



## Microsoft Dynamics Customer Solution Case Study



### Solution Overview

**Country:** New Zealand

**Industry:** Plastics Manufacturing

### Customer Profile

Established in 1974, Bailey Tanks is the market leader in the transport and storage of liquids. With manufacturing and distribution sites in both New Zealand and Australia, Bailey Tanks offers a complete range of water management related products to their customers in the industrial, domestic and agricultural sectors.

### Business Situation

Bailey Tanks needed a fully integrated system to support its tremendous growth and enhance production scheduling efficiency. It also wanted to be more proactive and improve overall customer experience with more accurate lead time information.

### Solution

Bailey Tanks replaced its manual, disparate systems with a fully integrated Microsoft Dynamics™ AX solution. A customized Truck Scheduling module from Adaptable Solutions was also implemented.

### Benefits

- Enhanced production scheduling efficiency
- Centralized distribution scheduling processes
- Increased security and management controls
- Cut month-end closure from two days to half day
- Increased operational and management visibility

## Plastics Manufacturer Enhances Supply Chain Efficiencies to Manage Growth Opportunities

“Our production planning and distribution scheduling accuracies directly impact our entire supply chain efficiency and the ability to fulfil customer orders. Microsoft Dynamics gives us the capabilities to efficiently manage the entire production process from the sourcing of raw materials to the shipment of finished goods to customers.”

-- Mr David Bailey, General Manager, Bailey Tanks

Established in 1974, the Auckland-based Bailey Tanks is a market leader in the transport and storage of liquids. The company markets its range of water tank products to the industrial, domestic and agricultural sectors. To meet the tremendous growth opportunities presented by the drought situation in South Queensland, Australia in 2006, Bailey Tanks needed a fully integrated system to enhance its production scheduling and distribution planning efficiencies. Its existing manual, disparate systems could not handle the sudden growth of more than 10 fold in transaction volume.

Microsoft Dynamics™ AX enables Bailey Tanks to fully integrate its back-end operations to enhance its production scheduling and distribution scheduling efficiencies, streamline accounting processes, improve business visibility and speed up decision making.





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Mr David Bailey  
General Manager  
Bailey Tanks

### Situation

Established in 1974, Bailey Tanks started as a custom rotational moulding company and has grown to become the market leader in the transport and storage of liquids. Headquartered in Auckland, New Zealand, Bailey Tanks employs approximately 75 staff across its four sales offices in Australia and New Zealand, and three manufacturing plants in Auckland, Christchurch and Brisbane. To better meet customer needs in the industrial, domestic and agricultural sectors, the company has diversified in the last few years to provide a “one-stop shop” solution for its customers with its comprehensive range of water tank and pump products, including accessories such as fittings, pipes, filter systems and valves.

Having built a strong brand of quality with steady growth over the past three decades, the severe droughts experienced in South Queensland, Australia in 2006 and 2007 provided a strategic growth catalyst for Bailey Tanks.

“Expanding into Australia was the obvious move, which incidentally delivered us straight into a growth opportunity. In 2006, the Queensland State Government announced state subsidies of AUD\$1,000 for each household in the South East Queensland region for the purchase of water tanks to cope with the drought situation. Overnight, our sales skyrocketed, bringing our monthly transaction

volume from approximately 300 in 2005 to 3000 in 2006,” said David Bailey, General Manager, Bailey Tanks.

Supporting the sudden growth of more than 10 fold in transaction volume proved to be an impossible task for its existing manual, disparate systems. These comprised of a standalone Customer Relationship Management (CRM) solution, four separate accounting systems across its four sales offices and Microsoft® Excel spreadsheets used for the manual planning of production and distribution schedules.

Due to the overwhelming response to the government initiative, the company faced a backlog of six months, which further compounded its difficulties with production planning, distribution scheduling and raw materials procurement. Most importantly, the situation made it nearly impossible for its staff to provide accurate delivery lead time information to their customers.

The desire to improve customer responsiveness and enhance overall customer experience drove the Bailey Tanks management to look into a scalable Enterprise Resource Planning (ERP) system that will fully integrate its back-end processes and scale with the company in the future.

### Solution

Bailey Tanks’ key criterion was to find a system that will scale with the company. “We wanted a solution



“Even though we had a very tight timeline for the implementation, we felt assured by the valued expertise and extensive experience from the Adaptable Solutions team, headed by Duncan Cox, its Managing Director. With the past work they have done in the manufacturing sector, especially in plastics manufacturing, we knew that our implementation was in good hands.”

