Whirlpool Corporation focuses on operational excellence as global growth shifts into high gear.

Overview

■ ***Business Challenge***

With its business processes becoming more numerous, disconnected and inefficient as it grew, Whirlpool Corporation reached a point where its profitability stagnated – despite rapid revenue growth. Whirlpool needed to not only consolidate its global business processes, but also integrate them to deliver maximum efficiency through its entire value chain.

■ ***Solution***

Whirlpool engaged IBM Global Business Services to reconstitute its fragmented business processes with best practices across all of its processes and lines of business. Standardized metrics – as well as product and parts taxonomies – enable Whirlpool to achieve a new level of operational efficiency on a global scale.

■ ***Key Benefits***

- *Substantially reduced finished goods inventory*
- *Faster product development cycles*
- *Improved ability to focus on the most profitable products and features*
- *More effective allocation of trade partner incentives*

Whirlpool Corporation is the world's leading manufacturer and marketer of major home appliances, with annual sales of more than US$18 billion, more than 73,000 employees and more than 70 manufacturing and technology research centers around the world.

While globalization creates a host of new market opportunities for manufacturers, it also tends to intensify – and in some cases redefine – the terms of competition. Put simply, global manufacturers need to do a lot of things right to perform successfully on a bigger and more demanding stage. Given the core importance of scale-based efficiency in the global manufacturing business model, perhaps no need is more basic than the vigorous and consistent growth of the business, through organic means, acquisitions or both. In the past decade, Whirlpool Corporation (www.whirlpoolcorp.com), the world's leading appliance manufacturer, has done just that. While Whirlpool

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>
> – Kevin Summers, corporate vice president and Global CIO, Whirlpool Corporation

Business Benefits

- Substantially reduced finished goods inventory
- Faster product development cycles
- Improved ability to focus on the most profitable products and features
- More effective allocation of trade partner incentives
- Optimized product merchandising
- Streamlined parts inventories through standardized parts taxonomies
- Improved ability to manage the company and optimize performance on a global basis by virtue of standardized business processes and performance metrics

needed 90 years to reach US$10 billion in revenues, it took only ten years to reach the US$20 billion mark, aided in large part by its 2006 acquisition of Maytag. Its current plan calls for even faster growth in the next decade.

But Whirlpool is also cognizant of the new and intensifying challenges it faces in meeting this goal, which is why it conducted a top-to-bottom analysis of what it needed to do differently as a business to succeed. Whirlpool framed its analysis by asking itself: How does a company that grew large as a U.S.-centric distributor for Sears transform itself into an even larger global consumer packaged goods company? While the company saw IT issues as part of the equation, it viewed business processes as the true focal point of its efforts. To this end, Whirlpool spent several months drilling down into the processes of each of its lines of business and benchmarked them against the industry.

Among its key findings was the discovery that Whirlpool had roughly 100 separate instances of SAP running throughout the company – a figure that, for all its IT implications, was seen first and foremost as an indicator of the gradual, yet unchecked proliferation of business processes that had occurred over time. Underlying the problem was a chronic and self-perpetuating cycle: because processes were largely unique to a particular line of business or manufacturing location, each incremental addition brought with it a unique set of metrics, product taxonomies, part numbers and other support systems, producing a highly heterogeneous environment that made optimization across the global enterprise next to impossible.

"Having discipline around processes and metrics is important. If you don't have it, it becomes exponentially harder to optimize production as the company scales up. With 20 plants in North America alone, we vividly see the importance of standardized metrics."

– Kevin Summers

Threatened by complexity

While a smaller Whirlpool had been able to improvise around the situation, the growing size, complexity and global scale of the company quickly rendered its disjointed process framework unsustainable. In effect, Whirlpool had reached a tipping point where the growth of the business exacerbated its underlying process inefficiencies – producing a kind of "friction" that kept the Whirlpool bottom line stagnant as its top line grew. To Whirlpool, the key to sustained global leadership was operational excellence, and the only way to achieve it was to rationalize, improve and integrate its processes in a way that would enable optimization across its global operations. Whirlpool turned to the industry and process expertise of IBM Global Business Services to help put this vision into action.

While broadly aimed at process standardization, the IBM role in Whirlpool Corporation's transformation was multilayered. Its first task was to establish a deep understanding of the company's key processes that would become a starting point for optimization efforts. With that established, IBM leveraged

its process expertise and global track record in the consumer packaged goods space to begin laying out the groundwork for its future process framework. An important part of this effort was determining which processes were best suited to global deployment and which – due to local market requirements – would be best deployed regionally. As for the processes themselves, IBM is leveraging its broad portfolio of industry best practices, an intellectual asset that figured prominently in Whirlpool Corporation's selection of IBM.

