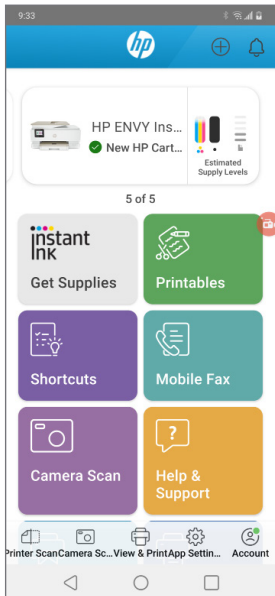


July 2022



HP Smart: Best-in-Class Print App

Objective

Commissioned by HP Inc. to evaluate the HP Smart app against other top OEM print apps, Keypoint Intelligence considered a variety of key criteria to access each print app's compatibility for the majority of printers and copiers for home and office use. The competitive set for this study consisted of the Brother Mobile Connect app, the Epson Smart Panel app, and the Canon Print Inkjet/Selphy app. The testing parameters considered Apple mobile and desktop, Android mobile, and Windows desktop.

¹Compared to OEM printing apps for the majority of top-selling, network-capable inkjet/laser printers and all-in-ones for the home and office, priced ≤\$450 USD. Printers selected by market share as reported by IDC Quarterly Hardcopy Peripherals Tracker – Final Historical CYQ4 2021. Claim based on research of printer manufacturer's print apps and Keypoint Intelligence hands-on testing and study commissioned by HP, July 2022. For details, please see: keypointintelligence.com/HPSmartapp

Background

Conducting business across myriad devices is commonplace today, be it in an office, a shared workspace, or a home office. Regardless of the device used, it is important that processes remain available and easily accessible. Print is a pivotal part of many workflows and, with the growth in wireless technology, it is vital to make sure the tools available are intuitive to use. Therefore, to keep pace with modern business, it is essential to have access to a feature-rich app that is easy to use across a spectrum of devices and operating systems.

Methodology

Keypoint Intelligence technicians downloaded the most recent versions of each OEM print app available for iOS, Android, Windows, and MacOS desktop platforms to be tested across their respective devices. Though HP and Brother are the only vendors to provide their apps for Windows and Mac desktops, both platforms were also tested. The HP Smart app, Brother Mobile Connect, Canon PRINT Inkjet/Selphy, and Epson Smart Panel were tested using the HP Envy Inspire 7955e, the Brother DCP-J1140DW, the Canon PIXMA TR7020, and the Epson Expression Photo XP-8700.

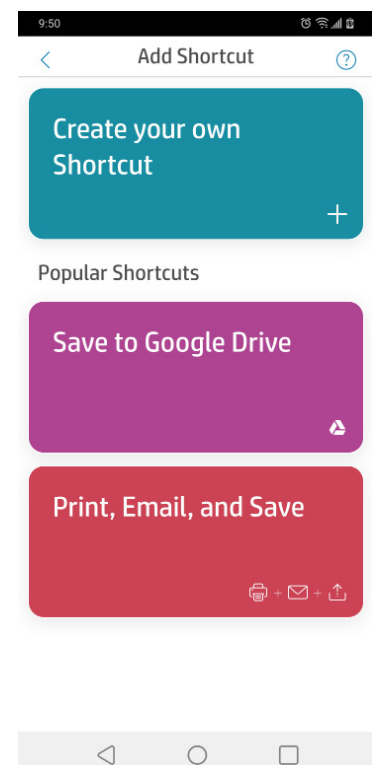
Analysts noted each available step, function, and option the apps offered during installation and key processes like print, scan, fax, copy, and even photo editing, paying special attention to the usability of each app and how intuitively the workflows progressed. The ability to customize was detailed as analysts explored each workflow, as were any errors or hindrances experienced. Prompts or shortcuts to access connectors to file sync-and-share sites like Dropbox, or social media sites such as Facebook, were recorded. Lastly, analysts examined the ability of the apps to provide users with remote feedback and device status alerts for supply levels and misfeeds, among others.

Findings

The HP Smart app has advantages across each tested platform. The UI employs a convenient tile format, allowing users to either streamline and focus on their most used processes, as well as engage with enhancements such as the ability to design photobooks, or produce creative projects. This encapsulates the home office experience: The same device may be used for technical business presentations, simple documents to review, and creative processes that may or may not be tied to business. From a user perspective, the HP Smart app provides the greatest flexibility and ease of use, letting users customize the app by selecting and rearranging many functions on the screen, all while allowing quick access to what they use most. The other apps have static menus, meaning users must navigate to perform tasks such as submenus to change settings or view vital statistics.

