



# 12 examples of retail technology innovation

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# The state of retail technology as we know it

2022 may just be retail's biggest year yet as many brands continue striving to find – and succeeding in finding – many new ways to improve everything from supply chain management to the customer experience. This is due to retailers demanding to stay competitive in an ever-evolving market. And the best way to stay competitive? Implement new technologies.

That, however, comes with its own challenges:

- Disconnected silos
- Unfamiliarity with new technologies
- Lack of transparency
- Lack of investment resources

It's the beast of retail. As an industry, this burgeoning mountain results in everything from complexities that are difficult to manage, to multiple chains to keep track of, franchises that are hard to maintain, customer demographics that continually evolve and so much more. These days, it seems like it's simply not possible to manage all of it. Stores big and small may find it futile to even try adopting new technologies regardless of how much proof there is that those technologies will achieve ROI.

Yet we do have our heroes in this retail technology market. Retailers that are strategic, perhaps starting small with initiatives but then gradually scaling. They remember that it does take time and patience to transform. Once they then hit the summit of transformation, a new customer experience unfolds, complete with innovative customer apps, e-commerce channels, API integrations and a flexible revolving legacy-to-cloud-and-back-again migration strategy that will keep retailers adaptive to the new trends.

In this eBook, you will find a compilation of those types of brands who have reached all sorts of benchmarks toward hitting that summit. Trust that the possibility exists right on the horizon. All it takes is the right hand to successfully lead a growing market into a new world of exciting possibilities.



# API, integration & microservices as retail technologies

The use case of APIs and integration features many examples, including one that has shifted within the retail market: e-commerce. Clearly many retailers (but not all) have penetrated the world of e-commerce in remarkable ways, focusing on data management, distribution and autonomy.

Often the e-commerce side of any retailer functions separately from the traditional brick-and-mortar system. That, however, causes data redundancy – e-commerce platforms must have the same data physical operations have, requiring nightly transfers to targeted systems. That can be quite cumbersome.

Enter: API management, integration, microservices. There now is a host of possibilities to connect the obvious silos, expand the e-commerce presence, and evolve the digital customer experience.

Imagine retailers utilizing API-connected mobile devices to inform customers of what's in stock – before they even walk into the store. Imagine a more personalized shopping experience via online order fulfillment.

It's now possible to achieve that. These following customers have opened the door to what's possible.



# Colruyt Group

## Counting on webMethods to unveil digital products faster

Colruyt Group, a Belgian family-owned business, is one of Europe's largest retailers. Established in 1928, the group owns and operates more than 600 retail stores, including its flagship Colruyt discount supermarkets. The company has 30,000 employees and annual revenues of €9.6 billion.

### CHALLENGES

- Rapid growth of e-commerce
- Rise in customer-facing apps and digital devices
- Shift to API integrations
- Desire to unify customer rewards and wireless payments across all Colruyt brands

### OUTCOMES

- Seamless customer data integration
- Support for mobile, e-com and wireless payments
- Easily handle 10 million transactions a day
- Reliability, even during surges in online ordering

### SOLUTION

Colruyt uses webMethods for integration and API management to ensure a reliable, fluid flow of data between applications and systems.

[Learn more](#)

“ webMethods allowed us to unveil new digital products and services that are faster, more secure and enable a vastly improved digital shopping experience.”

– Dries Vanmarcke, Technical Integration Architect, Colruyt Group

## Adaptable from the start

Colruyt Group was “born ready,” embracing change for almost 100 years, from supermarkets, to organic, to e-commerce and the move to mobile. Repeatedly reinventing itself, it has evolved to become a go-to name for meeting customer expectations across Belgium, Luxembourg and France. Its Mobile Readiness program launched in 2018 brought countless new apps to customers for online and mobile ordering. The program not only improved customer service but streamlined customer data management across all Colruyt Group brands. Flexible API integration to expose unique web/mobile app and connected device data was key to making mobile readiness work. Luckily, Colruyt’s long-standing integration partner, Software AG, had the best dedicated **API management solution**: webMethods API Gateway.

### Building on what works

Colruyt began using Software AG’s webMethods in 2010 for process automation, service lifecycle management, application and **B2B integration**. webMethods enables fast data access related to sales, customer information and suppliers, improving customer and vendor data management, complying with external regulations.

“For years, webMethods has been the backbone of our integration,” explained Dries Vanmarcke, Technical Integration Architect. So when time came to evolve the company’s integration strategy, “we knew right where to look.”

webMethods API Gateway features powerful runtime governance, a dedicated web-based user interface, SOAP- and REST-based API support and DMZ-level protection – all things important to Colruyt.

The company’s mobile readiness is thriving with simplified information sharing, more efficient new app and device connections, and runtime security that helps IT staff sleep better at night.

### Proof is in the numbers

Today Colruyt counts on webMethods API Gateway to process 10 million daily service transactions. Most of the transactions (90%) occur between 08:00-20:00. Colruyt provides up-to-the-minute product information to 12,000 in-store staff equipped with smartphones answering customer questions on the spot.

Digital XTRA cards offering discounts enable 4.5 million customers to track rewards and make contact-free payments. This not only keeps customers safe but saves money and encourages loyalty to the Colruyt Group brand.

Online ordering is flourishing too. More than 1 million customers have downloaded the MyColruyt app, creating speech-to-text shopping lists and viewing more than 9,000 recipes. Collect & Go, Colruyt’s online shopping platform, experienced a 3-fold rise in traffic during the early coronavirus months without issue.

Thanks to robust integration, Colruyt’s IT systems managed the surge without a hitch. They could never have pulled that off without webMethods and the **API management tools**.

### Innovation for the future

Colruyt is ready for the next level of APIs beyond internal app integration. With the security offered by API Gateway, Colruyt is looking to add 3rd-party apps for innovations like monitoring crowds in stores. By adopting the **API Portal**, Colruyt expects to simplify integration with 3rd-party developers and B2B partners, managing the full API lifecycle.

“For more than a decade, Software AG has given us the tools and the solutions to embrace our digital transition with confidence,” Vanmarcke said. “And they’ll continue to be an indispensable partner as we adopt more customer-centric solutions to help us thrive.”



# Water, barley, hops – and integration

## A craft beer start-up positions to thrive with webMethods.io

**Foreach Brewing** is an Amsterdam-based microbrewery, selling a range of small-batch beers in bars, restaurants, specialty shops and online directly to customers. Established in June 2020, it maintains more than a dozen beer recipes, specializing in customized brews for events and celebrations. As of September 2020, it had four people on staff and was selling approximately 1,000 bottles of beer per month.

### CHALLENGES

- Startup looking to build out an e-commerce platform
- Need to integrate disparate best-of-breed applications
- Lack of synchronized company-wide data
- Pressure to keep costs low in early stage of company growth

### OUTCOMES

- Fast, reliable, intuitive cloud integration
- Seamlessly connected data from mission-critical apps
- Automated fulfillment, shipping, and financial reporting processes
- Streamlined inventory management
- Freed up time for cofounders to focus on building business

### SOLUTION

**webMethods.io Integration Free Forever Edition**

“ By integrating our IT landscape and automating back-end processes, we have more time to focus on our customers – and on perfecting the art of brewing.”

