

# REINVENTION: HP'S SECOND NATURE

HP+ OFFERS A LESSON TO THE TECH INDUSTRY

## EXECUTIVE SUMMARY

For more than 80 years, HP Inc. has endured. Founded during the Great Depression in 1939 by Bill Hewlett and David Packard, few realize that the company is more than twice as old as Dell (1984) and Lenovo (1984) and significantly older than Apple (1976). HP has remained competitive and relevant by repeatedly relying on technological innovation. The Palo Alto-based company has multiple legacies, but perhaps none more durable than its \$17.64 billion printer business.<sup>1</sup>

The range and scale of HP's printing solutions portfolio, which includes office, home (consumer), digital packaging and 3D printing, stands out. This product diversity is a compelling strength for HP because it resonates with new segments of users. The work-from-home phenomenon, spurred on by COVID-19, is unlikely to significantly change after the pandemic subsides and employers adopt a hybrid in-office/work-from-home model. In this new reality, we expect work-at-home users to increasingly find value and appeal in innovative ways to print and express themselves.

This research paper will review HP's efforts to reinvent its printer business over the past several years and the last few months. The company is building on its long history of innovation and reinvention to grow its legacy printing business. Its new HP+ smart printing ecosystem puts the fundamentals in place to successfully reposition HP's printing business and reinvent how printing is delivered.

## WHAT IS HP+ AND ITS MISSION?

For the past 10 years, massive consumer and enterprise adoption of smartphones and mobile devices has proven to be a formidable headwind for the printer industry in general. HP is no exception – its overall revenue has stayed relatively flat over the past five years. Recognizing this sea change away from its conventional razor and blades business model, HP announced its paradigm-shifting Instant Ink program in 2013, a successful pivot to a subscription-based program that emphasizes lower supply costs and fundamental convenience. HP worked with its critical channel and retail partners to enable the program and now reports that more than 9 million people have actively

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<sup>1</sup> [https://s2.q4cdn.com/602190090/files/doc\\_financials/2020/q4/FY20\\_HP-Inc.-Earnings-Summary-FINAL\\_updated.pdf](https://s2.q4cdn.com/602190090/files/doc_financials/2020/q4/FY20_HP-Inc.-Earnings-Summary-FINAL_updated.pdf)

subscribed.<sup>2</sup> While Instant Ink ramped at a high rate before the onset of COVID-19, the pandemic has proven to be an accelerant due to the program's convenience for shelter-in-place consumers and work-from-home users. HP reports that Instant Ink has experienced double-digit subscriber growth over the past several quarters as its popularity continues to scale.

Building on the success of its Instant Ink initiative, the company announced HP+ in November 2020. A comprehensive offering for:

- Smart Printer
- Smart Ink Subscription
- Smart App
- Smart for the Planet

Taken together, these elements reveal HP's vision for the future of printing – printing that is effortless, convenient and environmentally friendly. Several HP+ product-related elements deserve more commentary because they are central to executing the objectives of an optimal smart user printing experience.

## DEFINING A SMART PRINTER

HP explicitly defines a smart printer as one that is cloud-connected, allowing printing from any device, anytime and anywhere. The cloud connectivity, similar to that of a smart thermostat, also brings smart security features and self-healing WiFi. In other words, only a cloud-connected printer can keep itself up-to-date, protected and always ready to print regardless of location and time. HP+ printers enabled with Smart Cloud Resilience capability can automatically detect and resolve connectivity issues *before* they impact a user's productivity.<sup>3</sup>

HP believes the integrated 24/7 security of smart printing is a key element as it can help prevent potential malware attacks and protect users' information from falling into the wrong hands. As a vulnerable endpoint that can be hacked or breached on a corporate or home network by a bad actor, the traditional printer [is not recognized as a security risk by many consumers.](#) IT and security managers' appreciation of the threat, however,

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<sup>2</sup> Interview with HP (1-22-21)

<sup>3</sup> Wireless operations are compatible with 2.4 GHz and 5.0GHz operations only. Learn more at [www.hp.com/go/mobileprinting](http://www.hp.com/go/mobileprinting). Wi-Fi is a registered trademark of Wi-Fi Alliance®

has been steadily growing. This situation represents both a marketing communications challenge and an opportunity for HP.

