

Mopria Alliance



2016



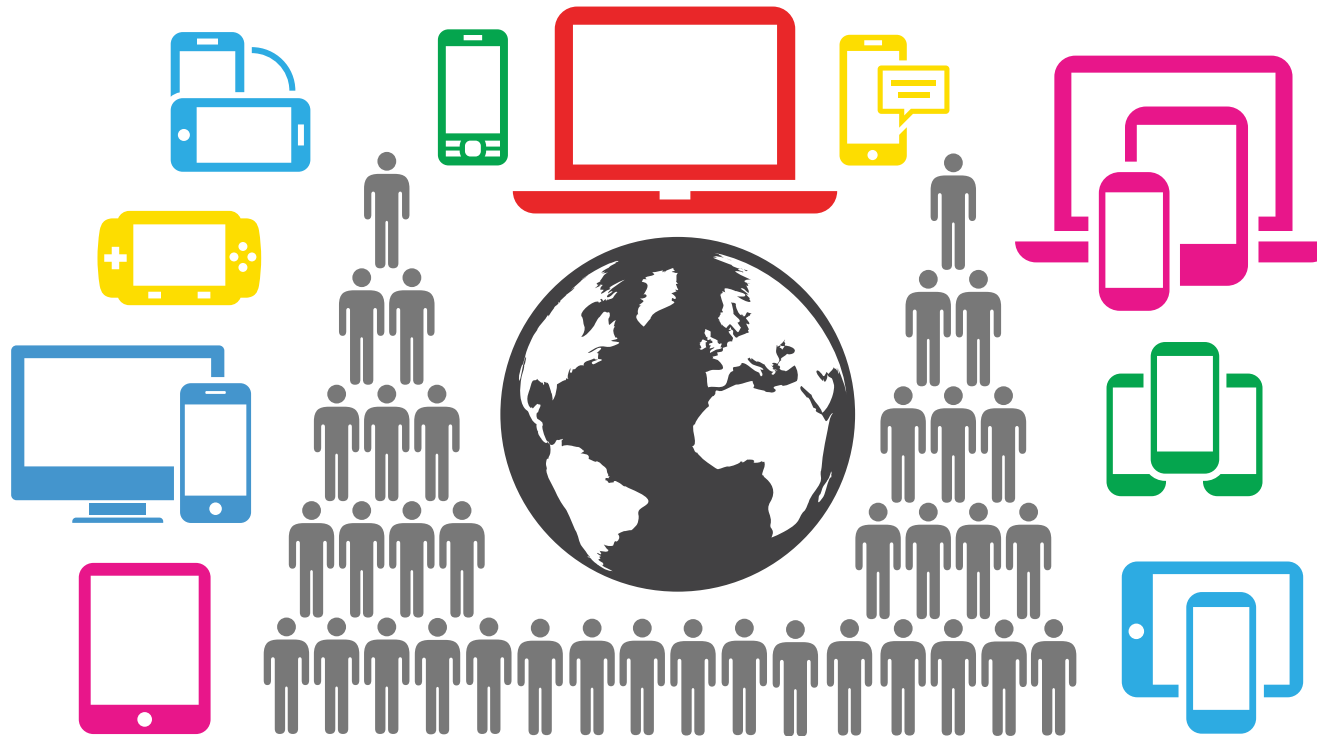
Agenda

- Mobile Adoption Today
- Opportunity: Need for Mobile Printing
- Solution: Mobile Print Standard
- Alliance Benefits
- Next Steps
- Q&A

