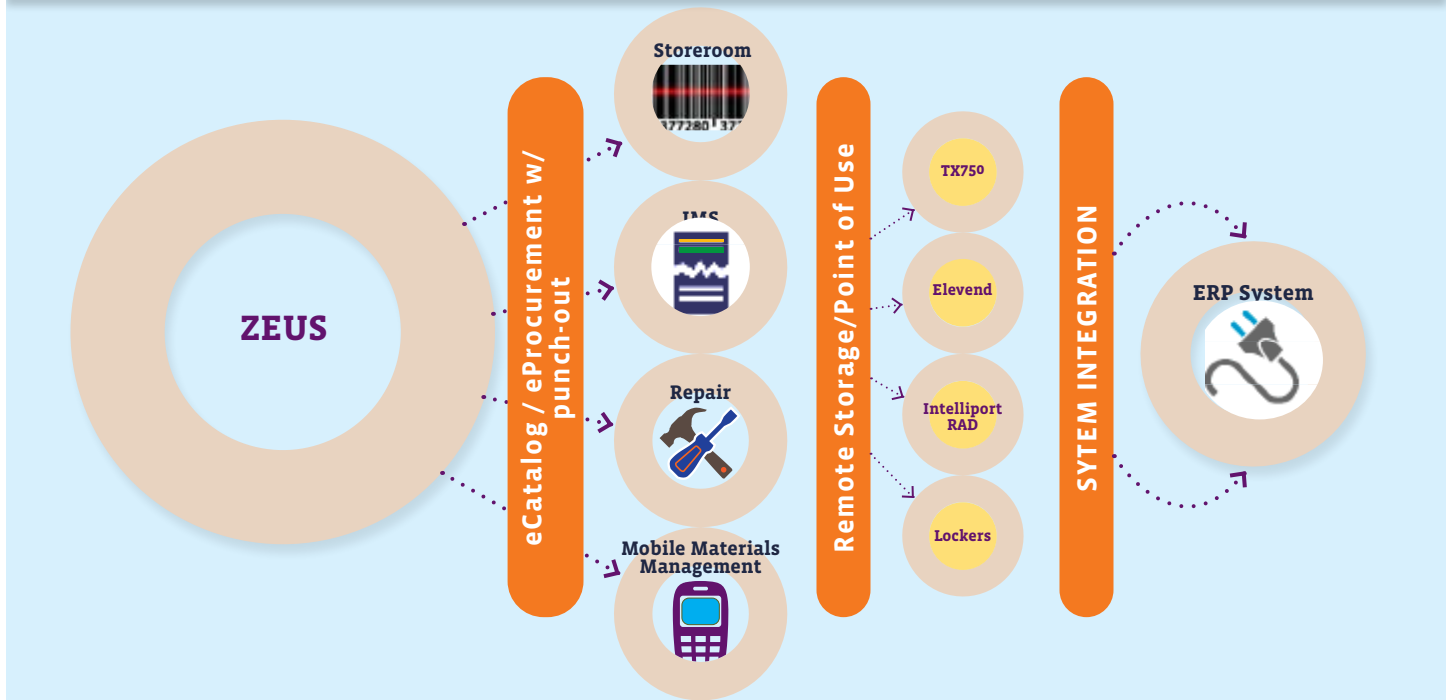
As Sheree stated, "Once procurement defined the strategy to move forward with SDI then it was up to our team to define how best to set up the IT landscape so that the MRO process is efficient and effective for IT and the business. When sitting in our position, anytime you hear integration with SAP you think custom coding, big budgets and long timeframes." Sheree added, "there were so many process touchpoints between the systems that didn't have pre-built APIs that we thought customization efforts were going to consume a great amount of time and resources."

When SDI proposed their solution – SdiConnect – to integrate Ascend's SAP system with

SDiExchange, there was a healthy amount of skepticism, but also optimism. If this solution actually worked, then the IT organization would shave off months or up to a year from the original projected implementation timeframe. The biggest selling point of SDiConnect was the flexibility and dynamic nature of the solution compared to traditional EDI technology. SDiConnect offered a fully integrated solution – meaning when the system of record makes a decision, either the master data changes or a purchase order is created, then within a few minutes that data is replicated across partner systems (back and forth). The comprehensive and almost real-time replication of transactional data is a huge differentiator. SDiConnect, resides between two more robust, but very rigid systems (SAP and SDiExchange). In essence, SDiConnect, bridges the gap between the way two very different systems think – which makes the process streamlined and the data more reliable.