Scan features of the HP Smart app are far more robust than the competitors, providing selections both before and after the scan takes place, as well as intuitive routing options. The HP Smart app also offers the most remote feedback to the user, not only providing at-a-glance consumable status levels on the home screen but also quick and accurate feedback on paper levels, offline status, open doors, and more.

One thing that helps make the HP Smart app the best in class is HP Shortcuts. This function allows users to save unique workflows as one-touch buttons, so they can automate tasks like scanning an expense report, printing a copy for their records, and emailing a copy to finance. The Epson Smart Panel app sports a preset copy



Shortcuts Home Screen on the HP Smart App

function, but none match the standard of functionality from HP's offering, thus giving HP the edge by allowing the use of Shortcuts functionality to program unique job types across each available mobile or desktop platform.

Another key advantage of the HP Smart app is how it works with **HP+**, a specific type of printer that offers extra value to elevate users' print experience. With HP+ printers, customers get advanced HP Smart app features, an extra year of warranty protection, increased sustainability features, included ink for the first six months and new, native in-OS printing that allows you to print from virtually anywhere on any OS, among other benefits. With HP+, users can utilize a proximity-based pull-printing solution called Private Pickup through HP+ smart printers connected to HP+ cloud. Using the HP Smart app, users can submit jobs to an HP+ smart printer, at which point the job is securely stored in the HP+ cloud until release. So long as the HP Smart app is used to send the job to the machine, with Bluetooth functionality enabled on the chosen device, users will be able to release the job as they approach the printer. Enterprise environments specifically benefit from this secure printing solution, without the need for additional software. This is a feature the competing apps do not support. Private Pickup also poses excellent value for consumer print environments, as an enterprise-level secure print solution is included with the HP Smart app and HP+ smart printers.

When accessed from Windows and macOS, the HP Smart app still outperforms the competing apps in available features, customization, and usability. Both the Windows and macOS desktop editions of the HP Smart app mirror the performance of its iOS and Android counterparts, with the same visual interface. The consistent interface means users will be familiar with processes and will not need to recalibrate between devices. HP Smart app maintains a rich feature set without involving additional programs or drivers. Installation for the application was quick and simple, and no errors occurred throughout the process.

There are also many more options for remote feedback without utilizing other programs, and the scan features continue to be considerably more robust than competitors. While the app can connect to many applications, it also provides shortcuts to commonly used connectors to save time. Though Canon's PRINT Inkjet/Selphy app closely mirrors the HP Smart app in terms of its print, scan, and copy capabilities, the software as a whole is not as intuitive and succinct as the HP Smart app.

Keypoint Intelligence analysts found the HP Smart app to be an intuitive and flexible choice for workflows like printing and scanning. While all the apps offer a competent feature set, the HP Smart app takes it a step further with a stronger feature set and even better usability. The result is the best in-class print app, versus the competitors, in this test.

¹Compared to OEM printing apps for the majority of top-selling, network-capable inkjet/laser printers and all-in-ones for the home and office, priced ≤\$450 USD. Printers selected by market share as reported by IDC Quarterly Hardcopy Peripherals Tracker – Final Historical CYQ4 2021. Claim based on research of printer manufacturer's print apps and Keypoint Intelligence hands-on testing and study commissioned by HP, July 2022. For details, please see: keypointintelligence.com/HPSmartapp

Supporting Test Data

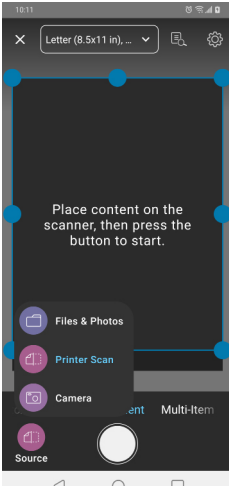
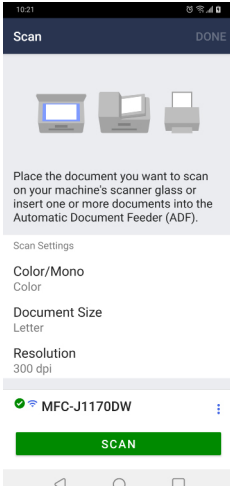
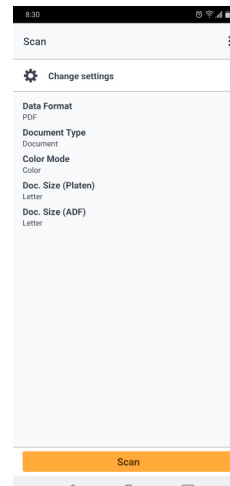
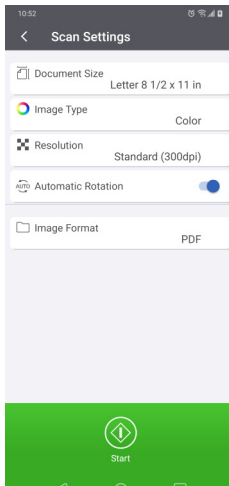
User Interface

