In the face of a challenging year for our industry, developers and engineers continued to deliver innovative products in the production print space. Indeed, most have been in the works for years, with launches timed to coincide with the mother of all tradeshows for the printing solutions market: drupa, which takes place only once every four years. But because of the global pandemic, that show along with most others were postponed, pushed virtual, or cancelled outright. So given the circumstances, the analysts at Keypoint Intelligence felt it imperative to showcase the innovations that will move the industry forward.

Our inaugural BLI Outstanding Innovation awards in Production Print recognize advancements in production print hardware, software, and services. The winners feature technologies that improve output quality, enhance productivity, deliver workflow efficiencies, impact sustainability, and advance their product segments in meaningful ways.

**METHODOLOGY**

Invitations were sent to manufacturers and developers that serve the production print market to self-nominate the groundbreaking products, features, and technologies set to debut in 2021 (or soon thereafter). To determine the winners, Keypoint Intelligence’s expert production print analysts—who among them have dozens of years’ experience evaluating production print products and analyzing market trends—judged the entries on three key metrics: how groundbreaking or unique the product or technology is, its likely impact on the market segment it addresses, and the expected timeline for availability in the market.
RECIPIENTS

The winners of the BLI 2021 Outstanding Innovation awards in Production Print are:

Canon Production Printing

Canon Arizona 2300 Series
Available in two sizes, this flatbed series introduces game-changing FLOW technology: an airflow technique combined with a zone-less, multi-origin table layout that allows for less masking, easy job switching, and versatile, accurate, and productive multi-board or double-sided printing. Unlike other flatbeds, no operator time is required for masking the table or taping the media down, thus enabling faster changeover between jobs, shorter set-up times and hassle-free job switching.

Canon ProStream 1800
An impressive evolution for its class, the ProStream 1800 claims offset-press print quality on standard offset coated stocks and delivers increased speed, too. Other innovations include an improved (and proprietary) air-floatation drying technology that leaves printed images and the paper surface intact, while Canon’s IQC camera system has been improved to have an even better impact on print quality.

Canon varioPRINT iX Series
Toner-based production sheetfed presses offer commercial printers a wide media choice and high-quality output, while inkjet-based models excel in productivity and cost efficiency but typically lack media versatility and flexibility. The varioPRINT iX series brings both worlds together and is the first true sheetfed inkjet press capable of handling uncoated and offset coated stocks and flexible media formats and weights. Claimed speed (320 A4 images per minute) and monthly volumes (up to 10 million images per month) are also impressive for the class.
CloudLab Sales & Management GmbH

CloudLab printQ 3D Packaging Design
CloudLab has developed a software solution that demystifies the packaging design process and empowers micro-businesses and non-professional designers to create packaging that both protects their products and helps build their brands. The solution provides a 360-degree view of the package as well as an animation of the flat-to-folded construction that ensures the intended design elements are positioned where desired.

Eastman Kodak Company

KODAK PROSPER Plus Imprinting System
The latest implementation of the company’s STREAM Inkjet Technology, the KODAK PROSPER Plus Imprinting System delivers precise drop uniformity and placement coupled with speeds of up to 600 meters (2,000 feet) per minute. This technology extends analog print quality to hybrid, high-value applications thanks to resolution of up to 600x900 dpi, drop sizes down to 9.8 picoliters, user-selectable ink drop momentum adjustments, precise drop uniformity, and more.

KODAK PROSPER QD Packaging Inks and Film Optimizer Agent
A potential game-changer for the high-speed inkjet segment, KODAK PROSPER QD Packaging Inks and Film Optimizer Agent are important components of Kodak’s end-to-end solutions for high-quality, high-speed digital production printing and digital imprinting for flexible-packaging production. This innovation claims rapid drying and curing along with exceptional durability and bond strength for packaging applications.

KODAK PROSPER ULTRA 520 Press
Powered by the company’s new ULTRASTREAM technology, this press delivers an improved top resolution of 600x1800 dpi and claims impressive print speeds on all paper grades (including glossy papers with high ink coverage). Another highlight: eco-friendly water-based KODAK nanoparticulate pigment CMYK inks for lower operating costs.
Eastman Kodak Company/Uteco Converting S.p.A.

Uteco Sapphire EVO M Press with Eastman Kodak STREAM Technology
The Sapphire EVO M Press is the first high-speed production inkjet press for flexible-packaging printing. The press can create high-quality packaging imagery—using eco-friendly water-based inks—on substrates ranging from paper to film. It boasts low running costs, high speed, and consistently high print quality thanks to the innovative implementation of Kodak's continuous inkjet technology and packaging inks.

Uteco Sapphire EVO W Press with Eastman Kodak ULTRASTREAM Technology
The Sapphire EVO W Press is the first digital web press for the packaging market to use Kodak's ULTRASTREAM Continuous Inkjet Technology. Key features include the ability to print on a range of plastic films and paper, with CMYK output at 600x1800 dpi across media as wide as 1.25 meters (49.2 inches) at speeds of up to 150 mpm (500 fpm). The solution provides numerous options for variable-data printing on packaging (for coding, local/regional promotions, mass versioning, and so on), and works with the new eco-friendly, water-based KODAK PROSPER Press QD Packaging Inks that are certified for indirect food contact.

