

## CANON LAUNCHES NEW I-SENSYS PRINTER

Canon Middle East, world leader in imaging solutions, today announces the release of the i-SENSYS LBP312x, a small footprint, high-productivity printer for use in fast-paced work environments where space is a premium. The new device combines sharp, rich print output at fast speeds with high capacity paper trays, double-sided printing and versatile mobile connectivity, making it ideal for busy workgroups in small office spaces.

### Versatile office workhorse printer

The Canon LBP312x is a black and white printer for busy office workgroups, offering advantages in speed, footprint, print quality, paper capacity and running costs. Its high productivity and compact design make it great for all kinds of busy environments where fast, frequent printing is necessary - from client-facing environments, such as healthcare or retail, to fast-

paced environments, such as logistics, finance or legal.

### Compact footprint

The Canon LBP312x is based on an innovative, more compact print engine, and also uses smaller toner cartridges. Its small footprint means it can be placed closer to users, providing immediate access to high-speed, top quality, mono print output, wherever work actually happens.

### High productivity and fast wake up

At the heart of the Canon LBP312x is an improved print engine that's both compact and also highly efficient, delivering fast A4 and A5 print at speeds of 43ppm and 65ppm respectively. It's ready to print in seconds from power off and sleep when the new Quick Start Up or Recovery modes are enabled, and the high-yield cartridges mean more pages can be printed between refills.

### Versatile configuration options

The Canon LBP312x has one 550-sheet paper cassette built in, and can be extended with up to three more standard cassettes of 550 sheets each. So as well as increasing paper capacity to reduce reloading frequency, it's also possible to print on up to four different sizes of paper, or different types of headed paper or forms, without having to reload.

### Mobility and easy integration with existing printer fleets

The Canon LBP312x supports a wide range of cloud and mobile technologies, including the Canon PRINT Business app, Apple AirPrint, Mopria and Google Cloud Print. Moreover, it's optimized for PCL and PostScript environments, and compatible with managed services, including our e-Maintenance remote service management system and uniFLOW output

management. Hendrik Verbrugge, Marketing Director, Canon Middle East and Canon Central and North Africa: "Canon builds its products around working with our customers to understand their needs.

The LBP312x is built to address the needs of customers that have high document output requirements for a small workgroup or in a compact office environment. Departments or businesses in the legal finance and logistics sectors regularly need to print large amounts of critical documents while keeping office space to a minimum and I believe this is the perfect device for those needs. Mobile connectivity and network integration makes the device perfect for agile workgroups, and uniFLOW compatibility makes it easy to slot into an existing print infrastructure." The new series will be available from Feb 2017.

## HOW GOOGLE CHROMEBOOKS CONQUERED SCHOOLS

**NEW YORK:** The Google Chromebook, a type of stripped-down laptop, isn't a practical mobile device for many people - mostly because it basically turns into an expensive paperweight whenever it can't find a Wi-Fi connection. Yet Chromebooks have defied expectations and made major inroads in an unexpected environment - US schools. In retrospect, that shouldn't be too surprising. Chromebooks are cheap and easy to manage, making them popular with budget-constrained schools with limited tech-support staff. And Wi-Fi is now common enough in US schools and homes to make an internet-dependent device practical for students.

Google doesn't want to stop there. It's releasing new models in partnership with Samsung that are designed to appeal to a broader range of consumers. They have several tablet-like features, including a stylus, touch controls and a 360-degree hinge that allows you to turn the screen face up. One starts selling Sunday for \$449; a more powerful version comes out in April for \$100 more. Google and its manufacturing partners are trying to shed the Chromebook's perception as underperforming budget devices. But even with premium models, expanding beyond US schools won't be easy.

### Chromebooks get schooled

For personal computers and tablets, Chromebook's share of the US education market was 49 percent last year, up from 40 percent in 2015 and 9 percent in 2013, according to IDC figures released this week. But education accounts for just 14 percent of the 110 million devices shipped in the U.S. last year - and Chromebooks make up just 9 percent of that broader total. Their numbers are also low abroad, even in schools. The Chromebook's popularity in US education is also largely limited to grades K-12, analysts say. Macs and Windows laptops are still dominant on college campuses.