To manage expectations and risk, Ascend staged its rollout with the vision of delivering value to the business without too much disruption to the IT team. Being able to have this option from SDI at no additional cost helped Ascend save a tremendous amount of integration work. It made the implementation faster and easier…and much less

Your Connection to Purpose-Built Supply Chain Technology

ZEUS

eCatalog / eProcurement w/ punch-out

Storeroom

IMS

Repair

Mobile Materials Management

Remote Storage/Point of Use

TX750

Elevend

Intelliport RAD

Lockers

SYTEM INTEGRATION

ERP System

expensive for the IT organization to support. The resistance that was present from Ascend's IT team was essentially eliminated. The IT team was able to focus on what it would take to conduct the transactional activity more efficiently which gave the entire MRO team the time and confidence to focus on process improvements.

Sheree shared, "I would say that we were pleasantly surprised at how smooth the integration really was. We truly have become a believer in SDiConnect and the integration between SAP and SDiExchange. This was a very positive experience which made us a believe that we could do this type of integration again in the future."

Inside the Game Changer

The old methods of SAP integration involved a lot of custom coding. We have changed the integration game by moving from custom code-based integrations to configuration-based integrations. This change in process saves customers time and money, delivering more logical interfaces. Logical interfaces expose problems in the system by making the interface more straight forward and easy to understand.

The configuration-based process requires nothing to be installed in the client's SAP landscape. It's nimble and can easily accommodate project requirement changes even

during deployment. We find that every integration has two key parts - first comes the blue print and then the team implements based upon the blue print. As with all integrations, things evolve. It's not that things don't work to the original blueprint, but during the integration the team realizes that more data or different data is required to improve the integration processes. SDiConnect can easily take the system and its data out of production and then put it back into production...seamlessly. The process of the system moving in and out of production can be accomplished with no major changes to requirements. These activities would take months when deploying in a code-based landscape. In a configuration-

based landscape you can do in hours and days what would normally take months in a code-based environment.

We understand that each integration is unique - even within the same industry and across the same modules. What we do to drive efficiency, in unique environments, is to create a baseline template as a generic transactional set of data and rules. We then use and modify the baseline so it works for each unique deployment. We have an asset in terms of a reusable set of transactions that are easily manipulated to deploy across any company environment. This process of developing and modifying a baseline set of transactions enables us to deploy faster, better, cheaper…and without much IT involvement.

We install nothing in a client's SAP landscape. We are not intrusive. The only thing we request of a client's IT team is to set up a SAP user and only give us user privileges and access to the data for the interfaces that we deploy. This limits our impact on the client's IT staff. They only have to set up a user and give us access and abide by privileges that are governed by SAP security.

Impact of the Efforts

As a result of these efforts, Ascend and SDI were able to exceed their performance goals of an astounding $10 million in savings per year. The IT organization is now working in one system with less processing errors, and invoices are paid in a condensed timeframe. IT has better records and has improved master data ownership and updating process. Ascend incurred a huge backlog of processing errors when using EDI technology, which have been nearly eliminated with the new integrated system. Errors sometimes still occur, but it is easier for the team to identify and correct them in almost real time.

As Sheree stated, "Our company is in the business of making nylon, plastics and polymers. Procurement made a decision that they didn't want to be in the business of MRO. Based upon that decision they outsourced procurement to SDI. The combination of SDiExchange (a technical solution) and the SDI team (a process solution) provides us with fully integrated MRO business support. The value to us – we can source maintenance and procurement activities to an outside provider while integrating and controlling our in-house maintenance activities - which is critical to the reliability of our business. This level of integration is the biggest complexity and greatest value."

About SDI

By helping organizations understand how each link in their MRO supply chain impacts the entire enterprise, SDI helps them achieve year-over-year savings, enterprise-wide efficiencies and newfound control.

Using a custom suite of products, services and tools, SDI's platform coordinates, aligns and optimizes every step of the MRO indirect process.

Lower costs, smarter inventories and more reliable production are all natural results from a more connected MRO supply chain.

To learn more visit sdi.com today.