Mobile Adoption Continues to Rise

The computing market is changing

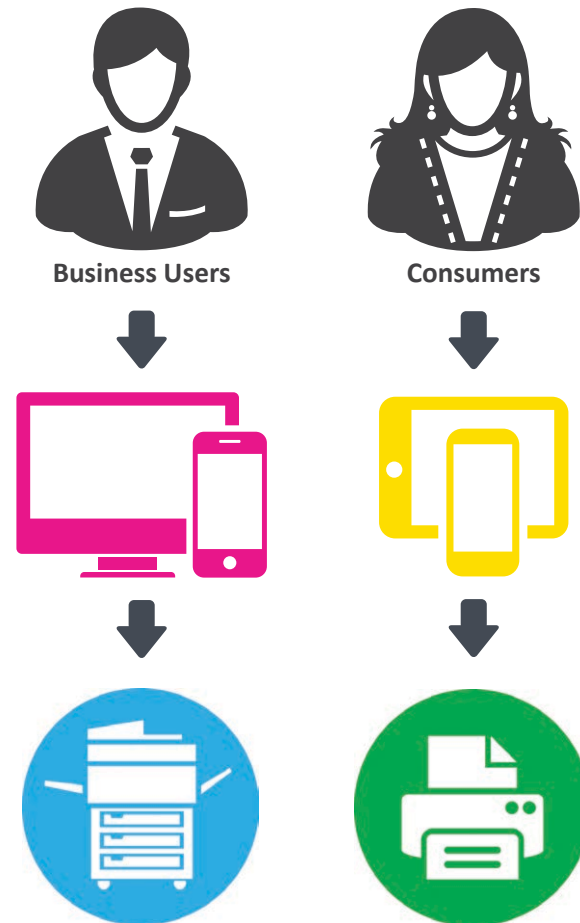
The number of mobile-connected devices have exceeded the number of people on earth. By 2019, there will be 11.5 billion mobile-connected devices globally.¹



Mobile Adoption

The computing market is changing

- 95% of consumers and 67% of business users desire to print from their mobile devices²
- By the end of this year, 58% of United States tablet users will be printing from their device³
- By 2018, Gartner predicts twice as many employee-owned devices used for work than enterprise-owned devices⁴



²InfoTrends, "Mobile Devices and the Impact on Print", John Shane, January 2015.

³DC, "Mobile Print: Enabling Today's Workforce," Holly Muscolino, Dinesh Srirangpatna, June 2014.

⁴Gartner, "Gartner Symposium/ITxpo," Federica Troni, November 2014.

What do Users Want to Print?



Top applications users want to print but can't



Consumer:

Airline Boarding Passes, Coupons, Tickets (events), Flight Itineraries, Hotel reservations, and School/ College Homework



Small Business:

Manufacturing, Sales, Regulatory/ Compliance, Drawings/Designs/ Signage/ Medical imaging, Email



Medium Business:

HR, Medical, Accounting, Drawings/Designs/ Signage/ Medical Imaging



Large Business:

Legal, Manufacturing, Marketing, Web (public), Drawings/ Designs/ Signage/ Medical Imaging, Accounting

Introducing the Mopria Alliance

What is it?

The Mopria Alliance is a non-profit membership organization of leading global technology companies with the shared goal of providing intuitively simple wireless printing from smartphones, tablets and other mobile devices

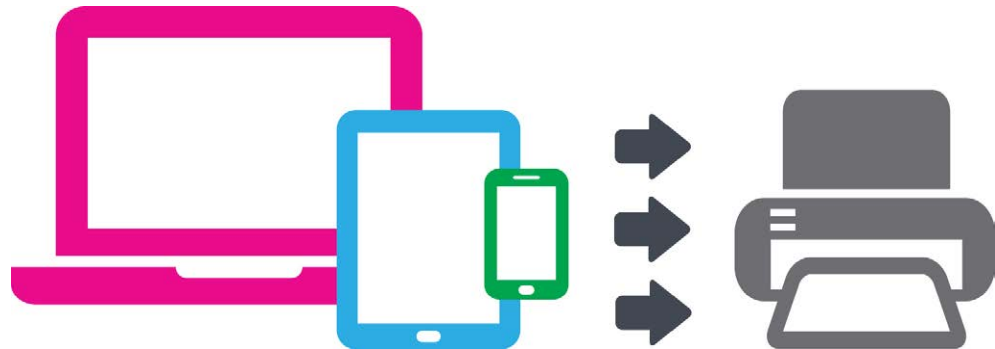
Our Goals

- Support mobile software application providers to deploy print functionality
- Develop innovations and experience standards in the interaction of mobile and print devices
- Certify products to carry the Mopria brand
- Educate consumers and business customers about the ability to easily print from mobile devices
- Achieve 500 million active users of the Mopria Print Service
- Mopria is an AirPrint-like solution that will deliver 3x the value of AirPrint in 2016