### Rough start

Chromebooks use a lightweight operating system designed to get people online faster, without having to wait around for the computer to start up. Much of the heavy lifting on Chromebooks gets done on Google's remote servers, so Chromebooks themselves don't need fast chips or lots of storage. Early on, though, that made Chromebooks seem cheap and underpowered, which "soured consumer expectations right off the bat," IDC analyst Linn Huang said. Online storage for photos and documents online was much less common in 2011 when Chromebooks launched, so their limited local storage was initially unappealing. And the few apps available for Chromebooks didn't work offline, at least at the time.

### Differing needs

But what constrains consumers can actually be liberating in



**NEW YORK:** In this photo, a Google Chromebook displays Netflix in New York. —AP

education. Most kids don't need laptops on the bus or other locations where they can't connect to Wi-Fi. And they don't miss business software like Microsoft Office; Google's online apps for documents and spreadsheets do just fine for homework. "What surprised us was how quickly it took off in education," said Kan Liu, who oversees Chromebooks at Google. Apple's iPad was hot at the time, but Google sold the Chromebook on convenience.

They're easier for classrooms to share; just sign in with a Google account, and a student's apps and documents instantly appear. Teachers also have online tools to lock down what apps and sites students can use. And with models available for less than \$200, schools can get a few Chromebooks for the price of an iPad or a rival laptop. "It allows us to put more devices in students' hands," said Aaron Slutsky, chief technology officer for McDowell County Schools in North Carolina.

### Far from universal

But Chromebook's success story in schools is largely an American one, and it's likely to stay that way. Gartner analyst Mikako Kitagawa notes that Chromebooks are useless in China because the device depends on Google services that aren't available there. And in emerging countries, where a budget laptop would be ideal, she said internet access isn't reliable enough.—AP

## COMPANIES BLUR LINES OVER WHO OWNS DEVICES

**NEW YORK:** When Samsung Electronics remotely disabled the last of its flawed Galaxy Note 7 smartphones last month, it further blurred the lines between who ultimately controls your phone, or computer, car or appliance: you, or the companies that make it work? Industry executives and analysts say companies are exerting greater remote control over their devices - changing how and whether they work, removing or adding software and content, or collecting personal data from them - not always with permission or with the user's best interests at heart.

"(The Samsung case) is exactly an example of how devices ... are no longer objects we own, but rather services we've subscribed to and which can be revoked at a moment's notice," said Stefano Zanero, an Italian computer security expert. Mahbul Alam, chief technology officer at Movimento, a car tech firm now owned by Delphi Automotive, says manufacturers have moved on from just selling a device and hoping there's no recall to a world where they are in touch with users through internet-connected devices that they can "change, modify, adjust" as they see fit.

"With power comes responsibility," he adds. "It's a new power that the device manufacturers and telcos have. How they exercise their responsibility is very important." Samsung said it retrieved 96 percent of the more than three million Note 7s it had sold and activated. That left more than 120,000 unreturned phones that were put out of action by over-the-air software updates or by telecom operators barring them from their networks. "We assume the majority of unreturned devices are not actually used," said a spokesperson for the South Korean firm.

In another example, HP Inc last year used a software update to prevent unauthorized cartridges being used with some of its printers. After some users complained, HP offered an optional update. HP did not respond to requests for comment. In other cases, manufacturers use so-called firmware updates to stop people using their devices in ways they don't want. Apple, for example, routinely upgrades the firmware on iPhones to outwit users' attempts to open up the software to unapproved apps and functions - dubbed jail breaking - said Bunnie Huang, a hardware entrepreneur.

### Gathering data

Bryan Hale of Resin.io, which distributes software updates to connected devices, says gadget makers increasingly realize that connected products are only as good as the software on them. That means they can't afford not to figure out how to update that software. Hacking attacks on appliances like CCTV and webcams highlight the pitfalls of not keeping devices updated.—Reuters