Tackling redundancy

The deepest layer of IBM's process analysis is also the most granular. As an appliance manufacturer, one of the most basic information elements Whirlpool references is the part number. As the breadth of the Whirlpool product line has expanded, the number of underlying parts involved in making and servicing these products, from the smallest screw to the largest subassembly, has expanded at a proportional rate. In reality, however, many products – often across product lines – employ generic parts that, while functionally identical, have been categorized as different because each business unit has followed its own parts taxonomy. As mapped out by IBM, the implications of this redundancy ripple across Whirlpool Corporation's value chain, beginning with product development.

Say, for example, a new Whirlpool product design calls for a new part that – unbeknownst to its designers – could have been filled by an existing part. The fact that the new (and redundant) part needs to be designed and certified lengthens the product's development cycle and, by extension, its time to market. At the same time, the practice of multiple lines of business maintaining separate stocks of common parts keeps parts inventories at higher than optimal levels and prevents procurement optimization. With Whirlpool launching an average of 73 new products every year, the dramatic cost and efficiency implications of this redundancy underscore the importance of the foundational work IBM is doing to rationalize and standardize the Whirlpool parts portfolio across all business units.

If there is a big picture to the company's transformation story, it is that the key to achieving operational excellence is in moving beyond the standardization of core business processes to actual value chain integration. Whirlpool Corporation's goal of sharply reducing its global finished goods inventory is a case in point, notes Global CIO Kevin Summers. "Having good [Sales & Operations Planning] processes is important, but they can't only be focused on manufacturing. They need to extend up and down our value chain into areas like forecasting, go-to-market strategies, the supply plan and the production plan inside manufacturing. The process implementation roadmap being developed by IBM will be critical to our success in achieving this integration across our global operations."

Solution Components

Software

- IBM DB2®
- IBM Tivoli® family of products
- SAP R/3

Servers

- IBM System p®
- IBM System z®

Services

- IBM Global Business Services
- IBM Global Services – Strategic Outsourcing

Smarter Manufacturing

To stay ahead of rising competition, Whirlpool is implementing best practices across all of its lines of business and integrating them to optimize its business processes across its entire global value chain. Becoming a more globally integrated enterprise enables Whirlpool to achieve "operational excellence" – the delivery of the right product mix to local markets while maximizing the efficiency of its global operations, from R&D to retail merchandising.

A single picture of global production

With the global appliance market becoming more competitive and dynamic, Whirlpool views support for operational, tactical and strategic decision making as a critical underpinning for operational excellence. One of the most basic requirements of optimization is the ability to make production decisions based on capacity and inventory information across global manufacturing facilities. To enable this, IBM is also working to implement a standardized SAP solution across its 30 plus manufacturing sites, through which the Whirlpool executive team will have an "apples-to-apples" view of such key operational metrics as quality, asset utilization, labor utilization and inventory levels. A comparable solution, known as Business Performance Management, provides a dashboard view into key financial metrics such as procurement spend.

Finally, with sales through trade partners like Home Depot accounting for a large share of its revenue, Whirlpool is also seeking to gain more visibility into the effectiveness of the US$1.5 billion it spends annually on trade partner incentives – more than any other company in the industry – so that it can direct its resources to the most effective and profitable channels. To adapt to the increasing competition for retail floor space, Whirlpool is working with IBM to process map all aspects of its retail strategy – from merchandising to pricing – to ensure a product mix that maximizes profitability and increases market share.

In addition to readying its processes for rapid growth, Whirlpool is also working with IBM to strengthen its IT infrastructure, the core of which includes the IBM System z and System p servers, IBM DB2 for core database and data warehouse functionality, and IBM Tivoli products providing systems management and automated backup and recovery. Its data center in Benton Harbor, Michigan is managed remotely by IBM strategic outsourcing staff located in Brazil.

In Summers' view, Whirlpool is hitching its future prospects on rapid growth – and IBM is playing an essential role in helping Whirlpool fulfill the operational challenges of meeting that growth. "We're relying on operational excellence to manage rapid growth more profitably and continue our leadership in a more dynamic and demanding global appliance marketplace," explains Summers. "By enabling Whirlpool to become a more globally integrated enterprise, IBM is helping us reach that goal."

For more information

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