Open Alliance

Our Membership Organization

- **An Independent, Membership Organization with a Clear Mission**
 - Provide intuitively simple wireless printing from smartphones, tablets and other mobile devices
- **This Collaborative, Open Industry Initiative Represents the Value Chain:**
 - Printer manufacturers
 - Smartphone manufacturers
 - Tablet manufacturers
 - Software companies
 - Mobile app developers
 - OS providers
 - Carriers
- **Open Participation**
 - Available to ALL stakeholders globally
 - Tiered rights and privileges
 - Representation at a company level – one company one vote



Create Standardized Approach

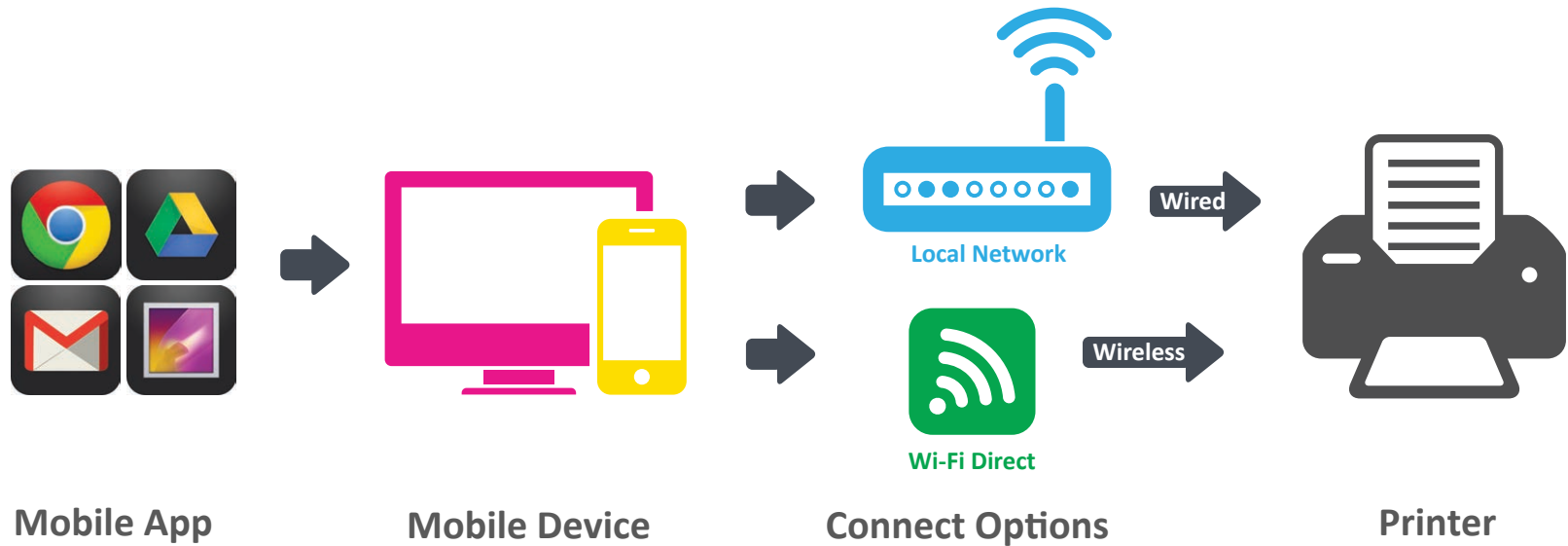
Benefits to every aspect of the ecosystem