– Kun Liu, Co-founder, Foreach Brewing

## Making a mark on the craft beer scene in Amsterdam

When the Foreach Brewing founders chose to turn their hobby into an enterprise, their goal was to spread the gospel of beer: taste, texture and the art of crafting the perfect small batch. Yet in June 2020, when their online shop went live, things fell short. While they'd invested in a range of apps – Shopify® for online sales, HubSpot® to manage customer relationships and Slack® for internal communications – these apps weren't connected well.

Lack of centralized data flow led to manual repetitive tasks: counting warehouse labels; compiling reports; repeatedly checking the website to ensure on-time customer deliveries. Above all, Foreach's disconnected application landscape led to spending too much time dealing with routine back-office tasks and not enough time on business growth. Foreach's founders needed a change. But as a small startup, they lacked resources to invest in a full-scale **integration platform**. Luckily, they partnered with serviceshift, an Amsterdam-based IT consultancy, with an ideal solution: the Free Forever edition of [webMethods.io](https://www.webMethods.io), Software AG's powerful cloud-based integration Platform-as-a-Service.

### A one-of-a-kind cloud solution

As system integration specialists, serviceshift had worked with several other integration platforms. Founder and director Stefan Lenke saw that webMethods.io stood out as the best. Not only was it incredibly easy to use, with an intuitive drag-and-drop design interface and assemble-and-deploy app workflows, it also came with industry-leading developer tools, an architecture supporting multiple users and a sophisticated application orchestration. This made automating business processes – Foreach's main aim – exceedingly simple. Best of all, with Software AG's Free Forever edition, enterprises with fewer than 1,000 transactions per month could access it at no cost – with no time limitation.

"To be able to access the powers of webMethods for free – for an indefinite amount of time – is an incredible asset for a start-up," Lenke says.

### Freeing up time to focus on a passion

After three months in business, Foreach went live with webMethods.io in August – and implementation was swift. Within a day, serviceshift had Shopify and HubSpot workflows up and running. It quickly brought six more workflows live – with only a day of implementation time each – and together they made a dramatic difference. Today the applications powering Foreach's e-commerce platform are seamlessly connected. When a customer places an order, the members of the Foreach team get an instant Slack notification for immediate fulfillment. They also get notified of shipment problems and low inventory issues. Gone is the time spent in the warehouse counting boxes, constantly checking for shipment arrivals, or dealing with financial reports: those are generated automatically, too.

"The best thing about the solution is the time it saves," says Kun Liu, co-founder of Foreach Brewing. "That allows us to focus on what we do best: creating delicious brews and finding new customers that are as passionate about beer as we are."

In the months ahead, there's more to come: in addition to its online customer sales, Foreach sells to restaurants, bars and retail shops, manually fulfilling those orders. Until now, Foreach has managed its online and offline inventories separately. Utilizing webMethods.io, it's now working to integrate data from its offline sales. This will enable the brewery to create a single, centrally managed and far more efficient supply chain, becoming a truly connected enterprise. With the confidence its applications are operating in sync, it also plans to introduce a range of new products: new recipes, merchandise and the ability to mix and match varieties in one six pack.

As Foreach grows, Liu says, it may eventually reach a point where it's time for an upgrade to a licensed webMethods.io version. "Once our volumes are where we envision them, we'll be more than happy to pay for it," he says. "For now, webMethods.io Free Forever has given us the exact kick-start we needed."



# Travelbasys

## Becoming a truly connected enterprise in the tourism industry – with API management

travelbasys has been a leader in the travel industry and a pioneer in data automation for more than 40 years. Its core system, RBS, was developed with Software AG's Adabas & Natural and is the market-leading back office and administration system for travel agencies all over Germany and Europe. travelbasys has its headquarters in Mülheim an der Ruhr.

### CHALLENGES

- Immense complexity and change in the tourism industry
- Coexistence of different, rigid systems
- Create a basis for new business models
- Ensure future competitiveness

### OUTCOMES

- Flexible and rapid implementation
- Available to thousands of agencies
- Personalized self-service products
- Compatible with data privacy laws

### SOLUTION

travelbasys used a flexible mix of platforms to create a modern solution including webMethods API Gateway to manage its use of APIs, SAP® with webMethods to connect to its ERP, and Adabas for its established but vital enterprise applications.

“ travelbasys is like a waterworks for the tourism industry. ... To do this we use solutions like SoftwareAG's webMethods API Gateway to maintain an overview of a highly complex data landscape.”

– Tenbusch, CEO of travelbasys GmbH & Co. KG



## Pioneers of data automation

Tourism is important, driving the German economy and feeding a complex ecosystem. Germans generate €96.8 billion in total annual global tourism revenue. In Germany alone, there are around 10,000 German travel agencies and more than 3,000 German tour operators. Many IT service providers and content providers create offerings and enable booking systems. travelbasys recognized complexities of transaction chains and the value of resulting data early – partially because the company structure with two shareholders (TUI and REWE Touristik) is complex and relies on data transparency.

**travelbasys** was already ahead of its time back in the 90s and had laid the foundation to successfully use data competitively. With its **Adabas & Natural**-based RBS system, the company took over bookkeeping for an entire industry. Today, the number of systems available have increased tenfold. The RBS system from travelbasys integrates all data silos and establishes a single source of truth for real-time data processing – available for thousands of travel agencies to use. That enables travelbasys to offer its customers full bookkeeping, CRM and archiving services with over a hundred interfaces – all without the travel companies ever seeing the IT complexity behind the scenes. “They just use the system,” says Peter Tenbusch, CEO of travelbasys GmbH & Co. KG.

### But connected customers demanded more in 2019

The landscape has become more complex in recent years, while customer behavior has become more agile and digital. Customers and service providers seek to discover and manage their data online. For travelbasys, this is a good reason to continue down the road it paved together with Software AG using a new tool: **API management**.

“Many of our customers and suppliers now want real-time access to certain data online. We want to meet this need as a service provider by opening up our systems,” explains Detlef Ziermann from travelbasys, who monitored the PoC of API Gateway. “In this context, developing these new functions quickly is important, of course, but the areas of security and monitoring are especially crucial for us. Software AG’s API Gateway convinced us on all three counts.”

### Opening the door for more connection, new-added services: efficiency, transparency and compliance

**travelbasys** needed secure access, speed and uniform data to communicate with customers in real time. API management makes it possible, aligned with data privacy laws. It expands the network travelbasys created and integrates systems of companies and service providers elegantly and securely.

By connecting internal and shareholder systems, TUI und REWE Touristik, travelbasys can also transparently deliver real-time current internal financial data like liquidity to dashboards – especially important during a pandemic when data exchange speed and reliability have never been more valuable.

These personalized, automated and high-quality 24/7 services include commission accounting, querying sales or order statistics and automated service provider reconciliation as individual packages. travelbasys customers benefit from them at manageable costs. Customers wanting to use these services can choose between a revenue-based or transaction-based payment model.

travelbasys implemented Software AG’s webMethods back in 2014 to help transition from mainframe to Linux®, establishing necessary conditions for webMethods API Gateway. “For our new products, we don’t even have to reinvent the wheel. We can just reuse individual services and implement them quickly for our customers,” notes Tenbusch. The company and its customers all benefit from a substantial increase in agility and speed with corresponding competitive advantages in a changing market.



# Kiabi

## Transforming omni-channel retail even faster

**Kiabi** is the famous French retailing powerhouse not resting on its laurels. In 1978, it transformed the retail clothing industry, offering modern fashion for the whole family. Since 2002, Kiabi has doubled in size, expanded from 5 to 32 countries, grown to 9,000 employees, increased revenue to €1.8 billion a year, and gone all in on digitalization and omni-channel retailing.