Global Graphics Software Ltd.

Global Graphics Software Direct Software Platform
When processing files to print, writing to disk causes bottlenecks for the ultra-high data rates required to drive today's—and tomorrow's—faster, wider, higher-resolution presses. And storing RIP output to disk before being able to start screening and printing means there is a delay before the press can start printing. Direct is a new graphics pipeline that sends data directly to the inkjet printhead electronics, eliminating the need to write to disk as an intermediate step. As a result, image processing times are significantly reduced, large volumes of data are handled with ease, and the time to print is accelerated.

Highcon Systems Ltd.

Highcon Systems Beam 2C
The first to introduce digital cutting and creasing into production-volume corrugated packaging, Highcon raises the bar again with a finisher that delivers non-crush digital laser cutting with exceptional cut-out capabilities and its patented DART (digital adhesive rule technology) system. Highcon digital finishing eliminates the need for (and time/cost associated with) a physical die, enabling short time to market, profitable short runs, last minute changes/edits, and general productivity improvements. What's more, the non-impact process maintains the inherent strength of the corrugated board, allowing the reduction by up to 30% of board material with the same protection capability.
HP Inc.

**HP Auto Alert Agent 2.0 for Indigo 15K Digital Press**

This new in-line quality detection system offers automatic detection and reprint of defective prints, so customers can get perfect defect-free prints. It is a fully integrated inspection system that allows every sheet to be inspected in-line—at press speed—with no skip or slowdowns. Using state-of-the-art deep learning methodologies, this real-time solution is much faster than any other inspection system in the market and offers two key advantages over other solutions: rapid defect classification and rapid analysis.

**HP Indigo 100K Digital Press**

The fastest B2-size printer on the market (rated at 4,500 B2 sheets per hour), this all-new platform promises enhanced productivity, groundbreaking automation, and new feeding reliability. It allows operators to create hundreds of jobs per day, with the added benefits of reduced cost per copy and claimed exceptional reliability. The press also introduces a dynamic five-source-feeding system, an automated color measurement system that effectively eliminates calibration time by running calibration in parallel to printing, and continuous stacking through a highly advanced Auto Pallet Replacement technology at the delivery unit.

**HP Indigo V12 Digital Press**

Based on the new HP Indigo LEPX print architecture, this press (expected in 2022) aims to offer digital label production at speeds comparable to analog presses. HP says it will deliver high print quality, up to six-color printing, and support for the widest range of applications in digital label printing.

**Solimar Systems, Inc.**

**Solimar Systems ReadyPDF Prepress Server**

PDF optimization is a key workflow component to keep presses running at full speed, but proper font handling, slowdowns due to slow RIPS, and the inability to process large variable-data PDF files are ongoing issues. The ReadyPDF Prepress Server solution can solve these issues while also reducing PDF file sizes up to 14 times.
Tonejet Ltd.

Tonejet Cyclone

This solution uniquely addresses the booming customized/personalized marketing segment with a system that prints directly onto beverage cans—at a lower cost than traditional decorating methods. Cans produced on the Tonejet Cyclone are 100% recyclable so there are huge environmental benefits compared to labels or shrink sleeves. Its unique printhead and chemistry system is protected globally by over 200 patents, and it enables both mass customization and cost-effective short production runs.

Xerox Corporation

Xerox Adaptive CMYK+ Kits

Specialty printing is one of the fastest-growing digital segments, opening up expanded possibilities for designers, printers, and customers. Not to be confused with simpler technologies that allow printers to add a single additional color to the CMYK mix, the Xerox Adaptive CMYK+ Kits come in the form of two self-contained, swappable, multi-toner kits. The Vivid Toner Kit delivers four specialty spot colors: White, Gold, Silver, and Clear. The Fluorescent Toner Kit adds impact with Fluorescent Cyan, Fluorescent Magenta, Fluorescent Yellow, and Black.
About Keypoint Intelligence

For almost 60 years, clients in the digital imaging industry have relied on Keypoint Intelligence for independent hands-on testing, lab data, and extensive market research to drive their product and sales success. Keypoint Intelligence has been recognized as the industry's most trusted resource for unbiased information, analysis, and awards due to decades of analyst experience. Customers have harnessed this mission-critical knowledge for strategic decision-making, daily sales enablement, and operational excellence—improving business goals and increasing bottom lines. With a central focus on clients, Keypoint Intelligence continues to evolve as the industry changes by expanding offerings and updating methods, while intimately understanding and serving manufacturers’, channels’, and their customers’ transformation in the digital printing and imaging sector.

About Buyers Lab Outstanding Innovation Awards

Outstanding Innovation awards acknowledge newly introduced or publicly announced products, capabilities, or technologies that Keypoint Intelligence analysts believe will advance a product category or move the industry forward in a meaningful way.