- **Solutions Developed by the Industry**
 - Jointly deliver specifications for use across value chain
 - Specify interfaces for specific use cases
 - Allow for multiple independent implementations
- **Create Certification and Conformance Programs**
 - Provide BUYER assurance
 - Products baselined to a standard
 - Multiple supply choices in value chain
- **Endorsement**
 - Through the value chain
 - From relevant standards bodies
- **Ecosystem Growth**
 - Global end-to-end footprint
 - Technology suppliers, buyers, users
- **Market Development**
 - Education and outreach



How: The Mobile Print Ecosystem

The ability to simply print from your mobile device requires:



- Print is an embedded function in the app

- Peer-to-peer with Wi-Fi Direct
- Through wireless and/or wired network which share connectivity

- Universal Standard for print protocol and printer language (PDL)
- Architecture supports documented legacy printers

Mopria Membership



<p><i>Founders & Board Members</i></p>	
<p><i>Executive & Board Members</i></p>	
<p><i>Executive Members</i></p>	
<p><i>Adopters</i></p>	
<p><i>Legacy Adopters</i></p>	



Mopria Progress

- The Mopria Alliance launched in September **2013** with **4** founding members: Canon, Hewlett-Packard, Samsung and Xerox.
 - Today **6** members sit on the Alliance board: Adobe and Konica-Minolta joined the founders as Board Members
- The current **25** member organizations represent a broad swath of the mobile printing ecosystem, including more than **98%** of the worldwide printer* business, as well as frontrunners from software companies, engineering and consulting firms, semiconductor companies and typeface designers.
- Through the Mopria Alliance self-certification process, member companies have published certifications for mobile devices; mobile print accessories and **875** printers from **16** brands, representing over **88 million** print devices in customer use today.

Canon



LEXMARK



FUJI XEROX



brother



EPSON



*Based on shipment units of IDC WW Quarterly HCP Tracker Final Historical release, 2014Q4.

Alliance Structure

Corporate Infrastructure

- Incorporated as a not-for-profit mutual benefit corporation 501(c) (6)
 - Open to new Board members, maximum of nine total
 - Open to unlimited membership at other levels

