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An rSTAR Whitepaper

TRANSFORM LEGACY ERPs: Unlock Investment Value, Accelerate Business Agility

A case history whitepaper based on a Fortune 500 manufacturer

The global industrial automation and control systems market size was valued at more than 172 billion in 2022. This sector has advanced considerably over the last decade with advances in technologies such as robotics, artificial intelligence, and more.

Automation enables efficient manufacturing and material handling. Industry leaders use industrial automation and control systems to increase productivity and reduce labor costs. As the manufacturing sector digitizes (called Industry 4.0), companies are prioritizing the rapid adoption of new systems and networking architectures. These moves are projected to provide significant opportunities for market growth, *according to an August 2022 report from McKinsey & Company.*

Our Client: An Industry Giant

Our client is a Fortune 500 manufacturer of parts, supplies, and equipment for the energy sector. The company has achieved rapid growth is in several verticals, ranging from flow solutions to measurement solutions, each offering a slew of different products. It has developed a comprehensive portfolio of industry expertise. This division featured in this case study is a leader in helping businesses automate their production, processing and distribution in the chemical, oil and gas, refining, pulp and paper, power, water and wastewater treatment, metals and mining, food and beverage, pharmaceutical and other industries.

Transforming Customer Lifecycle Services: The Need for a Flexible Cloud-Based Approach

Because of its rapid growth, the company faced several IT challenges.

Acquired companies came with different ERP systems:

As the company grew over the years and acquired other companies, they inherited each acquired company's enterprise resource planning (ERP) systems. The resulting intertwined technologies made it extremely difficult to build new, modern functionalities on top of it. The main "backbone" and system of record is Oracle Service Cloud, but Microsoft and other ERPs were also included in the overall architecture.company to one central hub – thus making things easier for both employees and customers.

Needed to stand out from the competition:

The company sought to build an innovative solution to empower customer lifecycle services and set their company's service team apart from the competitors. The resulting solution needed to be fast, flexible, and lower cost than their current solution. And they wanted to empower field services with accurate and timely information so that they could be proactive and helpful to the end customer.

The UI/UX had to be as good or better than a consumer app:

The company's team knew that enhancing a sluggish, monolithic ERP system with multiple intertwined legacy ERPs would be difficult. Their customers and field service technicians were accustomed to using their mobile devices for both personal and business transactions, and any apps developed for this project must be as good or better than consumer apps. Common practices such as scanning QR codes to access information was nearly impossible within the existing Oracle infrastructure. Improving the overall user experience for both field service technicians and end customers was a top priority.

Challenges

- Acquired companies came with different ERP systems
- Needed to stand out from the competition.
- UI/UX had to be as good or better than a consumer app

The company's IT director contacted Oracle seeking a partner to help them achieve their vision. Oracle recommended rSTAR Technologies. With rSTAR's extensive background in manufacturing automation and Oracle Platinum Partner status, *rSTAR was an excellent choice to embark on the project.*

Agile Approach to Complex Projects Builds Long-Term Success

rSTAR uses the SAFe Agile framework to ensure full transparency and participation of key stakeholders during the development phase of their work. SAFe Agile helps teams make quicker decisions, communicate more effectively, optimize efficiency, and stay focused on the customer. The resulting process helped the client develop and deploy their new approach faster and better than they thought possible.

Taking large projects and breaking them down into small steps allowed the team to test innovative ideas and, potentially fail with some. Failure, however, could be viewed as a learned exercise when only a small amount of time, money or resources was invested in it, and the learnings gleaned from each step in the agile process enabled the teams to improve with each iteration.

rSTAR's Oracle expertise and ability to build cloud native apps with excellent UI/IX, as well as their experience working with asset-intensive industries, enabled them to offer both insights and practical development services that led to the successful launch of the new microservices cloud native apps.

Custom Apps Save Money – Owned versus Licensed Apps

The company was using a subscription-based mobile platform. At first, it seemed like the best means to build certain apps. However, the team realized that although these apps seemed straightforward, they lacked enterprise capability and integration. They were nondescript, not custom and did not allow the user to have depth in visibility.

Even more troubling was the related costs. As this platform was not their intellectual property (IP), that mean that every customer onboarded onto the app came with a price tag. The bills quickly started adding up to millions of dollars. This wasn't sustainable, nor was it effective.