### CHALLENGES

- Find a way to respond to demand from the burgeoning volume of customers
- Manage data overload - and data inconsistency
- Efficiently navigate the market-wide transition to omni-channel retail

### OUTCOMES

- Slashed application development time by 50%
- Improved website performance from 3.6 to 1.2 seconds
- Expanded online presence from 5 to 32 countries
- Cut internal-external connection times from 4 months to 1 week

### SOLUTION

Kiabi used webMethods for Integration & API management for a fluid flow of data throughout systems and partners. And ARIS for business process transformation.

[Learn more.](#)

“ ARIS and webMethods gave us the power to drive the changes we needed in our e-commerce business.”

– Christophe Alie, CIO, Kiabi

## The digital imperative

Kiabi wanted a visionary digital transformation in a disrupted marketplace with accelerated technological advances, and increased web-based startup competition, consumer connectivity and empowerment. The company saw a strategic advantage in delivering a seamless and compelling omni-channel customer experience. It sought to establish greater connections by integrating devices, applications, networks, content, channels and interactions – a tall order to match with Kiabi's consistent annual growth of nearly 9%. But the company never saw new Millennial customers always connected and online before, so Kiabi's slower and error-prone legacy systems lagged, falling behind. It needed IT alignment with business function and omni-channel vision. The company needed a partner to help realize that vision.

### Love at first integration

**ARIS** and **webMethods** helped visualize and restructure processes, and streamline and extend customer contact. Service-oriented and event-driven independent solutions would increase flexibility to modify systems without downtime or compromise. Yet its 40% increase in data volume and sluggish website still remained an issue until Kiabi implemented Software AG's in-memory data solution in 2012.

Kiabi avoided traditional hard drive servers, reducing web page load time by 300%, from 3.6 to 1.2 seconds. It adopted the solution with immediate revenue impact as easily frustrated digital natives were no longer delayed, not abandoning online shopping carts. It also linked its retail channel experiences through a single unified platform, online annual revenue skyrocketing to €130 million.

### Omni-channel demands omnipresence

Kiabi fully transitioned to omni-channel retailing two years later, digitalizing processes and building a system agile enough to respond to Millennial customers trend-hopping faster than predecessors and shopping based on convenience and price. Personalization, real-time price and availability comparisons via mobile were the name of the game.

"ARIS and webMethods gave us the power to drive the changes we needed in our e-commerce business, to deliver greater value to customers and to respond to the future demands of our customers as they arise. The project was up and running in just a few days – and on our own terms!"

Kiabi needed faster product launches and integrated connected applications via an end-to-end chain with added features on the fly. As an integration layer, **webMethods Integration** and **webMethods API Management** enabled different systems storing, editing and distributing data to communicate with one another – without data flows or point-to-point connections. And thanks to in-memory data management, it happened faster than ever.

"The simplicity and speed of the webMethods APIs let us build an app for retail staff to check inventories with hand-held devices quickly. It literally changed how we operate at the lowest possible level."

**API Management** allowed Kiabi to assemble and update internal applications twice as quick as it had in the past. Even corporate external relationships benefited. Earmarked B2B partners like suppliers had shared seamless and secure private API keys, reducing new B2B connection setup times from four months to as little as a week. A year later, Kiabi utilized ARIS's **business process analysis** (BPA) to reduce implementation times and increase process agility and efficiency.

IT project managers couldn't believe the half-year project 3-week lead time reductions with ARIS BPA. IT and the business were on a winning trajectory with holistic views of customers, products, processes and suppliers. Kiabi's CIO was a hero. The decision had been a no-brainer: "Unlike the alternatives, Software AG's solutions were the only ones that provided all five of Kiabi's requirements: business and IT transformation, in-memory data, integration, process and analytics & decisions. This eliminated the risk of inconsistencies right from the start, and greatly simplified support."

Today Kiabi is more internally and externally agile than they've ever been, ranked third in the "2017 Great Place to Work" and fourth in the consecutive year. Their independent solutions offer endless possibilities. And their customers? They're happy right where they should be – at the center of Kiabi's attention.

# Business process transformation as a retail technology

The state of the market does need to be addressed for this particular use case – simply put, retail operating models aren't fit for the future of process transformation. In fact, as retailers and demand continue to grow, operations will then continue to grow much more complex, especially with the rise of e-commerce, to the point that they may be unmanageable. That's a despairing future indeed for an industry deserving of growth.

What is the key to staying ahead of the trends? Process discovery, redesign, automation and continual optimization. The retail market, in fact, has shown great promise in the prospects of implementing robotic process automation (RPA) and other such process management solutions.

Consider the theory that an organization may only be as successful as the processes designed to lead it into a new era of excellence: everything from the back office, to accounts payable/receivable, to logistics, to administration, to HR, to purchasing, to point of sale and so much more.

That's sustainable success from the ground up. It starts with the very building blocks themselves: the processes of operations. Now it's time to see a few examples of customers that have achieved this.



# Alicorp

## Unifying process architecture with ARIS

**Alicorp** was founded in 1900 as a producer of oils and soaps and has since risen to the top of Latin America's food processing companies. It has over 150 own brands, and four established business lines. A powerhouse in the consumables market, Peru-based Alicorp has 12,000+ employees in 9 different countries and reported 3bn USD in revenue in 2020 alone.

### CHALLENGES

- Pressure to achieve ambitious 2025 roadmap
- Need to unify technologies and processes across four complex business lines
- Demand for standardization and automation of processes across all geographies and subsidiaries
- Lack of process visibility, both internally and externally
- Struggle to find open process management platform that could integrate with new SAP migration

### OUTCOMES

- Integrated and standardized more than 60 years of core processes
- Achieved all key milestones from 2025 roadmap so far
- Integrated immediately with conglomerate-wide SAP S/4HANA upgrade.
- Delivered process mining "procure to pay" use case in just 10 weeks
- Created single source of truth for internal stakeholders and suppliers
- Transitioned 500 users to new system who are all now active
- Expected 20% increase in efficiency

### SOLUTION

**ARIS** for:

- Business Design & Strategy
- Rollout & Change Management
- Business Automation & Connectivity
- Risk & Compliance Management
- Process Mining & Analysis
- Professional Services

“ Thanks to Software AG's open technology – we're now well on our way to successfully achieving our 2025 road map.”

– Juan Balbin | Corporate IT Director

## Standardizing 60 years of complexity

Alicorp has worked hard in 60 years, scaling and growing organically with strategic acquisitions into an industry-dominating business. With four business lines (consumer goods, B2B, aquaculture, and milling), already a Latin America household name, it was fast becoming a global giant. But these years of accelerated growth have taken their toll.

Alicorp needed agility with new tech solutions to solve local problems, new applications to better serve global customers and different systems merging after acquisitions. The result? Potential operational anarchy. But Alicorp didn't reach benchmarks by being slow to react. That's why it established an ambitious digital road map in 2017: technology unification by 2025.

"Our business mantra is 'Feeding the growth of tomorrow,'" says Juan Balbin. "We have 60 years of commitment to our cause. But it was clear that we would not be able to keep this up without addressing the huge issue of disparate systems and processes."

