

CASE STUDY FOCUS: PACKAGING DESIGN & MANAGEMENT

## Double-Wall Fiber Hot Cup Replaces Foam EPS Cup

Design, launch and implementation of McDonald's double-wall fiber hot cup achieves company sustainability milestone, increases cost savings, enhances customer perceptions and synergizes supplier network



### Overview

McDonald's size, scale and global reach mean that its operations can have significant impact on people, animals and the planet. In light of its global and regional influence and aspiration to sustainably source all food and packaging, the restaurant leader continues to seek HAVI's partnership in developing projects, programs and products that enhance the social, environmental and economic impacts of its restaurant and supply chain functions.

Critical to this initiative and McDonald's Global 2020 sustainable sourcing commitments was the development, launch and implementation of the double-wall fiber hot cup to replace the foam EPS cup. Because of this accomplishment, McDonald's portfolio now includes a fully sustainably produced product: sustainably grown coffee in sustainably sourced and FSC® certified packaging.

A key element of McDonald's sustainability initiative is its commitment to eliminate deforestation, which has driven the brand to collaborate with NGOs and suppliers on some of its top and most impactful product lines; one being its coffee and coffee cups. The new FSC® certified hot cup complements the company's continued effort to care for the people and environmental impacts of its coffee supply chain, as 100% of the espresso served in McDonald's U.S. restaurants already comes from Rainforest Alliance Certified farms. The company continues to make progress here as well, toward its 2020 target to source all of its coffee from farms and programs supporting sustainable production.

To provide more environmentally responsible packaging while supporting their commitment to sustainability across the McDonald's system, HAVI synergized a network of suppliers (working together rather than as competitors) to produce an assured supply of consumer and FSC® certified eco-friendly double-wall fiber hot cups, which was overseen and managed by their cross-functional teams and then deployed through a tactical rollout strategy throughout the restaurant system.

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### Challenge

McDonald's realized the need for an overhaul on the material and design of its foam coffee cups based on customer insights, as well as a need to align supplier practices with sustainability goals along its value chain. The QSR leader realized that using a foam EPS cup ran contrary to its sustainable sourcing practices – especially as packaging to its coffee – and had been leaving a negative impression with consumers.

Completely dedicated to achieving and surpassing sustainability milestones set forth by the industry, as well as more ambitious benchmarks established by their own leadership team, McDonald's large scale network initiatives prove to be highly complex, integrated end-to-end projects. That said, the importance of seamless workflow through cross-functional management of the double-wall fiber hot cup was paramount from sourcing to deployment and system rollout.

A large-scale initiative that took place over the course of multiple years (delivered 20 percent ahead of schedule), the project required flexibility of project feasibilities and resulting project impacts around the company's promotional calendar and shifting priorities. This would not only be a constraint throughout the design, development and launch, but critical to seamlessly rolling out the new cups to the entire McDonald's system.

Orchestrating and implementing each component of such a monumental project, inclusive of highly integrated teams, networks and systems, McDonald's sought partnership in HAVI to initiate, manage and implement the project across the McDonald's value chain.

### Solution

To begin the process of design and material selection, HAVI hosted an Innovation Blitz in order to meet McDonald's standards in marrying technology, creativity, functionality, operational ease and cost with the promotion of environmental sustainability. Eight hand-selected suppliers were given the criteria and format, then challenged to put forth their best ideas in private presentations to McDonald's leadership. This gave the HAVI and McDonald's cross-functional teams the opportunity

to see the latest and greatest, most innovative designs and technologies available in the industry.

Upon selecting the resulting double-wall fiber hot cup based on cost, speed to market (staying ahead of legislation) and customer feedback, the cup was introduced through a complex, integrated and cross-functionally managed phased approach. The introduction of the cup into the value chain followed a project plan developed by HAVI, and was centrally-managed by cross-functional members of a dedicated HAVI team, McDonald's and accompanied by key suppliers. The plan included these critical components:

- Scope Document
- Key Milestones
- Communication Plan
- Manufacturing Equipment Qualification Plan across 3 suppliers/ 24 production lines/2 types of manufacturing equipment
- Test Plan
- Implementation Plan/Schedule, which included the deployment/ replacement of cups to 14,500 restaurants

Remaining seamless and efficient was critical to the success and ROI of the project. With this in mind, HAVI maintained constant project update communication and reporting to both internal HAVI and McDonald's customer leadership throughout the duration of the project, allowing for quicker decision-making while keeping Senior Leadership simultaneously well-informed.