The IT leader encouraged his team to think outside the box. He asked the team to bring best practices from other industries to the table and share apps they liked, and why they liked them.

The team examined banking apps and others and discussed the functions, features, and UX designs they liked and didn't like. Then, once they had a clear vision of what was desired, they worked with rSTAR technologies to build custom apps that worked with the Oracle ecosystem to extend Oracle Service Cloud through cloud native apps.

rSTAR provided them with a solution that could be their own IP, so they didn't have to pay another platform for it. The resulting apps, owned by the client, significantly cut costs while improving field services' ability to track billing, proactive communicate with internal teams, and manage processes that were previously tracked manually.

Now the field service team could access customer account information right from the field. Instead of manually submitting paperwork after a site visit, a phone app could submit the requisite information and update the ERP data within minutes. This provided all teams – sales, service, operations, accounting, others – with accurate and timely information.

Perhaps even more importantly, customers appreciated the new, proactive way of using service-related account information to check on maintenance schedules, replacement, and service needs, and more.

The company successfully solved all three challenges outlined at the beginning of this paper:

Legacy ERP systems were now able to communicate both with each other and through external cloud native APIs that exchanged and shared data

They exceeded customer expectations with their new approach, with the field service team able to stand out from the competition through proactive service strategies

The cloud native apps built by rSTAR provided an exceptional UI/UX experience, making them easy to use – which resulted in smoother adoption of the new apps within the department as well as sharing of best practices internally throughout the company.

Results Achieved

This new, flexible approach to building out a monolithic ERP infrastructure has resulted in multiple positive outcomes over the project lifecycle.

Quantitative Outcomes

Cost savings through custom applications: The company saved approximately $40,000 – $60,000 per month or approximately $1.2 million per year in software licensing fees by transitioning from third-party apps to their own custom apps.

Qualitative Outcomes

- Building an internal environment with data fed from each legacy ERP system, but not dependent upon it to connect with field services.
- Centralization of information and activities around existing assets.
- Sharing product and customer information easily with field service engineers and technicians through mobile apps.
- Single source of truth and clear view of customer data.
- Improved customer service to proactively suggest maintenance, service, products, or other items to enhance the end customers' operations and productivity.
- Best practices shared throughout the client's companies with internal communities working together to embrace change.
- Success encouraged other teams to think differently about data, share data proactively, and use the information to improve sales, service, and operations.
- Significant monthly cost savings by migrating from licensed third-party software to custom-built and owned solutions.

Key Takeaways

- Make decisions quickly about who owns asset, product, or service information.
- If you understand who owns an asset, you can build an API around it – and you've just created an acceleration for every other application that gets people to think differently about their data.
- Identifying an owner of the data helps change how people use the data. The owner can make it available to others through the APIs, and, in turn, empower others to think creatively about solutions.
- Don't be afraid to change or replace APIs as they age – you'll still get value out of them even if they need to be updated.
- An agile approach helps team members overcome fear of failure. Encourage honesty and transparency throughout the process. Use failures as a steppingstone to learn, grow, and build in new directions.

Next Steps

A good consultant acts as a seamless extension of their clients' companies. Consultants listen, advise, and educate clients on how certain technology can save time, money, and headaches. Rather than focusing only on the project at hand, the consultant should be part of the overall team and offer insights and propose solutions.

rSTAR's relationship with the client embodies the qualities of a good consultant. Although some company leaders were hesitant at first to make the transition, their skepticism was transformed into trust once rSTAR repeatedly demonstrated exceptional knowledge and value.

If your company also faces a similar challenge – multiple inherited ERP platforms, monolithic legacy systems that are difficult to build out or expand, or lack of core automation – contact rSTAR immediately. With over 20 years of experience working with asset-intensive industries such as manufacturing, automotive, energy, and utilities, our consultants understand the unique challenges of your industry and how to overcome them. Additionally, we are certified Salesforce manufacturing partners, and Oracle Platinum Partners, with teams also fluent in Microsoft platforms and many related systems and software.

Visit *rstartec.com* for more information or to schedule a no-obligation 30-minute roadmap call that can change how you think about your systems, processes, and technology.

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About rSTAR Technologies

rSTAR is a full-service specialized system integrator built to transform leaders in the asset-intensive industries (Manufacturing, Energy and Utilities, and High Tech) into business value all-stars by focusing on digital transformation initiatives.

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