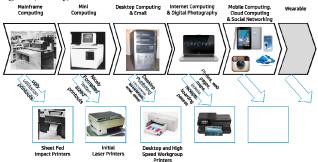
Printing Evolution in a World Dominated by Mobile Devices

Phillip McCoog, Hewlett Packard, Vancouver, Washington, USA

Abstract

"Printing is dead now that we have these new devices." We've all heard that said. "Young people don't want to print anymore!" We've heard that endless times. "Office work is changing so printers will become obsolete." Yup, old news. "The way people take and share pictures make printing photos unnecessary." Way too many times! "Communication and people have evolved that paper is just passé" Volumes have been written on this! Oh wait – you thought I was talking about recent news with mobile devices and wearables. I was talking about the last several compute revolutions and the pundits predictions on printing. They were wrong before (sort of) and they are wrong again (sort of).



The past is full of lessons and tips for predicting the future and full of pitfalls. It is important to view the current mobile compute revolution in context of what has happened over the last 50 years. Each compute revolution has dramatically changed the type and quantity of material to be printed. It has fundamentally changed what prints are used for. It has also changed user's concept about what a printer is and what they can use it for. With careful examination of the past, current mega-trends in mobility, and consumer and business behaviors, it is quite evident that printing will be different but it will remain a strong human need for years to come.

Not to ruin the ending but some fun facts to consider and some hints on what they mean for printing:

- The amount of people that have access to compute devices and therefore digital content for printing will more than quadruple in next decade (Hint: Addressable market is exploding not shrinking)
- Mobile devices mean people are taking pictures at a rate once unimagined (Hint: if the number of photos increase by 10,000 but the rate of printing per photo decreases by 10,00 the number of photos goes up by 10.)
- Mobile devices and social media are making sharing of photos a daily activity (Hint: email made sharing documents easy and printing exploded)
- Young kids love to print, young adults rarely print, adults between 25-55 print a lot (Hint: "young people

- don't print so they won't print when they get older" has been around since I was young)
- As people move to digital archives, prints get made, read thrown away, and reprinted later (Hint: paper-less office was the best thing that ever happened to printing)
- Mobile device vendors are innovating and advancing state of the art at a much more rapid rate than traditional compute platforms ever have. (Hint: AirPrint, Google Cloud Print, Samsung Galaxy print capability, and others to be announced this Fall are improving the experience)
- Cloud storage is absolutely exploding the amount of printable content due to the size, longevity, and ubiquitous access (Hint: the more that's archived, the more that is available for reprint later)
- Cloud computing is making sophisticated content creation available to what once was the domain of a few (Hint: think in-house marketing)
- Printer vendors have begun to advance common standards to remove the necessity for drivers and enabling rapid innovations (Hint:)
- Today's printers will not be compelling in 5 years (Hint: 5 year old printers have never sold well)

Given this foundation, to understand where print will be in 5 years due to the mobile and wearable revolution this keynote will address the following questions:

- What print capability will exist in mobile devices?
- What content will people print?
- What will they do with printed material?
- What will a printer look like?
- What will it mean to be a printer?
- What technology will be in a printer?
- How will the business model change?
- How will the industry change?
- How do we avoid print driver problems?

As is always the case, the future is bright for the companies that embrace and transform to the radical new future and will be troubling for those that hope for the past.

Author Biography

Phil McCoog is the Chief Technologist for the Consumer and Mobility Printing for HP. Phil leads technology development, key industry partnerships, standards, and consortiums to integrate printing into the emerging mobile and cloud computing ecosystems. In the past, Phil has led the architecture and development of HP Designjet, Deskjet, LaserJet, and Officejet printers. Phil has been with HP for 25 years. Phil received is BS in computer engineering from the University of California at San Diego (1988) and his MS in computer engineering from Columbia University (1996).