The typical printer can be a vulnerability on your home or office network, posing non-trivial security risks. Since HP manufactures its products with a unique digital signature in the factory, the company employs a secure cloud-enabled handshake that can generate security breach notifications to the user and automatically “self-heal” if it detects a printer device misconfiguration, a telltale sign of a potential outside hack. Extending this security approach to its ink and toner print cartridges via its “Genuine HP Supplies” program, tamper-resistant microcontroller chips guard against potential network intrusions at the supplies level.<sup>4</sup>

Convenience is another aim of the HP+ printing experience. Actuated by the HP Smart App, print content of all types (such as documents and even photos) can be printed remotely regardless of the user’s physical location.<sup>5</sup> Coupled with the new Private Pickup feature (facilitated by the Smart App), an HP+ printer releases documents to a user only when they are physically at the printer, detected by their smartphone’s secure proximity sensing ability. Since COVID-19 has forced many employees with “for your eyes only” printing requirements to work from home, this feature can be highly beneficial for remote work as well as in corporate settings with shared common printers.

All HP+ functionality, from monitoring ink levels and managing print supply subscriptions to managing printer security and connectivity, is accessed via the HP+ Smart Dashboard in the Smart App, a new console-oriented view of the overall printer experience.

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<sup>4</sup> HP Office Print Cartridge Security: HP office-class printing systems are select Enterprise & Managed devices with FutureSmart firmware 4.5 and up and select Pro devices, with respective Original HP Toner, PageWide & Ink Cartridges. Does not include HP integrated printhead cartridges and some LaserJet 100 series cartridges. Digital supply-chain tracking, hardware & packaging security features vary locally by SKU. See [www.hp.com/go/SuppliesThatProtect](http://www.hp.com/go/SuppliesThatProtect) and [www.hp.com/go/SuppliesSecurityClaims](http://www.hp.com/go/SuppliesSecurityClaims).

<sup>5</sup> Requires the HP Smart app download. For details on local printing requirements see [www.hp.com/go/mobileprinting](http://www.hp.com/go/mobileprinting). Certain features/software are available in English language only and differ between desktop and mobile applications. Instant Ink subscription may be required. Instant Ink not available in all countries. See details at [www.hpinstantink.com](http://www.hpinstantink.com). Internet access required and must be purchased separately. HP account required for full functionality. List of supported operating systems available in app stores. Fax capabilities are for sending a fax only. After 24 months, monthly fee applies to continue advanced features with HP Smart Advance. Smart Advance is not available in all countries. For more information, see [www.hpsmart.com](http://www.hpsmart.com).

## SMART INK SUBSCRIPTION REMOVES GUESSWORK AND MITIGATES COST CONCERNS

For years, users have expressed concern over the high cost of ink and toner. Building on the success of Instant Ink, HP+ is designed to ensure users never run out of HP ink or toner<sup>6</sup> while also saving money.

Instant Ink is enabled by cloud-connected HP+ printers that carefully monitor printer usage and automatically ship cartridges to the user before ink or toner is completely consumed. Instant Ink subscribers can save up to 50% on Original HP supplies.<sup>7 8</sup> Flexible subscriptions, which include recycling and shipping costs, start at \$0.99 a month for light printing requirements. To introduce users to the program, HP+ offers 6 months for free (up to 1,500 pages a month), with automatic renewal at selected plan-level pricing thereafter, absent cancellation. Instant Ink plans have no contract or annual fee and can be cancelled at any time.

## HP SMART APP OFFERS COMPLETE FUNCTIONALITY

Responding to evolving consumer trends and creating new innovative ways to print, HP crafted a rich smart printer experience by *embracing* the smartphone as the preferred user interface. HP's Smart App has gesture-enabled capabilities that negate the need for numerous and complex physical buttons on the printer itself. The HP Smart App provides print and scan functionality from the palm of a user's hand.