Mr David Bailey  
General Manager  
Bailey Tanks

that we could implement and just “forget about it” for the next 10 to 15 years. The system must be easy to use and will provide immediate relief to our staff in the short term,” said Bailey.

After evaluating several ERP systems available in the market, the Bailey Tanks management selected Microsoft Dynamics™ AX, due to its unique focus on manufacturing. “During our evaluation, we found Microsoft Dynamics AX to be a tier above other systems. When compared with other ERP solutions which seemed more suitable for trading companies, Microsoft Dynamics AX came up tops in its comprehensive range of functionality that is easily customizable to meet the exact requirements of our manufacturing business. It is designed for all sizes of businesses with the ability to scale,” said Bailey.

Bailey Tanks implemented the Foundation Pack and Production modules from Microsoft Dynamics AX. With the help of Adaptable Solutions, a Microsoft® Certified Gold Partner, a Truck Scheduling Module was developed to enable more efficient distribution scheduling.

Thanks to the focused attention by its internal project team which worked well with Adaptable Solutions, the implementation was successfully completed within four months. The system went live in October 2007.

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timeline for the implementation, we felt assured by the valued expertise and extensive experience from the Adaptable Solutions team, headed by Duncan Cox, its Managing Director. With the past work they have done in the manufacturing sector, especially in plastics manufacturing, we knew that our implementation was in good hands,” commented Bailey.

### Benefits

With Microsoft Dynamics, Bailey Tanks successfully integrated its back-end operations to enhance production planning efficiency and centralize distribution scheduling. These improvements give Bailey Tanks the capability to provide accurate delivery lead time information to their customers. Microsoft Dynamics also provides Bailey Tanks with increased security and management controls. With the elimination of manual accounting processes, operational and management visibility are also enhanced.

### Enhanced Production Scheduling Efficiency

On average, Bailey Tanks maintains a production lead time of about two to three weeks. Due to the large capacities of its products such as the BT25000 and BT13500 tanks, Bailey Tanks practices build-to-order production for its larger volume products and build-to-stock production for its smaller volume products in a mixed-mode environment.

With the dramatic rise in raw materials prices worldwide, the



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need to increase production planning efficiency to ensure optimum resource utilization becomes a critical success factor for Bailey Tanks. “Our production planning and distribution scheduling accuracies directly impact our entire supply chain efficiency and the ability to fulfil customer orders. Microsoft Dynamics gives us the capabilities to efficiently manage the entire production process from the sourcing of raw materials to the shipment of finished goods to customers,” said Bailey. In addition, Microsoft Dynamics support for serialized products also enables Bailey Tanks to accurately track the Bill of Materials (BOM) of their finished products backwards through the manufacturing process to the source of their raw materials.

Unlike previously, where production scheduling and raw materials planning were done manually, the detailed capacity scheduling within Microsoft Dynamics helps Bailey Tanks to execute more thorough and reliable production planning. Using Gantt charts, Bailey Tanks’ planners are able to visually assess how staff rotations affect their production schedule. The company also gains more visibility into the entire manufacturing process from end to end.

As Bailey Tanks manufactures the same product across multiple

factories, Adaptable Solutions also customized Microsoft Dynamics to support multi-site production. This helps to simplify production data setup and speed up the processing of production orders through the system.

During a demand crunch, Bailey Tanks is now able to optimize efficiencies by selecting the “next best” alternate resource for a production. This helps to save time otherwise spent waiting for the availability of a particular work centre. Bottlenecks can now be minimized, if not eliminated, due to better control with the sequence and scheduling functionality which reduces setup time and enables tight controls over the production process.

To enhance Bailey Tanks’ customer responsiveness, Adaptable Solutions also customized the system to enable the auto-emailing of sales documents such as sales order and sales despatch confirmations to customers directly from Microsoft Dynamics, without going through Microsoft™ Outlook. This speeds up the process and enables its staff to seamlessly communicate this information to their customers directly from Microsoft Dynamics.

Bailey added, “Most importantly, with Microsoft Dynamics, we are now able to provide more accurate lead time



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### **Centralized Distribution Scheduling Processes**

Efficient distribution scheduling enables Bailey Tanks to get its finished products to the customers in the shortest time possible. With the help of the customized Truck Scheduling module by Adaptable Solutions, Bailey Tanks can now effectively plan sales order lines and transfer order line items for delivery, while taking into account delivery and production constraints.

