

OVERVIEW

Growing food manufacturer rapidly adds mobile inventory solution to harmonize business systems and enhance productivity, traceability and sustainability.



Scan code to read the full case study



SNAPSHOT

INDUSTRY:

Food & Beverage,
Manufacturing

ENVIRONMENT:

Oracle's JD Edwards
EnterpriseOne

APPLICATIONS:

- P.O. Processing
- Inventory Management
- Warehouse Management
- License Plating
- Manufacturing

CHALLENGES

- 1 Fast deployment required within six months for in-house manufacturing facilities
- 2 Seamless integration with Oracle's JD Edwards ERP
- 3 Flexible solution to integrate with other manufacturing software, such as BarTender, Loftware, WonderWare and others.
- 4 Supporting company-wide sustainability initiatives

GOALS ACHIEVED

- 1 Rapid deployment against aggressive deadline
- 2 25% supply chain savings
- 3 20% increase in productivity
- 4 End-to-end traceability and enhanced compliance
- 5 Scalable solution to support growth
- 6 Enhanced sustainability with paperless processes



RFgen provided flexibility on the front-end to design the transactions the way our bakeries actually operate while still honoring the critical JD Edwards integration. It gave us the best of both worlds.



— Dave Hartwell, Senior Director of Business Applications,
Clif Bar & Company

THE CHALLENGE: RAPID GROWTH

Clif Bar & Company, a leading maker of organic energy bars, was experiencing rapid growth. It used to rely on co-manufacturers to produce its wide range of health products. However, suddenly, its largest co-manufacturer, Conagra Foods, exited the co-branded bakery business.

Clif Bar decided now was time to bring manufacturing in-house—to provide greater control and accelerate further growth. This required Clif Bar to rapidly transition all ERP, warehouse, manufacturing and related business systems from Conagra Foods' Indianapolis bakery within six months—while simultaneously bringing a new bakery online in Twin Falls, Idaho.

“We had to bring up the brand-new Twin Falls bakery, and in the same year, convert all ERP, warehouse, manufacturing and other business systems within six months to take over Conagra Food's Indianapolis bakery,” explained Dave Hartwell, Senior Director of Business Applications.

As part of this transition, the company needed real-time data collection for its Oracle's JD Edwards ERP to ensure perfect accuracy and traceability for food ingredients and finished products. The solution would also need to be paperless to support the company's environmental and sustainability vision. This led

the company to Oracle-certified mobile data collection with barcoding.

THE RECIPE FOR SUCCESS: REAL- TIME INVENTORY

“

RFgen allows us to seamlessly transact our lot required items to provide the inventory usage and lot traceability we require.

– Dave Hartwell

”

The complex requirements of Clif Bar's new integrated operations fueled Hartwell's search. He needed to find a mobile data collection solution that was not only flexible and cost-effective, but also integrated seamlessly with Oracle's JD Edwards EnterpriseOne.

RFgen Mobile Foundations checked all these boxes. RFgen provides real-time, bi-directional information exchange between JD Edwards and barcode scanners, handheld devices, PLCs and more to optimize inventory, production and manufacturing process workflows.

The suite of Oracle-certified mobile barcode software and mobile apps automate most common supply

chain transactions for rapid deployment. Users also have the option to tailor apps for more unique workflow requirements in-house using the RFgen low-code mobile development studio.

Hartwell was equally impressed with the RFgen team and their history of proven experience in the food and beverage industry using lot-controlled inventory management.

Clif Bar & Company implemented RFgen across their Twin Falls and Indianapolis bakery operations, to efficiently conduct day-to-day inventory management in a paperless environment.

Now, Clif Bar bakery associates use wireless barcode scanners running RFgen to collect important data for warehouse, inventory and manufacturing operations. Each day, production line associates use RFgen to request materials, then warehouse associates use RFgen to kit materials and send them to the bakery. After production, RFgen assists in picking, packing and load management for shipments leaving the warehouse.

“RFgen provided flexibility on the front-end to design the transactions the way our bakeries actually operate while still honoring the critical JD Edwards integration. It gave us the best of both worlds,” Hartwell said. “It was also the most affordable solution.”



THE OUTCOME: A SOLID FOUNDATION FOR GROWTH



Our dedicated RFgen sales manager went above and beyond. We provided our RFgen development consultant with our requirements, and he was able to translate those into the transactions we needed. His deep expertise in JDE—both functional knowledge and development experience—was critical to our success.

– Dave Hartwell



Clif Bar realized immediate and continuing benefits from implementing RFgen's mobile barcoding solution. These included:

- Expedited deployment against aggressive deadline
- 25% supply chain savings while maintaining highest quality
- 20% increase in productivity
- End-to-end traceability for food safety compliance
- Scalable software to accommodate rapid growth
- Real-time connection with JD Edwards and third-party applications
- Enhanced sustainability with paperless processes

Sustainability with 100% Paperless Processes

The company mantra, "Think like a tree," reflects Clif Bar's desire to reduce its environmental footprint. Now, Clif Bar's new paperless transaction processing supports these key sustainability goals.