Print

HP Smart	Brother Mobile Connect	Canon PRINT Inkjet/Selfhy	Epson Smart Panel																											
<div><div>10:24</div><div>Printer Setup</div><div>Choose a type of printer to add to HP Smart</div><div>Set up a new printer Set up and connect to a new HP printer and start printing</div><div>Get started</div><div>Add a printer that's already set</div></div>	<div><div>10:21</div><div>Print Settings</div><div>MFC-J1170DW</div><div>Paper Size Letter</div><div>1 Copies</div><div>Layout 1 in 1</div><div>2-sided OFF</div><div>Color/Mono Color</div><div>Quality Normal</div><div>Select Pages 1-8</div></div>	<div><div>10:27</div><div>Print</div><div>Change settings</div><div>Copies 1</div><div>Print with paper that is set up on the printer Off</div><div>Paper Size A5</div><div>Same as document size On</div><div>Media Type Plain Paper</div><div>Color Mode Color</div><div>2-sided Simplex</div><div>Print</div></div>	<div><div>10:51</div><div>Print Settings</div><div>PREVIEW</div><div>Printer XP-8700 Series</div><div>Printing Range 1..8</div><div>Paper Size Letter 8 1/2 x 11 in</div><div>Media Type Plain Paper /Bright White Paper</div><div>Layout Borders</div><div>Print Quality Standard</div><div>Paper Source Automatic</div><div>Color Color</div><div>2-Sided Printing Off</div><div>1 Copies</div><div>Start</div></div>																											
<div><div>11:42</div><div>ENVY Inspire 7900e All-in-One...</div><div>Ready</div><div>1 / 77</div><div>Copies - 1 +</div><div>Page Range 1-77 (e.g. 1-6,12,15-17)</div><div>2-sided 1-sided</div><div>Color Mode Color</div></div>	<div><div>10:21</div><div>Print Preview</div><div>2/8</div><div>MFC-J1170DW</div><div>Letter, Plain Paper</div><div>PRINT</div></div>	<div><div>10:27</div><div>Preview (Document)</div><div>Grounding</div><div>Extension Cords</div><div>TABLE A. RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLTS)</div><div><table><tr><th>MAXIMUM LENGTH (FEET)</th><th>25</th><th>30</th><th>35</th><th>40</th><th>50</th><th>60</th><th>75</th><th>100</th></tr><tr><td>AWG</td><td>18</td><td>18</td><td>18</td><td>18</td><td>16</td><td>16</td><td>16</td><td>16</td></tr><tr><td>CM</td><td>7.6</td><td>9.1</td><td>10.7</td><td>12.2</td><td>15.2</td><td>18.3</td><td>22.9</td><td>30.5</td></tr></table></div></div>	MAXIMUM LENGTH (FEET)	25	30	35	40	50	60	75	100	AWG	18	18	18	18	16	16	16	16	CM	7.6	9.1	10.7	12.2	15.2	18.3	22.9	30.5	<div><div>10:51</div><div>Preview</div><div>6/8</div><div>Start</div></div>
MAXIMUM LENGTH (FEET)	25	30	35	40	50	60	75	100																						
AWG	18	18	18	18	16	16	16	16																						
CM	7.6	9.1	10.7	12.2	15.2	18.3	22.9	30.5																						

<p>The HP Smart app makes mobile printing very easy. Dedicated “Print from” buttons for different sources, plus easy wizard-like job configuration menus, make it simple for users to select all the settings they need to print.</p>	<p>Printing using Brother Mobile Connect is simple, which should be expected given its limited feature set. The app enables users to print photos stored in their camera roll and documents, as well as those saved in the user’s device history.</p>	<p>Canon PRINT Inkjet/Selphy offers simple document and photo print mobile procedures, mostly because of its simple feature set. Users can preview the image, select the amount of copies to make, paper size, media type, border, page range, and grayscale settings.</p>	<p>Epson Smart Panel offers simple and easy printing from mobile devices. The app has two print buttons: Print photos and Print Documents. Users can preview the image, select the number of copies, print range, paper size, media type, layout options, print quality, paper source, color mode, and duplex printing.</p>
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Scanning