HP's Smart App plays a strategic role in its mission to provide the best possible printing experience. Millions of users use it for hassle-free product setup, scanning, PDF

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<sup>6</sup> Based on plan usage, Internet connection to eligible HP printer, valid credit/debit card, email address, and delivery service in your geographic area.

<sup>7</sup> Based on monthly subscription cost of HP Instant Ink 700-page plans without purchase of additional sets of pages compared to cost per page to print ISO/IEC 24711 pages on most in-class, traditional A4 color inkjet cartridge printers & MFPs using original standard capacity cartridges priced for: Canada <=399 CAD & United States <399 USD. Sale prices not considered for this study. HP Ink Advantage printers excluded due to non-standard hardware & supplies model. Buyers Lab July 2020 study commissioned by HP, based on publicly available information as of June 1, 2020. Printers selected by market share in IDC Quarterly Hardcopy Peripherals Tracker - Final Historical 2020Q1. For details: [www.keypointintelligence.com/HPInstantInk](http://www.keypointintelligence.com/HPInstantInk)

<sup>8</sup> Save up to 50% on toner. Based on monthly subscription cost for U.S. and Canada for toner HP Instant Ink 1,500 page plan vs. transactional cost per page of in-class monochrome A4 laser printers and MFPs < \$450 USD that use original, standard-capacity integrated cartridges (toner and drum in one cartridge). Buyers Lab April 2020 study commissioned by HP, based on research of publicly available information as of 04/24/2020. Printers selected by market share as reported by IDC Quarterly Hardcopy Peripherals Tracker - Final Historical 2019Q4 for U.S. and Canada. For details and latest report, see: [www.keypointintelligence.com/HPTonerService](http://www.keypointintelligence.com/HPTonerService)

creation, faxing, copying and secure file sharing directly from a mobile device to others via a linked cloud account. First released by HP in 2017 and available on both the Apple and Google Android app stores, the popular and highly-rated app<sup>9</sup> has a hefty 47 million global monthly active users. The app assists cloud-connected coordination and the printer itself to automatically detect and fix connectivity issues<sup>10</sup>, making sure that users can print whenever needed from any device, from virtually anywhere. The app's overall design, quality, and intuitiveness attest to HP's fidelity to mobile device software development.

The Smart App enables numerous productivity tasks that make it convenient for both business and consumer users. Professional-caliber scanning leverages the superior camera technology available in today's smartphones, allowing documents, contracts and business-trip receipts to be automatically cropped, flattened and smoothed. Recognizing that fax machines are still used at many businesses, the HP Smart App integrates easy-to-use secure fax send functionality,<sup>11</sup> useful for numerous on-the-go mobile device faxing scenarios. The app also features time-saving shortcuts that work with popular cloud-storage services such as Google Drive and Dropbox.

## SUSTAINABILITY: A KEY COMPONENT OF HP+

Perhaps the most consequential element of HP+ relates to the company's ongoing commitment to protecting the planet. Sustainability goes to the core of HP's corporate DNA and has been integral to realizing the vision the company's founders established decades ago. Sustainability is seemingly embedded at every level of the business and its impact remains central to HP's Sustainability vision for 2030.

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<sup>9</sup> <https://apps.apple.com/us/app/hp-smart/id469284907>

<sup>10</sup> Wireless operations are compatible with 2.4 GHz and 5.0GHz operations only. Learn more at [www.hp.com/go/mobileprinting](http://www.hp.com/go/mobileprinting). Wi-Fi is a registered trademark of Wi-Fi Alliance®.

<sup>11</sup> Based on internal HP testing. Average timing estimate based on: 1) downloaded HP Smart app on mobile or desktop device, 2) setting up Shortcut, 3) scanning jobs which have more than 2-3 tasks associated with them (scan to email, save and rename, store to cloud, etc.). Average timing savings comparison based on using printer and desktop scan software to complete similar scanning tasks. Requires the HP Smart app download and supported HP printer. For details on local printing requirements see <http://www.hp.com/go/mobileprinting>.

FIGURE 1: 2030 SUSTAINABILITY IMPACT VISION



Source: HP Inc.