RFgen automates workflows for receiving materials, put away, issuing to work orders, cycle counts, picking, packing, load management, and more. With one scan, transactions are recorded in the ERP—eliminating wasteful paper recording.

"One of our objectives was to run the manufacturing and warehouse transactions with a paperless process. Using RFgen's capabilities to adjust business rules, but still honor standard JD Edwards business functions, made that a reality," Hartwell said.

Mobile Inventory Increases Savings, Productivity

Even with the aggressive deadline, the company didn't have to sacrifice customization, flexibility or functionality. Instead, they gained a solution that worked immediately—with a resulting 25% supply chain



savings and 20% increase in productivity.

RFgen Mobile Foundations also offers seamless exchange of information with JD Edwards and third-party applications for manufacturing, food safety and equipment maintenance. This includes facilitating information exchange between JD Edwards and WonderWare manufacturing execution software, SafetyChain software for food safety, and SOMAX predictive maintenance software.



Because we were able to develop the interface to our transactions just as the bakeries are designed, the transactions are intuitive and the learning curve was much lower than previous experiences. For 80% of our bakery associates, RFgen is JD Edwards, because it is the only system they use."

– Dave Hartwell



"We wanted a single standard interface between systems. RFgen provides a single engine that integrates both real-time warehouse transactions using barcode scanners and third-party integrations with JD Edwards through the RFgen batch queue function," Hartwell explained.

The flexible solution has continued to accommodate new production lines and rapid company growth since the implementation.

But RFgen's mobile platform delivered much more than basic barcode scanning and inventory control:

Intuitive Mobile App Design

RFgen features a flexible low-code mobile application development environment built on visual drag-and-drop. This allows IT staff to rapidly tailor and create new workflows and deploy mobile apps across a variety of screen sizes and device types.

"Because we were able to develop the interface to our transactions just as the bakeries are designed, the transactions are intuitive and the learning curve was much lower than previous experiences. For 80% of our bakery associates, RFgen is JD Edwards, because it is the only system they use," said Hartwell.

Bulk Inventory Control with License Plating

License Plating is a software solution that enables similar inventory items to be grouped together in "containers." License plates can be created for any point in the food manufacturing processes. This makes tracking and moving inventory faster and more efficient for Clif Bar.

"For our lot managed items, we use RFgen's License Plating applications. Materials are

transacted by the license plate throughout the warehouse process," said Hartwell, who has also been pleased with RFgen load management functionality. "Without any additional licensing costs, we were able to leverage RFgen load management. That enabled us to customize the load management process to match how we pick, pack, load and track orders."

Compliance with Lot-Level Traceability

Food safety and traceability measures are extremely important to Clif Bar. In the event of a food recall, manufacturers must be ready to pull affected products quickly and efficiently to avoid costly fines and lost customer trust. To do so efficiently requires compliance to the FDA's FSMA track-and-trace requirements for food ingredients and finished goods.

Clif Bar's new solution enabled all materials to be tracked and lot-controlled through RFgen, effectively automating traceability with software. This heightened the company's recall readiness with greater agility, transparency and accuracy, enhance end-to-end traceability in their supply chain.

"At Clif Bar, there is simply nothing more important than food quality and safety," Hartwell

explained. "RFgen allows us to seamlessly transact our lot required items to provide the inventory usage and lot traceability we require."

Award-Winning Partnership

In addition to supporting Clif Bar's strategic success, RFgen is proud to be one of the key technologies that contributed to Clif Bar receiving the 2017 Manufacturing Leadership Award from Frost & Sullivan in the Enterprise Technology Leadership category.

"Our important suppliers are more than just suppliers; they are our partners. For us, RFgen has met that call," said Hartwell. "Our dedicated RFgen sales manager went above and beyond. We provided our RFgen development consultant with our requirements, and he was able to translate those into the transactions we needed. His deep expertise in JDE—both functional knowledge and development experience—was critical to our success."

Hartwell was happy with RFgen's contribution to the successful rollout: "An amazing and talented team of internal IT professionals, suppliers including RFgen, consultants, and business leaders pulled off successful rollouts in both bakeries despite pretty tough challenges."

ABOUT CLIF BAR

Clif Bar & Company is a leading maker of organic energy bars, including the CLIF®, LUNA®, and CLIF Kid® product lines. Developed with athletes in mind, the employee- and family-owned company provides plant-based energy to fuel and energize movement of all kinds. It prides itself on its environmental and sustainability initiatives and is the number one private organic research funder in the United States.