Recognizing the gold-standard of the FSC® certification, and influence of the trademark and organizational reach of the label, HAVI also managed the phase-in of the FSC® certified board and then subsequently included the graphic on the hot cup. On the heels of the new packaging launch, McDonald's also announced a global Commitment on Deforestation across the Company's expansive global supply chain.

Critical to the rollout of the cup was the Field Quality team. Without a single supplier/manufacturer able to support the system-wide overhaul of one of the largest national restaurant networks, quality control was paramount. In order to generate three cup sizes (small, medium and large) to fit one tight-fit lid, consumer safety was a high priority to ensure leakage or even dripping of hot contents would not ever be a concern.



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Rolling out in regional phases (in total, national rollout will take 4 years), 600-2,000 markets received deployment in a given month: as one supplier is putting their cups into the field, another one is getting ready. Here, coordination and quality inspection was absolutely crucial; so, the HAVI Field Quality team visited 2,000 restaurants across markets to ensure cups maintained integrity and consistency throughout each phase.

From a local store perspective, the Field Quality team was even more rigorous, coordinating with managers to deploy new cups on a schedule and also retrieve old cups for proper disposal on the same truck in order to decrease chances of mismatched cups to lids. This also minimizes the sunk cost of old cups and increases efficiency through the use of reverse logistics of old materials.

Overall, through system synergy, suppliers collaborated to support one of the largest restaurant systems in the world, and centralized management and end-to-end dedicated cross-functional teams, HAVI was able to help convert McDonald's previous EPS foam cup to a renewable resource with the optimized double-wall fiber hot cup, promoting environmental sustainability and reaching a company milestone, while increasing cost savings and enhancing the consumer's brand perception.

### Benefits

- The new cup design provides sustainable and customer benefits with a cost-neutral impact to the system.
- The redesign promotes environmental sustainability through materials changes from EPS foam to a renewable resource within double-wall fiber hot cup, marking a company milestone.
- HAVI facilitated and synergized networks of suppliers to share proprietary technology, royalty free, for a major packaging category. This synergized supplier network has also ensured assured supply throughout the restaurant's system.
- The resulting cup has aligned with brand demand for sustainable products while the trend of legislation continues to build from a regional and global perspective, as well as consumer expectations for quality and corporate responsibility.
- Efficient deployment maintained quality control across the system and reduced risk involved with the system overhaul.
- McDonald's received FSC® certification, now in the hands of millions of consumers across the country – increasing awareness of its sustainable practices.
- Reverse logistics and deployment scheduling to align with managed shipments reduced waste and saved capital in sunk costs.
- There has been a reduction in material use and freight cost due to packing capabilities since the cups redesign and materials' increased insulation, eliminating the need for a sleeve.
- Efforts to optimize packaging design in the U.S. have now led to the elimination of 5.8 million pounds of packaging waste, surpassing the initial goal of 5.2 million pounds. As of the end of 2015, 53% of McDonald's fiber-based packaging is now certified (FSC, PEFC™ or PEFC-endorsed) or recycled, up 23% from the previous year.
- Through dedicated & consistent project management methodologies, HAVI led a high-functioning team inclusive of customer, supplier and internal resources. This resulted in higher productivity and efficiencies as well as delivering the project 20% ahead of the timeline parameters set forth by the customer.
- Project Management established regular communications and project status reporting to keep customer leadership apprised of and aligned with key details of this important initiative, increasing efficiencies throughout the project.



HAVI is a global, privately owned company focused on innovating, optimizing and managing the supply chains of leading brands. Offering services in supply chain management, packaging, logistics and recycling & waste, HAVI partners with companies to address challenges big and small across the supply chain, from commodity to customer. Founded in 1974, HAVI employs more than 9,000 people and serves customers in more than 100 countries. HAVI's supply chain services are complemented by the customer engagement services offered by our affiliated company The Marketing Store. For more information, please visit [HAVI.com](http://HAVI.com).