As a new element of HP+, Forest First protects and restores forests for every page printed. HP will make an investment for each page printed, regardless of the paper brand used, contributing toward a forest positive future with every HP+ print. But Forest First goes beyond sustainable fiber sourcing and replanting trees. It also works through industry and NGO partnerships to help protect the entire forest ecosystem. This includes the forest animals and the communities that depend on them to live, which are directly impacted by forest degradation. HP's initiatives are designed to drive action now and inspire others to preserve and improve forest ecosystems for future generations. With these HP+ initiatives, HP commits itself to a future that is forest positive

HP's sustainability track record is strong. According to the company, it achieved 100% of this goal in 2016 for the HP brand paper business as it is derived entirely from certified and recycled sources.<sup>12</sup> Even HP's product packaging has been a focus area for sustainability progress, going back to 2009 when the company announced its *Design for the Environment* initiative that laid out objectives for neutralizing the environmental impact in three core areas: energy efficiency, materials innovation and design for recyclability.<sup>13</sup> The company augmented the program with a renewed commitment to

<sup>12</sup><https://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c06601778>

<sup>13</sup>[http://www.hp.com/hpinfo/newsroom/press\\_kits/2009/ecosolutions/reduceimpact/PSGEcoPressFactSheet.pdf](http://www.hp.com/hpinfo/newsroom/press_kits/2009/ecosolutions/reduceimpact/PSGEcoPressFactSheet.pdf)

protecting, restoring, and promoting sustainable forests. Dubbed *Forest Positive*, the program commits HP’s print business to zero deforestation, a countermeasure to the 18.7 million acres of forests (an area nearly 1,300 times the size of Manhattan) lost each year due to the permanent removal of trees for fuel, construction and manufacturing.<sup>14</sup>

HP also recycles 1 million plastic bottles per day through its “closed-loop” recycling process, which incorporates the plastic into new products. Eighty-two percent of Original HP ink cartridges and 100% of Original HP toner cartridges contain up to or over 45% post-consumer plastic content.<sup>15</sup>

**FIGURE 2: HP’S SUSTAINABILITY TENETS**



Source: HP Inc.

This is not an exhaustive list of the various activities that HP undertakes to achieve its corporate goal of becoming the most sustainable technology company on the planet. While the average consumer may not fully appreciate [the commitment that HP makes to its sustainability and environmental goals](#), the industry has recognized its work in this area. Simply put, sustainability is not a “feel good” catchphrase; it plays a central, if not vital, role in HP+.

<sup>14</sup> <https://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c06614535>

<sup>15</sup> <https://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c06614535>

FIGURE 3: INDUSTRY ACKNOWLEDGEMENT FOR HP'S SUSTAINABILITY COMMITMENT



Source: HP Inc.

## A RETAILER PERSPECTIVE: STAPLES U.S. RETAIL

Strong partnerships are often the key to excellent execution. With HP+, the company's long-standing relationship with Staples U.S. Retail offers yet another industry lesson about the value of strategic partnerships.

In several ways, Staples U.S. Retail<sup>16</sup> is the logical partner for HP to work with on its initial go-to-market plan for HP+. First, Staples and HP have partnered for decades and as the pandemic forced employees to work from home on a massive scale, both companies benefitted from workers updating their legacy hardware. HP and other PC OEMs saw their notebook businesses ramp up while Staples has seen a similar acceleration in consumers' interest for "retooling" their home offices with new technology devices. HP's own research shows laptops and printers were among the top five products office workers bought during the pandemic.<sup>17</sup>

In addition, both companies have a modern, aggressive and forward-looking view on their corporate responsibility for protecting the environment. While Staples and HP have partnered since the late 1980s, several product trends and environmental plan intersections make Staples the ideal exclusive launch partner for HP+.

<sup>16</sup> Hereafter referred to as "Staples".