### SAP migration exposes lock-in situation

A corporate-wide migration from SAP R/3® to SAP S/4HANA® was the first major milestone. Alicorp knew this would be a huge project but underestimated its significance to **business process transformation**. "We started to look into phase two of our road map and quickly realized that there were few vendors out there that were genuinely open enough to integrate with SAP S/4HANA. Least of all expose the processes linked to SAP R/3 instances that were soon to be obsolete," says Balbin.

A powerful **business process management platform** would allow engineers, designers, architects and strategic suppliers to collaborate via a connected user interface. Alicorp wanted a definitive **process governance** system for roles, responsibilities and hierarchies. It needed performance management through **process mining** functionality and KPI alignment with process optimization. It even wanted to manage operational **risk and compliance**. Finding an independent vendor open enough to create fluid data flow between new process architecture was challenging. So when Alicorp discovered that Software AG's **ARIS Enterprise** had an **SAP integration solution**, it knew it had found the partner of choice.

### A truly connected enterprise

Alicorp had to set up integration with SAP® Solution Manager (SolMan), an impossible task according to other vendors, but Software AG's **ARIS** communicated seamlessly with SolMan via HTTP. The parent Alicorp business's full migration covering all processes was done in under two years. Not bad!

In under a year and a half, all 500 active ARIS users share a single point of truth for both company and customer journeys. Alicorp predicted central control and 20% more operational efficiency, reducing incidents and expensive change requests.

### Procure to Pay go live in 10 weeks

The successful use cases rolled in – such as the **process mining** project: "We quickly turned our attentions to one of our major pain points – the customer journey from procurement to payments. We needed to be able to measure efficiency using KPIs aligned to our strategy. And there was the headache of the SAP S/4HANA integration to get done," says Balbin.

But Software AG's **Professional Services** team helped with integration of all strategic dashboards and visualization of the entire end-to-end process from procurement and accounting to payments. It went live in just 10 weeks. "We now have 54 analytics dimensions, 41 indicators, 71 analysis favorites and 104 measures all on one ARIS dashboard. It is truly astonishing!" says Juan Balbin. "And there's no need for our business users to request SAP reports. It's all there."

### Feeding the growth of tomorrow

With the global SAP migration nearly complete, Alicorp is now concentrating on the other companies in the group, now feeling confident in a position to scale excellence. And the partnership with Software AG continues to grow. With Software AG's webMethods now being used for further complex integration projects and Alfabet for asset management, Alicorp is better placed than ever before to feed the growth of tomorrow.



# Ayaydin-Miroglio Group

## Inspiring a contemporary retailer

The Ayaydin-Miroglio Group is a fashion retailer that designs, produces and distributes women's apparel, footwear and accessories under its three brand labels: Ipekyol, Twist and Machka. Its founding company merged with the Italian global textile and garment group Miroglio in 2008. The group's 2,000 employees operate more than 230 stores. Franchise operations add another 36 stores in seven countries: Saudi Arabia, Cyprus, Iraq, Azerbaijan, Bahreyn, Qatar, United Arab Emirates, Kazakhstan and Kuwait.

### CHALLENGES

- Sustaining high growth in new sales channels
- Adopting new franchise model for international expansion
- Keeping up with changing customer preferences
- Creating operational efficiencies
- Improving workforce morale & reducing turnover

### OUTCOMES

- Developed 250+ improvement suggestions including short-term quick wins
- Completely redesigned non-merchandise procurement process
- Simplified operational processes
- Streamlined and improved workforce performance
- Boosted workforce morale

### SOLUTION

#### ARIS

“ With processes modeled and shared using ARIS, departments and teams had shared visibility and understanding. They started thinking and working together towards a common goal.”

– Sinan Aydoğuş, Strategy and Operations Manager | Consulta

## Sustaining phenomenal growth

The Ayaydın-Miroglio Group has transformed into a multinational fashion powerhouse with three unique brands speaking to the desires and needs of hundreds or thousands of women. Located in premier retail locations with its unique Turkish-Italian corporate culture, the Group focuses on growth. The metrics speak for themselves: 20% average growth and 20 new stores YOY for decades. Yet critical operational processes lagged, internal costs increasing with an ambitious and complex international expansion plan. The Group desperately needed an engaged and enabled workforce to serve constantly evolving customer habits, preferences and expectations.

### Seeking solutions

Ayaydın-Miroglio engaged leading Turkish consultancy Consulta in late 2017. They were tasked with discovering ways to be more operationally efficient, customer centric and future ready. Consulta, the local partner of Software AG in Turkey, suggested **ARIS** model existing processes, having used the software some 10 years earlier as the best solution for its customers. ARIS made modeling and analyzing processes easy. Its reports clarified responsibility and alignment to collaborate. Customers liked that every employee could access processes online.

### The gift of insight

A year later, Consulta prepared a road map, modeling and analyzing the Group's end-to-end processes. For the first time, Ayaydın-Miroglio saw all existing processes. "Until you have ARIS in place, you only have a general idea of the processes in place and lack details. You end up having to assume how work is actually performed," explains Sinan Aydoğuş, Strategy and Operations Manager from Consulta. ARIS showed isolated teams and individuals operated independently. Siloed departments worked and communicated inefficiently. Process documentation and organizational memory. All this fueled HQ personnel frustration with high turnover.

But... "With processes modeled and shared using ARIS, departments and teams had shared visibility and understanding," tells Aydoğuş. "They started thinking and working together towards a common goal." With process blueprints now at their fingertips, the project team came up with 250+ improvement suggestions. "We used ARIS to not only show our 'as-is', but also our 'should-be'," imparts Murat Barslan, Strategic Planning Manager at Ayaydın-Miroglio.

### ARIS-powered improvements

Ayaydın-Miroglio implemented Consulta's initial ARIS-powered recommendations. While most benefits were hard to calculate, some were quantifiable: monthly work hours were reduced by 3,000 at one store, another cut five full days of personnel. Using to-be modeled processes, Ayaydın-Miroglio also completely redesigned its non-merchandise procurement system with other departments following. And IT concentrated efforts on smarter investments in business-critical technologies. Process blueprints helped Human Resources (HR) update and streamline job descriptions and roles across the complex organization, reorganizing and optimizing head counts. HR recruitment no longer pursued descriptions for job postings. They just downloaded them from ARIS.

### Cultivating an ARIS culture

The biggest challenge ahead for Ayaydın-Miroglio is proliferation with process adoption, collaboration and improvement as an essential part of corporate culture. To accomplish this, the Group is making ARIS an everyday-and-everyone tool: Each Ayaydın-Miroglio Group HQ worker has been given a personal review of their position in ARIS. 20% of them have completed in-person ARIS training. And there is an online course conveniently available anytime. More and more HQ workers are using ARIS to access processes and recommend improvements. They're noticing that upper management is discussing and implementing their suggestions. And morale is improving.

### Looking ahead

Aydoğuş is confident this project will succeed. Three key success factors are upper management support, a collaborative **process improvement** approach and continuous communication. And of course, the best-in-breed ARIS capabilities. Implementing recommended improvements and a new project management are next. Identified operational data shortages for performance KPIs will also be targeted. And the Group will use ARIS for a standardized documentation system. There's no end in sight to this process-focused efficiency drive. And with back-end operations and culture working as one, everyone is ready to support this fashion empire's growth for decades to come.