HP Smart	Brother Mobile Connect	Canon PRINT Inkjet/Selphy	Epson Smart Panel
			

			
<p>The HP Smart app employs a simple scanning paradigm, which makes it easy for users to capture information, be it in paper form or from digital sources. The app enables users to capture documents using their smartphone's camera (images on the camera roll can also be imported) or through an MFP. Dedicated scan to email and cloud buttons streamline scanning processes. Scanning with an MFP is equally simple, as users select the source through a clearly marked scan source icon. There are many features available after scanning, including a unique and useful mechanism for adding text to scanned documents.</p>	<p>Brother Mobile Connect has limited scan functionality compared to the apps in this group, which does make it easy to use. Users click Scan and then select document size, and scan type, after which they hit Scan. Users can view the document and add/remove pages from the scan once completed. Scanned images can be saved as a PDF or JPEG, as well as either shared or saved to the file history for later use.</p>	<p>Canon PRINT Inkjet/Selphy offers very simple scanning functionality. Users can select document type, color mode, and document size settings before scanning. After capture is complete, users can preview the document and route save it as either a JPEG or PDF document.</p>	<p>Epson Smart Panel has two scanning buttons: Scan and Document Capture (capture images using the smartphone's camera or by importing an image from the camera roll). When using Scan mode, users can configure the source (ADF or platen), document size, and image type, and select resolution, brightness, and gamma settings. When scanning is complete, users can save the image in a local folder, in the device's camera roll, or open it in another application on the smartphone. Alternatively, users can route scanned images to Box, Dropbox, Evernote, Google Drive, and Microsoft OneDrive.</p>

Help and Maintenance

HP Smart	Brother Mobile Connect	Canon PRINT Inkjet/Selfhy	Epson Smart Panel
			
<p>HP Smart app provides status and printer information on the home screen as well as in-depth details when selecting the printer icon, which can also take users to resources to search online help. HP provides a virtual agent to guide users through solving common problems and issues. The error messages were accurate and quick to appear when issues were simulated and to resolve when issues were rectified.</p>			<p>Epson Smart Panel provides status and printer information as well as links to let users search online help. Users can also perform maintenance tasks such as head cleanings, nozzle checks, or checks for firmware updates. There is a banner on the home screen that says if the printer is ready or is experiencing an error, and troubleshooting is available. Users can also access video help manuals to solve any common errors or problems.</p>
	<p>Alerts show up as a small notification under the relevant icon on the home screen.</p>	<p>Canon PRINT Inkjet/Selfhy provides a Menu for printer and consumables status, as well as printer information for the connected device. The app also provides a link to an online manual for further help and support.</p>	

Feature Comparison (Android/Apple Mobile)

	HP Smart	Brother Mobile Connect	Canon PRINT Inkjet/Selphy	Epson Smart Panel
Features Set	Instant Ink Supplies (Order) Printables Shortcuts Mobile Fax Camera Scan Help and Support Print Photos Print Documents Printer Scan Copy Camera Scan App Settings Account Personalize Tiles	Status Document Print Photo Print Scan Copy Maintenance Connect Adv Settings Ink & Toner Smart delivery Buy Supplies Home Scan History Notifications	Photo Print Document Print Create Photo Items Smart Phone Copy Scan Copy	Print Photos Print Documents Scan Document Capture Copy Preset Copy Access to Class Id Card Borderless Copy Book Copy Creative Print Fun with Printing Guest Connection Printhead Cleaning Video Manuals Troubleshooting
Features Other	Customizable (all can be toggled on or off)			
Photo Editing Features	Filters Auto-Enhancement Add text Crop (basic and advanced to fit specific paper sizes) Rotate Flip Brightness Saturation Contrast Clarity Exposure Shadows Highlights White Blacks Temperature	Not Applicable	Not Applicable	Paper Size Media Type Layout Print Quality Paper Source Color Print Date Auto Correct Sharpness

Scan Features	Pre-Scan Batch Photo Document Text Extract Multi Item Book ID Card Auto-File Name Auto-Heal Auto-Orientation Smart File Naming Save as Text Files Flatten Book Pages Flash Page swap Spell Check Text Edit Scribble Signature	Scan Color/Mono Document Size Resolution Machine Info Select Machine	Pre-Scan Change Settings Data Format Color Mode Doc. Size Platen Doc. Size ADF Main Menu Change Save Location Share	Scan Scanning Side More Settings Document Size Image Type Resolution Image Format Start Post Scan Delete Crop Rotate 90/180 Reverse Order File Name Location
	Post Scan Edge Detect Auto, Full, Flatten Share/ Save Name File Type File Size Print Shortcuts Mobile Fax File Name Add More Pages Rotate Auto-Orientation			