Adopter Membership

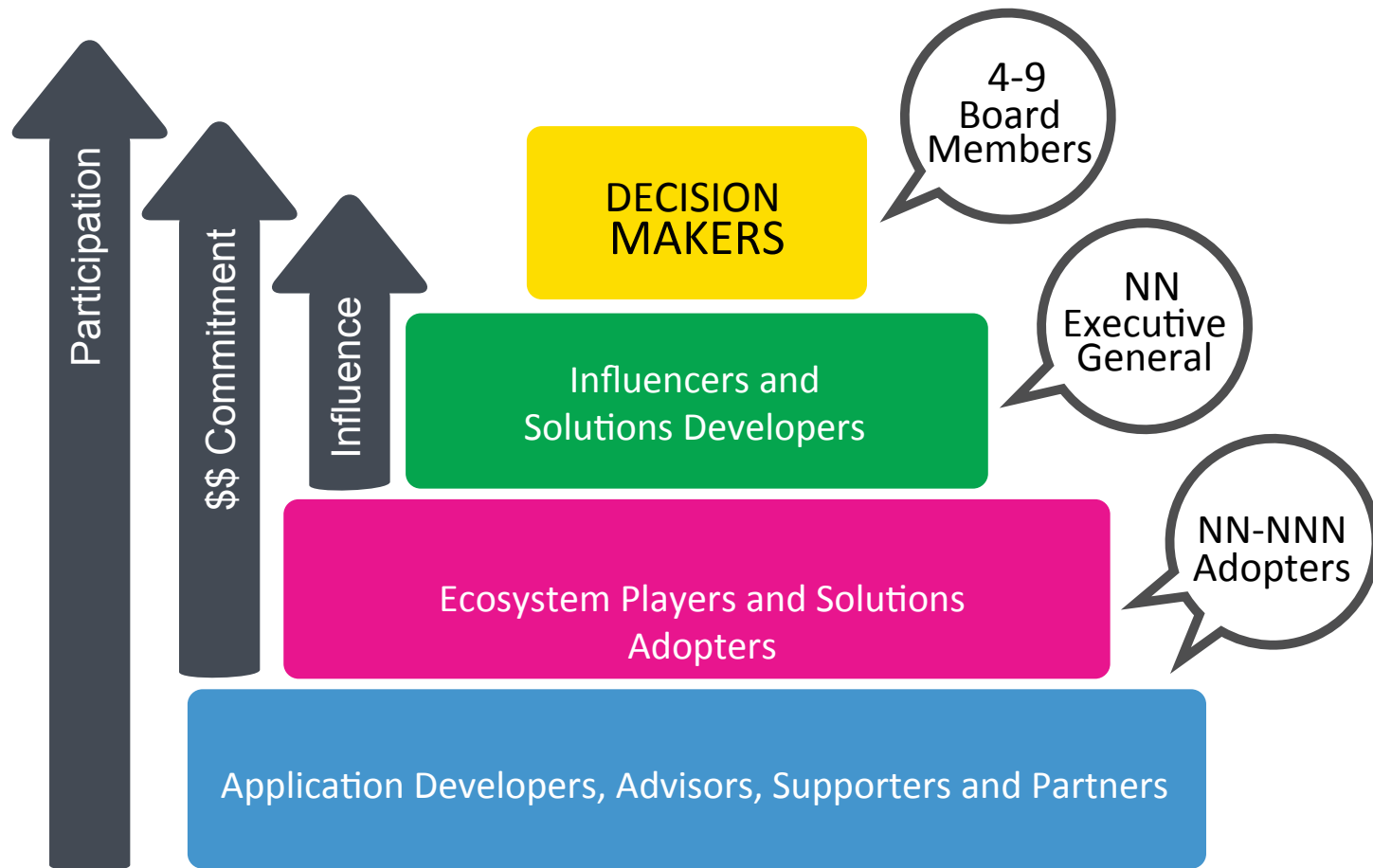
Executive Membership

- Professionally managed by an independent entity:



- www.inventures.com

Alliance Structure



Alliance Benefits

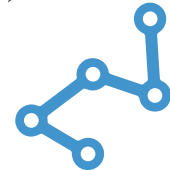
Safely moving industry forward

Provides corporate veil/safe harbor

- Liability separation and insurance (for participants and leaders) - Errors and Omissions, Directors and Officers, General Liability
- Individual and company indemnification
- Anti-trust provisions

Vendor neutral entity manages, owns and enforces key deliverables

- Rules of participation/rights/privileges
- Intellectual property provisions/cross licenses for deliverables
- Specification(s), reference implementations, test suites
- Certification logos



Alliance Member Benefits



Benefits for every member

- Meet consumer demand for ease-of-use
- Broad compatibility of certified devices
- Increase consumer engagement and device use
- “Unlock” printed pages
- Enable new applications previously limited by lack of print/scan features
- Turn resources away from simply establishing and maintaining basic print to new innovations involving mobile device and printers
- Alliance support from test tools and device certification to marketing the benefits of the Mopria brand mark

Founders:

Canon



Adopter Membership

Access and benefits snap-shot

Limited membership level designed for companies interested in deploying the Mopria standards and supporting the marketing of the benefits to consumers.

Membership includes:

- Access to the members-only website
- Access to final specifications
- Ability to provide suggestions and inform about defects
- Access to the process to certify products and services
- Access to user group and online support
- Development support
- Use of the Alliance's trademarks, logos
- Inclusion within Alliance marketing
- Participate in general or annual Alliance meetings
- Receive member communications



Annual dues: \$30K

Executive Membership

Access and benefits snap-shot

Full membership level designed for companies interested in contributing to the selection and development of standards behind the Mopria logo.