# BRC

## Developing process management with ARIS

Established in 1990, Sichuan Languang Development Co., Ltd. (**BRC**) develops and markets tourism, residential, office, entertainment and restaurant real estate; it also develops and sells medical equipment and medicine products. It does business in China with more than 20,000 employees and over 390 holding and participating enterprises.

### CHALLENGES

- Over 8,000 documents about systems, processes, specifications and guidelines not updated in a timely manner
- Implementation of systems could not be monitored or promoted, impacting workers' efficiency
- Training new employees was taking too much time

### OUTCOMES

- Overall process efficiency has increased by 50% on average
- The average processing efficiency of single person has increased by 32%
- Processes and documents are more easily discovered
- Employees can quickly understand their own roles and responsibilities within the process
- Business scenarios can be visualized with analytic reports

### SOLUTION

- ARIS Design & Strategy
- ARIS Rollout & Change Management

“ The efficiency of an enterprise depends on 50% excellent business design, 30% excellent organizational structure and 20% process platform support.”

– Shen Hui | Vice President of Sichuan BRC

## Creating new worlds with 8 million words

Visiting a theme park isn't just another family vacation. It is a ticket to travel to a different world – one full of imagination and creativity. But it's not magic that makes these worlds come to life. It is details. The curator of these details is a highly coordinated team of employees that follow processes with exactness. Their playbook? A comprehensive and meticulously documented set of rules and guidelines. In the case of Sichuan Languang Development Co., Ltd. (BRC), that documentation had grown to more than 8 million words across 8,000 separate documents for its 390+ properties. Talk about data overload!

Finding the right documents became a monumental task for BRC's employees – as was keeping them up to date in a timely manner. This started to put processes at risk for HR, finance and **supply chain systems** alike.

Take for example new employee training. For a new development, special training is necessary for staff, and it may involve dozens or even hundreds of people. BRC would need to dispatch scattered training materials and organize and coordinate the participation of business personnel from multiple departments, which was difficult to control. Often this process alone was confusing and overwhelming for new employees and required additional trainings or a slow start in their new positions.

### Getting a grip on processes

The company decided it needed to find a **process management solution** to support its **business design**, starting with the 8,000-plus documents.

"The efficiency of an enterprise depends on 50% excellent business design, 30% excellent organizational structure and 20% process platform support," said Mr. Shen Hui, VP of Sichuan BRC.

After an extensive search, in 2019 BRC purchased ARIS to help it get organized.

With the help of ARIS's **process management platform**, BRC:

- Sorted out processes and documents scattered across the organization
- Created a one-stop operation, with identifiers such as "who I am," "what I do" and "how I do it"
- Determined the business scenarios, so that employees could quickly locate the position and job content that they needed within the process
- Clarified the complex corresponding relationships among personnel, position, role and process
- Realized a panoramic presentation of the value chain to provide analysis reports for process optimization by visualizing business scenarios to enhance process operation value
- Established a long-term operation mechanism of **process governance**, such as organizational guarantee, element change, process error correction, process reward and process inspection, to support the flexible adjustment of business, organization, power and responsibility and system

### ARIS and process mining

ARIS was the driver for **organizational change** and regional empowerment of BRC development. Efficiencies meant that the number of headquarters staff dropped from more than 700 to just over 300, as employees moved to areas where they could be more productive. All functional and business departments can now maintain the visualization, standardization and control of their own processes.

"Sichuan BRC started the journey of building a new-era management system with **business process** as the link, promoting the sustainable development of enterprises with the help of the latest digital technology," Hui said.

### What's next

The second stage of BRC's project in 2021 will include a proof of concept for **ARIS Process Mining**, where BRC will choose one subsidiary to complete end-to-end **process mining**. BRC expects that – from 2020 to 2022 – process and business objectives will be closely linked, improving overall efficiency.



# Tesco

## Bucking the trend with ARIS

**Tesco** plc is a multinational grocery retailer headquartered in Hertfordshire, England. It is the third-largest retailer in the world by gross revenues, with 6,800 shops worldwide. Tesco employs around 450,000 people in 10 countries.

### CHALLENGES

- Standard operating procedures for global finance transformation program to be designed/documentated
- Redesign business processes to drive cultural change
- Reduce operations costs at Tesco Business Services
- Enable lean optimization of store processes with consistent CX
- Reduce process duplication and siloed operations

### OUTCOMES

- Complete visibility and control of processes worldwide
- Ability to mitigate financial, regulatory and brand risk
- Reduced costs at shared service centers
- Increased staff confidence to manage processes

### SOLUTION

**ARIS** for:

- Business Design & Strategy
- Business Automation & Connectivity
- Rollout & Change Management
- Risk & Compliance Management
- Process Mining & Analysis

“ We were constantly reworking our processes and there was little control or guidance. With ARIS we now have complete visibility and control of processes worldwide.”

– Jason Dietz | Head of Process Architecture and Capability for Tesco Global

## Visibility is key to process control

More than 90 percent of retailers failed to increase productivity over the past few years and margins are projected to fall by a further 13 percent by 2030. Tesco won't be one of them. The multinational grocery retailer decided that, in order to better serve its customers worldwide, it needed clearer visibility into its business processes.

"Every little helps" according to Tesco plc's slogan. It means that every contribution, big or small, can help you reach goals.

Tesco knows about small steps; its founder Sir Jack Cohen started with a market stall in London in 1919 and opened his first store 10 years later. Since then Tesco has bought, built and opened thousands of new stores, today boasting 6,800 shops worldwide.

### Competitive pressure and critical visibility

Since Tesco introduced self-service shopping in the 1940s, the digital and contactless consumer appetite of shopping has radically increased. Tesco had no choice but to become more agile in the market of competitors' evolving business models.

Jason Dietz, Head of Process Architecture and Capability for Tesco Global, said: "Our competition can change their business overnight. It was important that we have a clear decision-making process to become leaner and fitter – that was the mantra."

Multiple process gaps and holes documented through workshops and shared using Excel spreadsheets, PowerPoint and Sharepoint hindered process visibility. Without it, Tesco couldn't be agile. Customer experience (CX) consistency was nonexistent. The lack of transparency hindered business decision making, missing out on future opportunities for growth. Even as Tesco's process architecture team formed to lead the organization as part of the Global Finance Transformation Program (GFTP), they were "constantly reworking...processes and there was not enough control or guidance," according to Dietz.

But the team did identify Tesco needed to reinvent its service model architecture. With a single source of truth for **process design** and standard operating procedures, Tesco would be able to:

- Design and document standard operating procedures for GFTP
- Transform business processes to drive cultural change
- Reduce process duplication, siloed operations and costs at Tesco Business Services
- Enable lean optimization of store processes with consistent CX


### Every little value helps with customers at heart

This single process design/SOP platform would bring transparency, risk/cost reduction and control of processes worldwide. Tesco partnered with Software AG for **ARIS** to deliver an integrated end-to-end process view, helping to create a more efficient business operating model. With five designers and 20 viewers, Tesco rolled out **cloud deployment** for GFTP. Then Tesco selected ARIS as the de facto **enterprise management system** for its global service model transformation, adding **Risk & Compliance Management** and task mining using Robotic Process Discovery with Software AG's partner Kryon.

Today, Tesco has built an impressive global process platform evolving toward full end-to-end visibility and enterprise management with 160 active designers and 1200 embedded viewers. Tesco seeks to expand viewership to the thousands with vital store-level processes for a consistent and efficient customer experience. Customer-facing teams will leverage these via a store portal. Tesco is also considering the **Internet of Things** for automatic capture of actual process data.

