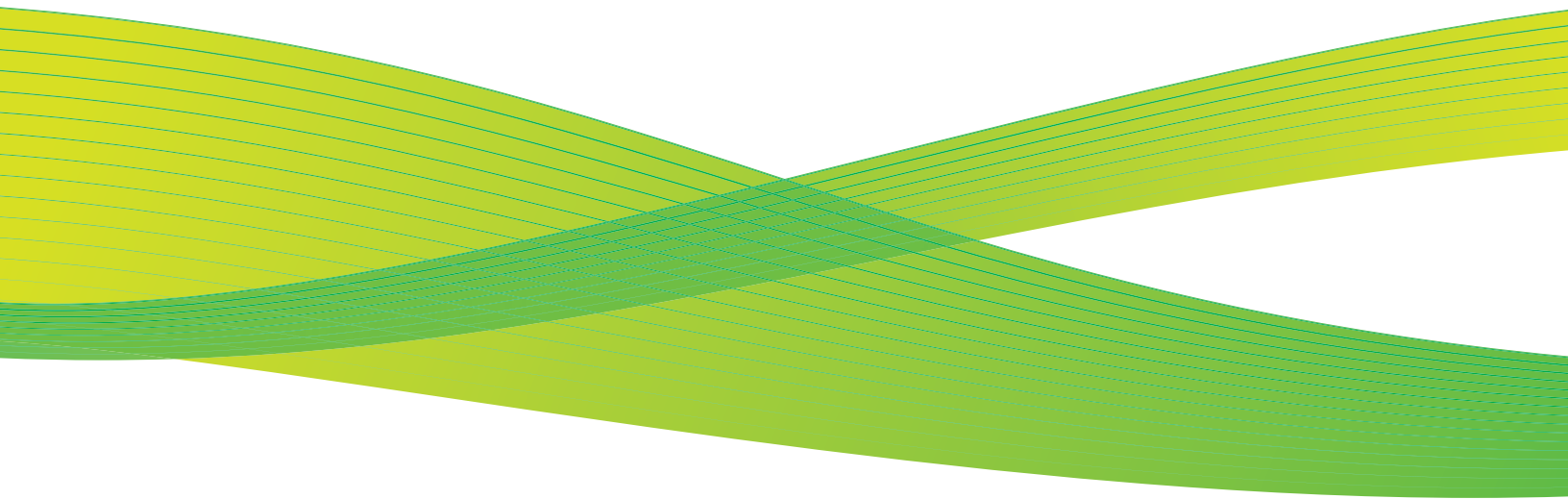


Digital packaging system
enables a streamlined, green
supply chain for Microsoft.



Mediaware produces Microsoft Windows 7 packaging on demand with the Xerox Automated Packaging Solution.

When Microsoft sought to streamline its supply chain with a green packaging solution for its Windows 7 software, Mediaware won the business with the Xerox Automated Packaging Solution for on-demand production.

Now successfully meeting Microsoft's needs, Mediaware is expanding the business with packaging for new products from Microsoft and others.



About Mediaware

Mediaware Digital Ltd. of Dublin, Ireland, is a leading innovator in the manufacture of printed cartons and packaging. Founded in 2009, Mediaware specializes in highly automated, short-run digital packaging. By eliminating toxic chemicals from production and by producing packaging in only the quantities needed, the system contributes to environmental sustainability.

Web site: www.mediawaredigital.com

About Microsoft Corporation

Founded in 1975, Microsoft is the worldwide leader in software, services and solutions that help people and businesses realize their full potential.

Web site: www.microsoft.com

The challenge

In late 2008, Microsoft Corporation decided to streamline its supply chain for the October 2009 multilingual launch of Microsoft Windows 7 operating system software. For EMEA (Europe, Middle East, Africa) and Asia-Pacific distribution, Microsoft sought a partner to securely integrate with its manufacturing and supply chain management system and deliver glossy, full-color, environmentally friendly folding cartons in dozens of languages and in desired quantities. This just-in-time system also needed to satisfy Microsoft's requirements for price, reliability, and production and product quality, while achieving zero process waste and minimal order-to-delivery cycle time. Microsoft made its formal request for bids in early 2009.

The founders of Mediaware Digital Ltd. recognized an opportunity for meeting Microsoft's needs with a digital printing solution. Mediaware Chairman Simon Healy approached Xerox Corporation for help conceptualizing and creating an integrated packaging-on-demand production line to essentially replace a warehouse full of printed boxes with a digital press and IT system.

Mediaware's proposal was the only one Microsoft received for a digital printing solution that included an integrated packaging line and direct connectivity to Microsoft's enterprise resource planning (ERP) systems. Compared to traditional approaches, Mediaware offered lower minimum orders—as few as five cartons per order—less need for physical storage, faster turnarounds and a better environmental footprint with less waste and fewer toxic chemicals.

Mediaware won the contract, but had just six weeks to build the production line for an immovable October Windows 7 launch date.