Print	Print Type Print Size Rotate Edit Crop Adjust Image Filters Text Markup Print Share Shortcuts Fax	Print Preview Photo Crop Rotate Expand Print Settings Media Type Borderless Copies Color/Mono Quality Cloud Services Email Paper Size Copies Layout 2-Sided Quality	Print Settings Copies Print with paper in printer Paper Size Media Type Border Amount of Extension Color Mode Auto Photo Fix Sharpness	Copies Paper Size Media Type Layout Print Quality Paper source Color Print Date Auto Correct Sharpness Clear Rotate Print
Connectors	Dropbox Google Drive Google Photo Facebook Evernote Quickbooks Other	Google Drive	Dropbox Evernote Google Drive Google Photo OneDrive Instagram Box Image Canon	Google Classroom
Remote Information Available	Load Paper Cover Open Tray Open Tray Empty Toner Missing Offline Ink Levels Errors Jams	Ready/ Busy Cover Open No Ink Ink Levels in Pages- ISO/Usage Error Messages Paper Tray Jams Offline	Ready/ Busy Cover Errors Ink error Ink Levels Paper	Ready/ Busy Ink Levels Paper Not loaded Ink Levels Waste Tank levels

Feature Comparison (Windows/ Apple Desktop)

	HP Smart	Brother Mobile Connect	Canon PRINT Inkjet/ Selphy	Epson Smart Panel
Features Set	Pre-Scan	App Not Available	App Not Available.	App Not Available
	Source	iPrint & Scan	IJ Network Scanner	Print driver
	Detect edges	Standard Print Driver	IJ Printer Assist	Scanner Driver
	Scan Area		IJ Scan Utility	Scan smart
	Output			Photo+
	Resolution			Photo+ Tool
	Document			Scan 2
	Camera			
	Multi-Item Scanning			
	Book Scanning			
	ID Card Scan			
	Auto File Naming			
	Smart File Naming			
	Save as Text Files			
	Text Recognition			
	Auto-Heal Scans			
	Text Edit			
	Text Extraction			
	Scribble Signature			
	Post Scan			
	Print			
	Save			
	Share			
	Shortcuts Mobile			
	Shortcuts Printer			
	Fax Send			
	Add			
	Type			
	Compression			
	Language			
	File Name			

Print	Printer Presets Copies Black and White Two-Sided Pages Print			
Connectors	Print From Dropbox OneDrive PC Applications with Print Available Scan To Twitter PC Dropbox OneDrive Installed File Applications			
Remote Information Available	Load Paper Door Open Jam Toner Missing Offline Toner Levels Errors			

Print	Print Type Print Size Rotate Edit Crop Adjust Image Filters Text Markup Print Share Shortcuts Fax	Print Preview Photo Crop Rotate Expand Print Settings Media Type Borderless Copies Color/Mono Quality Cloud Services Email Paper Size Copies Layout 2-Sided Quality	Print Settings Copies Print with paper in printer Paper Size Media Type Border Amount of Extension Color Mode Auto Photo Fix Sharpness	Copies Paper Size Media Type Layout Print Quality Paper source Color Print Date Auto Correct Sharpness Clear Rotate Print
Connectors	Dropbox Google Drive Google Photo Facebook Evernote Quickbooks Other	Google Drive	Dropbox Evernote Google Drive Google Photo OneDrive Instagram Box Image Canon	Google Classroom
Remote Information Available	Load Paper Cover Open Tray Open Tray Empty Toner Missing Offline Ink Levels Errors Jams	Ready/ Busy Cover Open No Ink Ink Levels in Pages-ISO/Usage Error Messages Paper Tray Jams Offline	Ready/ Busy Cover Errors Ink error Ink Levels Paper	Ready/ Busy Ink Levels Paper Not loaded Ink Levels Waste Tank levels

About Keypoint Intelligence

For 60 years, clients in the digital imaging industry have relied on [Keypoint Intelligence](https://www.keypointintelligence.com) 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 to improve business goals and increase 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.

For more information on Keypoint Intelligence, please call (973) 797-2100, visit [keypointintelligence.com](https://www.keypointintelligence.com), or email info@keypointintelligence.com.