### Conclusion

The robust foundation Tesco built in ARIS can dive into processes to see how the business works. Tesco's teams are confident in proper process management. The CEO and Board have noticed the benefits. The scale of what has been achieved in building Tesco's end-to-end business model in ARIS far exceeded expectations. Software AG is proud to have partnered with Tesco achieve their goal with ARIS – "Every little helps."

The background of the entire page is an abstract, flowing pattern of wavy lines in various shades of purple and blue, creating a sense of movement and depth. The lines are smooth and curved, with some areas appearing more saturated than others, giving it a liquid or fabric-like texture. The overall effect is modern and dynamic.

# IT transformation as a retail technology

Continual observation, upgrade, troubleshooting and maintenance: this comes with the territory as an organization scales and transforms. One aspect that is critical to ensuring success is road-mapping a future-state architecture prepared for the next level of excellence. It's called IT (information technology).

Without IT, our systems wouldn't survive. But IT is only as effective as the resources allocated and the tools provided. Additionally, enterprise architecture (EA) is key to ensuring the scale maintains lean and agile performance in the event of anything from a random data crash to the task of considering new innovative technology investments for the future. Any of those situations require the power of IT. And the power of IT absolutely demands a platform to harness it effectively.

Few brands have attained that level of excellence. Here's one, however, that has achieved that – and more.



# Luxury Fashion Group

## Building the new era of luxury retail with IT portfolio management in the cloud

This leading multinational luxury fashion group has grown over the years through acquisitions and seen sales thrive for its high-end fashion products, attaining billions in global sales revenue.

### CHALLENGES

- Rapid expansion
- Major acquisitions
- Global competition
- Growing cost pressure

### OUTCOMES

- Planned \$100 million in IT savings
- Aligned the IT organization to business objectives
- Achieved single company, multi-brand enablement
- Met Wall Street M&A expectations
- Simplified the enterprise architecture

### SOLUTION

- Enterprise Architecture Management powered by Alfabet
- IT Planning and Portfolio Management powered by Alfabet
- Global Consulting Services

“ Alfabet is at the heart of the luxury fashion group’s initiative to save \$100 million in IT costs in just three years.”

## Creation of an American fashion supermodel

This multinational luxury fashion company was born humble. Started by six leatherworkers in a New York City loft in 1941, the company became an international powerhouse through several make-or-break risky acquisitions totaling \$3 billion+ in the past decade. The company's IT leadership team then wanted Information Systems (IS) teams to see into their portfolios, developing project plans and future IT strategies to support the company's ambitious **business transformation** goals. The piecemeal process involved manual updates to a Microsoft® Access® database, visualization in the Visio® modeling tool and PowerPoint® for presentations. Portfolio info was updated twice annually – not good for **road mapping** and investment decisions to be made on the turn of a dime. A centralized and collaborative platform for IS and **Enterprise Architecture** (EA) was necessary to support IT, road-mapping toward a future state architecture including key financial indicators.

In 2014, the luxury fashion group turned to the only solution in the industry for **IT planning** and enterprise architecture: **Alfabet**. With acquisitions on the horizon, the company sought help from **Software AG Global Consulting Services** for faster gain with less pain via Alfabet as an **agile** cloud-based platform.

"No other vendor offered a true cloud solution nor the product functionality and scalability," said Barry Spellman, Account Executive, Software AG. "So after a series of pilot programs in which Alfabet was pitched against Mega and Troux®, it clearly outperformed. Few vendors could meet the company's needs while actually adding value to their business intelligence, infrastructure and IT business operations functions. And because Software AG's solutions offer so many capabilities and linked platforms, when they want to expand their capabilities, they no longer have to ask if it's possible."

Alfabet is the company's digital transformational gateway to next-generation planning, system transparency, omni-channel consumer experience and supply chain optimizations. And that's not all. Alfabet is also central in saving \$100 million in IT costs in just three years.

### From one star to a shimmering constellation

The defining question at the very center of the company's successful transformation: how would it go from one brand to many with cost efficiencies? The leather-goods business was thriving. The company would benefit if it could maintain its identity while building an all-star constellation of complementary brands. This along with 2017 Software AG partner of the year Visual Enterprise Architecture's optimized resource deployment would open the "Building the New Era of Luxury Retail With **IT Portfolio Management** in the Cloud" doors to massive savings and meet market and Wall Street demands for real-time visibility, operational efficiency, connected commerce and omni-channel retail.

The luxury fashion group had the technological foundation it needed with Alfabet. The company had surmounted accessibility and scalability hurdles, improved collaboration across brands, and achieved transparency, foresight and agility in IT expenditure planning.

### The road ahead for a platform to grow

As a bonus, Alfabet's full cloud-based options allowed the luxury fashion group to plan for the future by rolling out implementation at record speed. The company now has: strategic alignment between business and IT and a delivery structure to ensure appropriate cost measures and processes; the means to drive continuous improvement of operational effectiveness within IS; and a reliable, secure and scalable operating environment.

After the initial success of using Alfabet for its EA capabilities and as the foundation for integrating the disparate IT systems of the acquired companies, the luxury fashion group is ready for broad-reaching future initiatives. As a sign of its confidence in Alfabet and the Digital Business Platform ecosystem backing the solution, the company has extended its license through at least 2020.

This will help this luxury fashion group run its various brands independently, while rolling IT and billing transformations into a single-company **SAP® implementation**. It's an ambitious project, made more daring because that rollout is planned for a timeline of just 18 months – the fastest ever for an SAP Fashion Management solution. But with Alfabet and Software AG on the job, this luxury fashion group knows it's working with the best in the business.



# IoT & analytics as a retail technology

Cost mitigation, convenience, accuracy, transparency and centralization: those are amazing keywords benefiting both the customer and the retail organization. Yet while integrations, processes and IT might be on par, certain stationary retail aspects won't be unless there's a technology capable of connecting and automating all of them to save time, product and money across the board.

That's where IoT – the Internet of Things – changes how the game is played. From remarkable innovations, such as self-checkout, self-scanning, reverse vending machines, scales, freezers, refrigerators and emergency power supplies, to solar panels, EV-charging stations in the parking lot, automatic gates and automatic-sensor-capable trash cans.

Imagine an entire network of all these devices sending and receiving data to optimize everything from temperature to electric, saving cost and waste on the daily with minimal overhead and time.

Traditionally it's a massive endeavor for a retail organization to build an IoT-ready network, still requiring considerable measures of expert staff members in IT to manage devices, check and automate triggers for X number of locations potentially nationwide.

But with the right platform centralizing all of it on one single source of truth with default seamless connectivity that's practically plug-n-play, it is possible – as these customers you'll learn about have shown.





# Autosen

## Sensor data out of the box

**autosen** was founded in 2011 as an online sales platform for sensor and automation solutions. As a driver of digitalization in SMEs and the industrial sector, autosen now develops and provides all-in-one solutions for Industry 4.0 and the Industrial Internet of Things (IIoT).

In 2018, autosen launched its io-key on the market, the world's first plug-and-play IIoT gateway. As an initiator and founding partner, autosen relies on its own resources in ongoing development activities and opening up new fields of application as well as on the capacities of leading IIoT specialists – including Software AG – in the io-key ecosystem. autosen currently has around 20 employees.