Membership includes all of the benefits of Adopter Membership, plus:

- Review analytics and operating budget
- Chair committees and/or work groups
- Participate and vote within committees
- Ability to be elected to the Board of Directors (Seated Executive Member)
- Participate and vote within work groups
- Access to draft specifications before the review period

Annual dues: \$50k

Board Membership

Access and benefits snap-shot

Membership level for the initial four companies (Canon, HP, Samsung and Xerox) that organized the Alliance, selected and developed the initial standards behind the Mopria logo. Membership includes all the benefits of Executive Membership, plus:

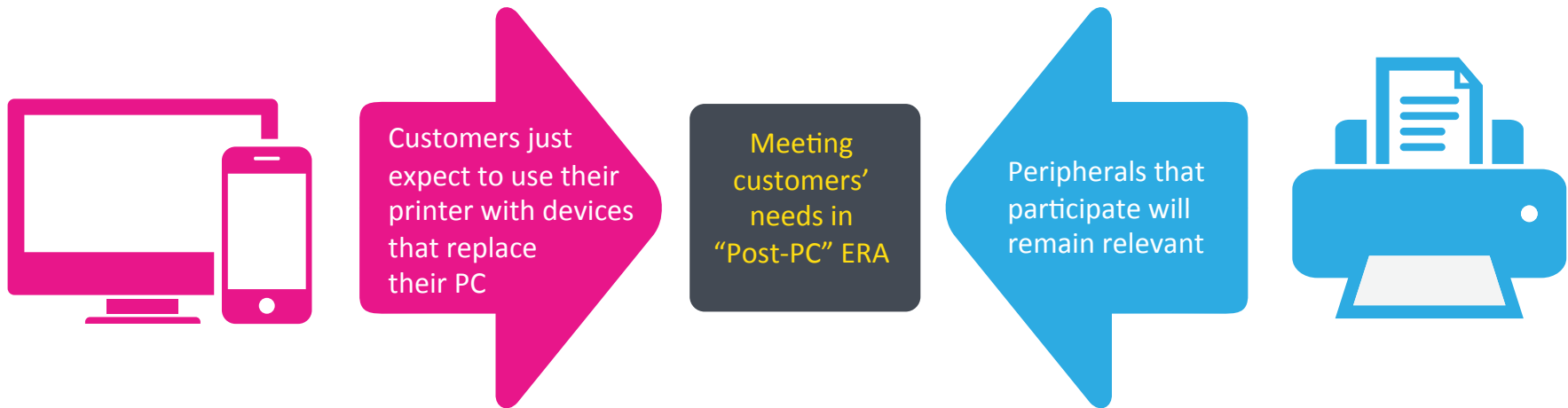
- Seat on the Board of Directors
- Initiate work groups or committees
- Approve final specifications
- Approve and give interviews on behalf of the Consortium
- Approve the operating budget and the Executive Director
- Set-up and approve requirements and certification processes for compliant products and services
- Authorize licenses to the Alliance logos.

Annual dues: \$125k



Mopria Alliance Outcome

Unparalleled interoperability between brands resulting in a better user experience than PC printing



How: The Initial Standards



Mobile App

Open API to deploy print functionality and convert files to accepted formats

Mobile Devices

Print Subsystem to convert files to accepted formats and discover printers (MDNS)
User Experience guidelines

Wi-Fi Direct

- **Wi-Fi Direct Services – Print** – specific application of Wi-Fi Direct to pass data between mobile and print device
- NFC touch-to-print option - **NFC implementation requirements**
- File types selected for print job rendering: **PWG Raster, PCLm, JPEG, PDF**

Printer

What You Can Expect in 2016



Mopria plans

- More Operating Systems
- More Certified printers
- Mopria supported in mobile devices
- More apps enabled with the print feature (approximately 2,300 now)
- More updates in the Mopria Print Service for Android
- More standards such as enterprise features, scanning and cloud printing

Customer Outcomes



- Intuitive mobile print solution
- Minimal to no set-up
- Standard way to connect to a printer, send a print job etc. across different mobile devices
- Apps include print feature
- Many connection methods: cloud, local wireless network, peer-to-peer, or NFC tap-to-print
- Mobile print solution that meets IT security requirements for business

Mopria Alliance and You

We want you to join and help us drive the future!

- Opportunity to join the Alliance and be a Board or Executive Member
 - Industry and thought leadership attributes come with membership
- Influence future direction
- Harvest first mover advantages through the value chain