<sup>17</sup> [https://press.hp.com/content/dam/sites/garage-press/press/press-kits/2020/2020-innovation-summit/hp\\_wes\\_infographic.pdf](https://press.hp.com/content/dam/sites/garage-press/press/press-kits/2020/2020-innovation-summit/hp_wes_infographic.pdf)

On the environmental front, both companies have similar objectives. Staples reports that 30% of its product sales have eco-based features (meeting one or more environmental guidelines, from recycled content to leading environmental certifications). The company annually collects nearly 50 million pounds of what it dubs “eWaste” (e.g., electronics, batteries, and ink/toner) in North America.<sup>18</sup>

In conversations, Staples senior leadership makes it clear that the company sees HP+ as an opportunity to differentiate and solve the most significant pain points that customers continue to face when printing:

- Running out of consumables at the wrong time
- Minimizing price with low-cost subscription plans based on usage
- Maximizing the use and creative potential of its printers in a hassle-free manner

Staples’ customer research indicates that most consumers are yearning to do more innovative and productive things with their printers. The company believes HP+ is perfectly suited to deliver on that promise.

Staples indicates that customer response to HP+ has been exceedingly strong since the program was announced. In particular, the total “solution” persona of HP+ is particularly attractive to Staples’ customers because it has a customized and personalized feeling. Staples is also in agreement with HP’s embrace of smartphones as an essential device for cloud-enabled printer management and control. Given these synergies, it’s easy to understand Staples’ excitement about HP+.

## CONCLUSIONS AND CLOSING COMMENTS

To be properly understood and fully appreciated, HP’s newest reinvention of its printer business must be viewed as a long, never-ending journey with multiple milestones (including “firsts” such as wide-format printers and digital print packaging services). It’s also a great teachable moment for the entire tech industry.

Regardless of age, successful companies must combat relentless competition and changing usage models to maintain their leadership position. HP has reinvented itself multiple times over its eight-decade lifespan to maintain its edge and protect its legacy printer business. Defending the printer business is a substantial task, given how

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<sup>18</sup> [https://www.staples.com/sbd/cre/noheader/about\\_us/corporate-responsibility/environment/performance-highlights/index.html?icid=envh:pane:3:env:20180422](https://www.staples.com/sbd/cre/noheader/about_us/corporate-responsibility/environment/performance-highlights/index.html?icid=envh:pane:3:env:20180422)

smartphones and other mobile devices have altered the printing landscape over the past 10 years.

However, HP's current reinvention is focused on meeting emerging customer needs, with printers that are optimized to work with users' smartphones, anywhere and anytime. What's more, HP is transitioning from a razor and blades model to a new model that will save customers money on supplies and eliminate interruptions. Underlying all of this is a commitment to forest restoration.

HP+ presents the company with an opportunity to reposition the very nature of printing in consumers' minds. Rather than trying to fend off the smartphone as a threat to its print business, HP embraced smartphones as part of its cloud-connected, print-enabled ecosystem to leverage the ease of use, security, productivity and convenience benefits they provide.

HP's Instant Ink subscription service was the first step in moving HP's imaging business to a "print-as-a-service" model. While that transition has been successful, the aspirational aspects of HP+ make the initial Instant Ink announcement look quaint.

IT professionals, small businesses and even consumers want eco-friendly solutions. A recent poll indicated that nearly a third of IT professionals rated sustainability as "extremely" or "somewhat" important in influencing its IT investment decisions.<sup>19</sup>

HP's printer business continues to be profitable, diverse and critical to HP's long-term success. The company knows it has little choice but to transition its traditional business model to a services-based one, and it understands the risks involved. It must continue to use its marketing engine to convince customers of the usage model and convenience benefits derived by connecting its printers to the cloud. While many customers will take advantage of those benefits, concerns around privacy may prove to be headwinds that HP must confront with explicit, proactive messaging.

While HP can't forego its corporate reputation for product innovation – and it shouldn't – HP+ may be poised to reinvent an entire industry. The tech space history is littered with examples of companies who refused to break away from the past or dare to take on bold new ways of operating. Success can never be guaranteed, but the core

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<sup>19</sup>[https://www.canalys.com/client/content/getcontent.php?id=17312&utm\\_source=19833&utm\\_medium=instantemail&utm\\_campaign=1731](https://www.canalys.com/client/content/getcontent.php?id=17312&utm_source=19833&utm_medium=instantemail&utm_campaign=1731)

fundamentals of HP+ are sound. If the company can execute its vision, its printing business should remain healthy, relevant and a model for the rest of the industry.

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