### CHALLENGES

- Creating a sensor-to-cloud process that is quick, easy and cost effective
- Enabling entry to IIoT for all industries
- Providing access to new digital business models
- Expanding the potential for sensor data in the cloud

### OUTCOMES

- Easy connection to the cloud via plug-and-play in <1 minute
- No intervention in the customer's IT infrastructure
- Automatically generated dashboards
- Numerous monitoring and analytics functions
- Diverse application possibilities with 12,000+ customers
- Tenfold cost savings for end customers

### SOLUTION

The solution runs on the Cumulocity IoT platform, especially well-suited for building new digital business models. Cumulocity IoT met their exact needs for stability, flexibility and speed – and lived up to their requirements in implementation.

[Learn more](#)

“ A universe of possibilities in one box: The io-key combines gateway, connectivity and cloud into a complete solution. No additional expertise required.”

– Rainer Schniederger, Head of products and technology at autosen

## Highway to the cloud: the io-key for industrial sensors

The full potential of the Industrial Internet of Things in one box: that's the idea behind autosen's io-key offering customers a very fast and uncomplicated path to the cloud and all its opportunities. The io-key delivers reliable real-time data analysis and control with numerous innovative functionalities tailored to suit sensor technology.

Software AG's **Cumulocity IoT platform** makes that possible.

autosen knew sensors and automation components, currently providing more than 10,000 customers with its own products and solutions. Sensors were always the invisible heroes of all industrial processes: precise, durable and reliable, with information on fill levels, temperature and humidity, or condition and service needs of machines. Data needed to be transparent with its critical evidence of proper systems operations, for which the cloud is the ideal platform for that data. Yet that involved high cost and extensive technical effort – a dilemma for many industrial companies.

autosen then partnered with Software AG to develop the intuitive all-in-one solution, the io-key, addressing the needs of its customers. It consisted of a plug-and-play Software AG Cumulocity IoT-based cloud solution and IIoT gateway with integrated SIM card for available data transfer and automatic sensor recognition via the IO-Link to generate to the corresponding dashboard. Other key advantages include easy and quick setup in less than a minute and no expert knowledge needed. "No intervention in the IT infrastructure and no further programming. The io-key delivers maximum integration with minimum effort," says Rainer Schniederger, Head of products and technology at autosen.

### Cloud on demand

It was an unbeatable unique selling proposition – whether about greenhouse humidity sensors, food processing plant temperature sensors or agricultural silo fill sensors. All of it transfers for analysis and presentation through the io-key with Cumulocity IoT in the background. Likewise the platform can monitor machine processes in real time with an alarm function to trigger maintenance and service orders from the cloud – without having to access the company's closed IT system. At a manageable cost, the on-demand and self-contained io-key for €249 with an additional monthly fee from €5 to €20 meant approximately tenfold cost savings.

"For customers searching for a pragmatic monitoring solution for their sensors, we solve the problem from end to end," says Schniederger. As needed, customers would use Cumulocity IoT's innovative analytics through the Apama Analytics Builder to book optional services such as text messaging or display-location alarms.

### Cumulocity IoT as a marketing multiplier

Cumulocity IoT met autosen's exact needs for stability, flexibility and speed – and lived up to its implementation requirements. The collaboration went smoothly right from the start, with a brief development period of about a year prior to market launch. The end result is a flexible, customer-specific solution with potential. With a range of more than 12,000 sensor types and over 300 manufacturers of IO-Link sensors that can use the io-key, the marketing opportunities are vast. In addition, autosen also offers the io-key as a white label product, not just in direct sales.

This enables the company to focus in particular on customers who already work with Cumulocity IoT, such as **telecommunication providers** like Deutsche Telekom. Deutsche Telekom's sales team can offer their customers the io-key as a complete solution, which opens up the sensor technology market even further – a win-win situation for everyone involved, and one which autosen wants to intensify by expanding the io-key ecosystem in the future.

The Cumulocity IoT platform is especially well-suited for building new digital business models and offers all the prerequisites to serve major customers. With the recent introduction of an io-key that is available worldwide, autosen has reached a new milestone in positioning itself in the global market. Software AG and autosen are a successful team – to be continued.



# Lyreco

## Supply chain automation for distributors with IoT

**Lyreco** is one of the world's largest office supply distributors. With 10,000 employees in 45 countries, Lyreco delivers 235,000 boxes to customers every day. Lyreco prides itself on operational excellence in its processes, customer satisfaction and high levels of environmental stewardship, having obtained both ISO 9001 Quality Assurance and ISO 14001 Environmental Impact Compliance certifications.

### CHALLENGES

- Lack of real-time stock and sales insight
- Need to improve service assurance
- Drive operational cost savings from restocking and servicing machines

### OUTCOMES

- Fast setup, available in two weeks
- Reduced out-of-order and out-of-stock situations
- Continuous vending machine telemetry

### SOLUTION

Cumulocity IoT is the #1 self-service IoT platform with ready-to-go tools for device connectivity and management, application enablement and integration, as well as streaming and predictive analytics.

[Learn more](#)

“ The Cumulocity IoT solution for our Nespresso® Capsule Dispensers helped us reduce out-of-order and out-of-stock situations to a minimum.”

– Raoul Marechal, Technics and Operations Manager, Lyreco

## Lyreco ensures employees get their Nespresso

Digitalization, the regulatory environment and increasing global competition are driving unprecedented change, driving adaptive business strategies, better risk management and process simplification. Many organizations are turning to the **Internet of Things** (IoT) to accomplish that.

Lyreco, a key supplier of Nespresso premium coffee and coffee machines for businesses, is a prime example of an organization a connected, digital future by embedding IoT technology in its products. In redefining relationships with its partners and customers, Lyreco recognized customers desired more connected products with deeper insight into product usage, leading to decreases in operational expense and increases in environmental awareness.

### Lyreco adopts the Cumulocity VendMe solution

Lyreco adopted the Cumulocity VendMe solution for Nespresso coffee and coffee machines to benefit customers. This facilitates the vending machine and application data collection powered by the **Cumulocity IoT platform**. The solution provides real-time stock and sales analysis, a unique configuration of Lyreco machine operations, a set of stock-level business rules and integration to Lyreco business systems.

### Solution components: Cumulocity IoT platform

- Cumulocity IoT dedicated edition platform and VendMe solution
- Cloud-based deployment
- Vending machine telemetry devices and cellular connectivity

### Process integrations

- Fully integrated to Lyreco SAP® Enterprise Resource Planning (ERP) system
- Formulation and deployment of vending operations-specific business rules
- Android® and iPhone® smartphone operator app

### Go-to-market accelerators

- Set up and available in two weeks
- Future solution support and service assurance to maximize customer service levels
- Stock management analytics and process support

### Outcome

Cumulocity's VendMe solution allows Lyreco to monitor the live operational performance of Nespresso machines and their usage so coffee capsules can be dispatched before they are needed and field technicians as soon as a critical fault is detected.