The solution

Mediaware turned to Xerox for help transforming an 8,000-square-foot facility into a secure, climate-controlled environment for on-demand package printing of folding cartons—in just six weeks. The heart of the operation is the Xerox® Automated Packaging Solution Powered by Stora Enso Gallop® for the iGen4® Press, an integrated packaging production line that automatically prints, coats, stacks and die cuts prior to gluing and distribution. The system comprises the Xerox® iGen4 Press with a Xerox® FreeFlow® Print Server and three in-line finishing devices:

- The Epic CTi-635 Inline Coater with aqueous coating
- The Stora Enso Gallop DC 58 Die Cutter, designed for the iGen4 press' sheet size (22.5" x 14.33" / 571 x 364 mm) and fast die changes
- The Stora Enso Gallop Buffering Stacker Line, which feeds the die cutter and enables printing even if the die cutter is offline

Mediaware also integrated its system with Microsoft's order entry, manufacturing, delivery operations and supply chain partners. The integration uses Xerox® PrintCise® manufacturing supply chain workflow software, enhanced with proprietary Mediaware Arc-Link software. The result is a highly automated web-to-print folding carton production system that uses the internet to accept orders and maintains tight coordination between production and consumption.

In the six-week window, Mediaware also staffed the organization and tested the newly installed equipment and IT infrastructure to ensure smooth operations.

The automated production process

- Orders submitted to Mediaware are processed automatically for production.
- Production-ready jobs are submitted automatically to one of several Xerox® iGen4 Press queues based upon carton size, limiting the need to change folder/gluer settings.
- The iGen4 Press feeds real-time job status to PrintCise via Internet Printing Protocol (IPP).
- Printed Stora Enso Ensocoat® 330-gsm coated solid bleached sulfate boards are transported automatically to in-line systems for automated coating and diecutting.
- The coated, die-cut boards are transferred by hand to the folder/gluer—the first time the carton is touched by hand in normal operations.
- For final quality control, the final batch of cartons is weighed to verify that the right number was produced. If the weight is verified, a delivery label is released. If not, the job goes into quarantine for evaluation.



“We are delivering exactly what Microsoft wanted in a packaging system—timeliness, precision, affordable short runs, sustainability and security.”

— Simon Healy, Chairman,
Mediaware Digital Ltd.

Case study at a glance

Challenge

- Streamline Microsoft's supply chain for Windows 7 software packaging.
- Integrate production with manufacturing and supply chain systems.
- Deliver glossy, full-color folding cartons in dozens of languages and precise quantities, with minimal cycle time from order entry to delivery.
- Meet Microsoft's requirements for price, reliability, production and product quality, and environmental footprint.
- Build the production line in just six weeks.

Solution

- Acquired the Xerox® Automated Packaging Solution Powered by Stora Enso Gallop® for the Xerox® iGen4® Press.
- Engaged Xerox to help build the production line.
- Staffed the organization.
- Integrated the production system with Microsoft's supply chain.
- Extensively tested the equipment and IT infrastructure.

Results

- Successfully ramped up secure facility in six weeks to begin production on schedule.
- Successfully providing affordable short runs with three-day turnarounds.
- Minimized costs through reductions in labor, warehousing, errors, redos and waste.
- Reduced environmental footprint through use of water-based coating materials and digital printing, and reductions in waste.
- Provides flexibility to adjust rapidly to changing market requirements.
- Improved management with a zero-inventory, zero-outage solution.
- Quickly expanded business with packaging for additional customers.

The results

Mediaware met Microsoft's October 2009 deadline and has routinely delivered packaging on schedule ever since. Healy credits Xerox with helping Mediaware ramp up so quickly. "While the equipment is great, the biggest difference (between Xerox and others) is the commitment of the people on the ground," he said. "They were there with us every step of the way."

Volume for Microsoft and additional customers has grown to between 10,000 and 15,000 cartons per day in run lengths of 5 to 2,500, precisely matching orders, making it a zero-inventory, zero-outage solution. Microsoft orders are delivered within three days, and the automated portion of Mediaware's on-demand process, from e-mail order to die cutting, takes less than 45 seconds, yet delivers uncompromised image quality.

Mediaware's costs are lower than traditional production, and savings are passed on to Microsoft. Automated order taking, production, finishing and digital "warehouse picking" limit labor requirements, errors and redos—and associated costs. Warehousing of printed boxes and their associated costs are practically eliminated, freeing up capital. Savings are especially great for Microsoft, because multilingual packaging increases warehousing requirements incrementally.

From a sustainability perspective, the waste associated with conventional folding carton converting—makeready and die-cut scraps, overruns and inventory obsolescence—are drastically reduced. In addition, digital printing requires less ink, creates less substrate waste and uses fewer toxic chemicals than offset and uses no plates. Coating materials are water-based, addressing Microsoft's requirements for green chemistry.

Mediaware has subsequently added a second Microsoft product, Office 2010, and packaging for other brand owners, too. To grow, Mediaware targets manufacturers in pharmaceuticals, retail and other industries, and explores personalized packaging. The potential is significant because the flexible on-demand system fits well with the strategies of e-commerce agility that many companies champion for adjusting quickly to changing market requirements.

Xerox Corporation offers production printing, workflow and business development solutions that help graphic communications companies and in-plants to run environmentally responsible operations and meet their business objectives. Web site: www.xerox.com/digitalprofit.