The seamless integration of the Truck Scheduling add-on module with Microsoft Dynamics AX Master Planning and Production Scheduling enables Bailey Tanks to provide realistic and achievable delivery dates to their customers. Besides improving customer service, Bailey Tanks also enjoys cost savings with the improved utilization of delivery trucks through optimized loading. The system also provides Bailey Tanks with the capabilities to easily reschedule their delivery scheduling in the case of vehicle breakdowns.

As a fully integrated system, Microsoft Dynamics also enables Bailey Tanks to centralize some of its planning processes, the most significant being its distribution scheduling process. “Instead of having one person physically on-

site at each of our four sales offices to handle distribution scheduling, we have successfully centralized the process by managing it remotely from our headquarters. Besides gaining efficiencies from the centralized process, we have freed up valuable manpower resources for other higher-value functions. Our staff have also become more focused and efficient in their work,” said Bailey.

### **Increased Security and Management Controls**

Due to the critical need to ensure minimum margins, the Bailey Tanks management needs tight controls over its critical business data such as fluctuating raw materials costs. “With Microsoft Dynamics, we enjoy more flexibility in setting controls to enhance security. The solution gives us an efficient way to control who gets access to what functions and data, according to the staff’s job function and needs. By eliminating the possibilities of unauthorized manipulation of sensitive data, we are able to preserve data integrity,” explained Bailey.

With Microsoft Dynamics, security policies can be defined across the organization, with customized group policies administered centrally to enhance management controls.

### **Month-End Closure Reduced from Two Days to Half Day**

The new system also helps to

## About Microsoft Dynamics™

Microsoft Dynamics™ is a line of financial, customer relationship and supply chain management solutions that help businesses work more effectively. Delivered through a network of channel partners providing specialised services, these integrated, adaptable business management solutions work like and with familiar Microsoft software to streamline processes across an entire business.

## For More Information

For more information on Microsoft Dynamics, visit Microsoft [www.microsoft.co.nz/dynamics](http://www.microsoft.co.nz/dynamics) or email: [askdynz@microsoft.com](mailto:askdynz@microsoft.com)

For more information about Adaptable Solutions, call 64 9 523 2405, visit [www.adaptable.co.nz](http://www.adaptable.co.nz) or email: [dynamics@adaptable.co.nz](mailto:dynamics@adaptable.co.nz)

For more information about Bailey Tanks, call 64 9 262 7070, visit [www.tanks.co.nz](http://www.tanks.co.nz) or email: [info@tanks.co.nz](mailto:info@tanks.co.nz)

streamline Bailey Tanks' accounting processes. Prior to Microsoft Dynamics, the disparate accounting software used at its four sales offices meant that much time was wasted during every month-end to manipulate the varied data into a centralized accounting system. Tedious data re-entries and imports, with frequent reconciliation, were required to resolve the data inconsistencies often caused by human errors.

"By establishing a fully integrated system using Microsoft Dynamics, these manual accounting processes are eliminated. Month-end closure is now a simple half day process, instead of the previous two days," beamed Bailey.

### Increased Operational and Management Visibility

Overall business visibility has also been enhanced with a fully integrated Microsoft Dynamics system. At the operational level, manufacturing managers now enjoy visibility into other business functions, such as sales and distribution. This gives them a broader perspective into the business, which enables them to devise more effective plans for their areas of responsibility.

According to Bailey, the increased visibility has enabled the Bailey Tanks management to make faster business decisions with confidence. "With Microsoft Dynamics easy-to-use drill-down reporting, management can now monitor key performance indices more closely and in greater detail. The ability to drill down by different regions and product groups gives us more insights to make faster and more informed decisions," said Bailey.

### Confidence to Grow without Growing Pains

Pleased with the comprehensive capabilities and the scalability of Microsoft Dynamics, Bailey said, "With Microsoft Dynamics, we are assured that we have a system in place that will help us scale our processes comfortably to support future growth. It is a relief to know that we can expand our operations without experiencing the usual growing pains."

With plans to "fully integrate everything", Bailey Tanks is looking at replacing its existing Customer Relationship Management (CRM) solution with CRM functionality from Microsoft Dynamics.

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Document published 06/08

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