### Benefits to Lyreco and its customers

- Cost-effective service assurance: The solution provides considerable improvement in customer service levels, with out-of-order and out-of-stock issues reduced to nearly zero
- Operational cost savings: Management of coffee machines and inventory can be fully automated and based on real-time usage, saving both fuel and money
- Future proof: Adoption of the vending application based on the leading **IoT platform** ensures Lyreco can meet its future requirements for innovative services

Raoul Marechal, Technics and Operations Manager at Lyreco, describes the value that Lyreco has found from its IoT solution. "The Cumulocity IoT solution for our Nespresso Capsule Dispensers helped us reduce out-of-order and out-of-stock situations to a minimum," he said. "At the same time, we were able to reduce costs by improving our operational processes. Our employees now benefit from having a real-time view on machine data during daily work on customer sites and via integration of the machine data into our SAP® system."



# Mainframe integration as a retail technology

Lastly, even with all aspects accomplished, some projects require more meticulous attention to what is needed – a retail organization might have the integrations set up perfectly, the processes to manage them, the IT to monitor them and even an IoT network to communicate with them. But what happens when some systems don't speak the same language? What then?

Retailers might be okay with spending more to completely update and retire legacy systems, but there are situations where it might be more beneficial to successfully connect those unique systems to others without compromising operations and performance. In order to do that successfully, mainframe integration is crucial.

Sometimes it's just not feasible to change everything so that everything works. Sometimes, all you need to do is add one thing. And that is the best solution possible.

Here's a customer that has achieved exactly that.



# Fabick Cat

## Creating a data warehouse with custom order processing system

**Fabick Cat** is a tractor dealer that specializes in the distribution of Caterpillar® equipment. The company's product line consists of more than 300 machines. It features articulated trucks, backhoe loaders, compactors, front shovels, hydraulic excavators, motor graders, paving equipment and off-highway trucks. It also offers a wide range of rentals. The company was established in 1917 and maintains a facility in Fenton, Miss., U.S.

### CHALLENGES

- Common reporting for merged dealerships
- One set of reports with summary data for both companies

### OUTCOMES

- Created a SQL Server® data warehouse
- Consolidated reporting across multiple BUs and data sources
- Indexed files from Change Data Capture (CDC) to SQL Server

### SOLUTION

Fabick Cat used CONNX DataSync, the micro-batch, low-latency CDC solution that keeps data fresh and upto-date without impacting the performance of data sources.

[Learn more](#)

“ CONNX DataSync is able to perform most syncs in seconds. Only copying the changed data has not impacted the performance on our OpenVMS® Server for interactive users”

– Arnie Strouse, Systems Analyst

## “To ever serve our customers better”

The late John Fabick, Sr., founded the first Fabick Company in 1917, merchandising Cletrac Crawler Tractors and John Deere® farm implements. With only three employees and one small store on South Grand Avenue in St. Louis, Miss., Fabick set out to “build the greatest service organization of its kind.” To achieve this goal, he adopted as his company creed “to ever serve our customers better.” In 1921, Fabick expanded his business by including the Model A and Model S Crawler Tractors manufactured by C.L. Best. Four years later, C.L. Best and Holt Manufacturing merged to form the organization that is known today as Caterpillar Inc., the world’s leading manufacturer of construction machinery. From this early beginning, the association between Fabick and Caterpillar Inc. has grown hand-in-hand and continues to thrive. Today, there are more than 1,100 employees including members of the Fabick family’s third, fourth and fifth generations, working together under the active leadership of the founder’s great-grandson, Douglas Fabick, as CEO and Dealer Principal along with Jeré Fabick serving as President and co-Dealer Principal. What makes Fabick Cat unique is not only its size, but its outstanding people, support and facilities bound together by the single concept of total service capability for the equipment owner.

### Challenge

Fabick Cat has an IBM® AS/400 based system order processing system that is used across many installments. After acquiring a second Caterpillar dealership, an issue arose when Fabick Cat realized the dealership had its own custom-written order processing system running on OpenVMS with RMS files. What Fabick Cat wanted was a solution to provide a data warehouse for both systems. This would provide uniform reporting and analytics for both companies. The initial plan was to FTP files from the OpenVMS server and load them into SQL Server. The amount of data downloaded every day and the manual nature of this approach caused concerns. Dave Kramer, IT Manager at Fabick Cat, after a positive experience using **CONNX** previously to access RMS data, decided to call on CONNX yet again. CONNX had just the solution to meet their demands.

### Solution

CONNX DataSync is a micro-batch, low-latency CDC solution that keeps data fresh and upto-date without impacting the performance of data sources. DataSync enables companies to maintain data warehouses with minimal effort or system requirements, delivering near real-time data integration and continuous refreshes by incrementally updating only those records that have changed. Companies can eliminate the need for large and resource-intensive bulk data refreshes with DataSync’s highly efficient and market-proven design. Arnie Strouse, the lead analyst on the Fabick Cat project said, “DataSync is able to perform most syncs in seconds. Only copying the changed data has not impacted the performance on our OpenVMS server for interactive users.” With the database synchronization software, companies can schedule updates to optimize system performance based on individual needs. Depending on the demand, you can schedule updates for lower-use periods, such as after normal business hours, or as frequently as every minute when you need the more up-to-date data. DataSync is fast to implement, easy to use, versatile, scalable and minimizes project risk.

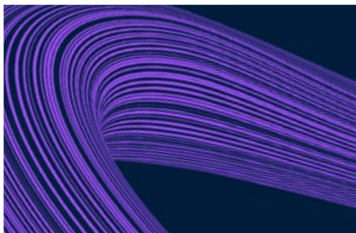
# The future of retail technology

So maybe the future isn't as challenging or impossible as we may think. It's all about perspective. Confidence is imperative in a market teeming with possibilities; and more importantly, it would be beneficial for all of us to spread the word. Spread the confidence. Make it clear that it is possible –

- It's possible for smaller businesses with lower budgets
- It's possible for retail organizations lacking the IT staff
- It's possible for retail enterprises with many disconnected siloed locations
- It's possible to scale the technology – without growing pains

And, yes, it's possible to successfully implement these new retail technologies. Better yet, it's more than possible – it's necessary, it's critical, it's clearly a certainty!

**Contact us today to learn more about how to leverage these new retail technologies as our customers have done.**



BLOG POST

## Can technology transform the store?

Experts are predicting stunning changes happening in the retail industry, but how far are retailers from the reality?

[READ STORY ↗](#)

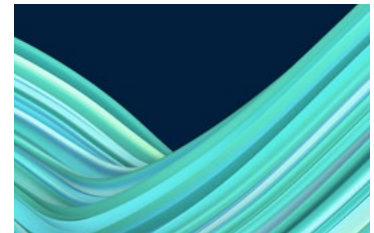


BLOG POST

## Shoptalk is retail's big reunion of the year

One of the most popular retail shows dropped this year. It was about time after a 2-year hiatus!

[READ STORY ↗](#)



BLOG POST

## Will sustainability be the biggest retail trend?

Expect interesting moves in this area related to supply chain and the overall customer journey.

[READ STORY ↗](#)

## ABOUT SOFTWARE AG

The digital transformation is changing enterprise IT landscapes from inflexible application silos to modern software platform-driven IT architectures which deliver the openness, speed and agility needed to enable the digital real-time enterprise. Software AG offers the first end-to-end Digital Business Platform, based on open standards, with integration, process management, in-memory data, adaptive application development, real-time analytics and enterprise architecture management as core building blocks. The modular platform allows users to develop the next generation of application systems to build their digital future, today. With over 45 years of customer-centric innovation, Software AG is ranked as a leader in many innovative and digital technology categories. Learn more at [www.SoftwareAG.com](http://www.SoftwareAG.com).

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