

The Importance of Awareness for Print-Based Augmented Reality

By Colin McMahon, Research Analyst at Keypoint Intelligence – InfoTrends

As businesses seek ways to remain competitive in today's increasingly digital landscape, many are considering the use of content that is enhanced with augmented reality (AR). AR complements printed materials in a variety of ways, making it possible to add more material per page while also enabling additional interactivity. As a software tool, it can enable print service providers and their clients to better track exactly how users are interacting with their content, including who is viewing which AR display and for how long.

Like any new technology, though, AR brings with it a unique set of hurdles that must be overcome before the maximum ROI can be achieved. When it comes to AR-enhanced printed products, many of the challenges start with awareness.

The "Newness" of AR

Because modern technology has been accelerating at a dizzying pace many people are currently using software and hardware products without fully understanding what they are or how they work. The same is true with AR. According to research from Keypoint Intelligence – InfoTrends, many of today's consumers use AR applications without realizing that they are even engaging with the technology. For example, photo filters—common on apps like Facebook and Snapchat—are rudimentary AR applications. They overlay digital content over real-world images. Millions of people around the world make use of this technology, but not all of them realize it is AR software. Although the concept

of AR has certainly become more mainstream, print providers cannot assume that everyone is familiar with it.

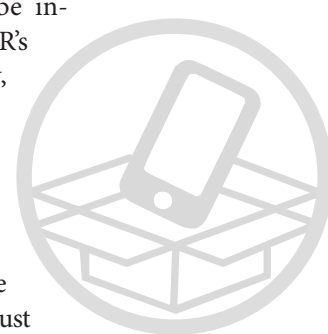
Today's consumers need to be educated about AR, specifically in the areas of how it works and even when it exists. AR is much less accessible to the average consumer than a paperback novel, for example. When people see a book, they expect to see words on its inside pages and they do not need to open the book to know that the content is there. While people understand that books fill a function and they know how to use them, many consumers still don't know what to expect with AR applications.

How to Effectively Label AR Content

Print Service Providers that are hoping to take advantage of AR must first create an effective call to action that informs the end user of its existence. This can be something as basic as a logo or sentence of written text. The most important part of any call to action is clarity—peo-

ple need to be informed of AR's functionality, and this responsibility falls on service providers. Today's Print Service Providers must clearly and concisely communicate the presence of AR functionality and explain how it is meant to be used.

Zappar, an organization that creates AR toolkits, advocates a two-pronged approach when it comes to user education. Many products that are made with the company's technology include visual as well as written directions, showcasing the path to AR creation in three easy steps. Every AR-enhanced product is also marked with a Zappar logo. In the future, the company hopes that the presence of its logo will be enough to



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PAPER BY JAN

A Look Back on the 2019 Printing and Writing Paper Markets

Jan Gottesman, President of Spicers Paper & Kelly Paper, reports on the latest happenings in the world of paper supply and costs.

Over the past five to eight years or so the printing and writing paper markets have had a clear trend of decreasing demand. But the decrease has been manageable for both printers and the mills, as it's been a fairly steady fall of 2-5% per year. In 2018, for example, demand fell by about 2.5%.

Last year, however, was different. In 2019 a number of factors combined to create a severe drop in demand in the printing and writing paper markets: 12% overall—14% in the coated free sheet market and 8.4% in the uncoated free sheet market. What happened?

To understand 2019 you need to start by re-examining 2018

I believe the roots of 2019's problems can

be found in 2018's supply challenges and rapid price escalation.

As you may recall, in 2018 we experienced a shortage of capacity in the printing and writing paper markets for both coated and uncoated paper. In fact, capacity was so tight for uncoated paper that there were allocations. On top of the supply challenges there were also an unprecedented number of price increases that started in Q4 of 2017 and continued throughout 2018.

As all of this started to play out, many printers and merchants scrambled to find the paper they needed. When they did find it, they bought up as much as possible. Given the dynamics of the market, stockpiling looked like a good idea.

So there was an inventory build. That big inventory bubble had to be worked off during the first part of 2019...which, of course, decreased demand.

Layered on top of this was the impact

of the price increases on the end users.

As you know, most end users have fixed budgets. When paper prices increase, end users cut back. Maybe what was going to be a 5,000 run gets downsized to a 4,000 run. Or perhaps their 10-page brochure slims down to an 8-page brochure. This normal response to price increases reduced the actual tons of paper sold as well.

All in all, 2018's supply shortages and price increases resulted in 2019's drop in demand.

In 2019 the mills cut capacity

In 2019 the paper manufacturers responded to this drop in demand by removing capacity from the North American market. Georgia Pacific closed down their 450,000-ton uncoated free sheet capacity. Domtar announced the closure of two uncoated paper manufacturing machines, another 204,000-

ton reduction. International Paper has announced a capacity shutdown as well.

In response to the capacity shutdowns a flood of imports came onto the market. While the imports had a positive impact on stabilizing prices, they also put the supply/demand dynamics further out of whack.

A vastly improved outlook for 2020

Luckily, the outlook is much more positive for 2020. The inventory bubble was worked off months ago. Prices have stabilized. Thanks to the elections, which have always driven demand, demand is likely to increase. And given the current dynamics in the political arena, it's likely that demand for printing related to political campaigns will be even higher than usual.

With all of these positive developments, I am hopeful that 2020 will be a good year for us all.

NATIONAL ASSOCIATION NEWS

PIA Unveils "Leadership Skills For New Supervisors" Course

Printing Industries of America has unveiled a newly developed, premium course in its iLearning Center, "Leadership Skills for New Supervisors." This course aims to help new supervisors make the transition from contributor to leader by honing skills such as directing, sharing, teaching, training and mentoring. Developed by leadership trainer and mentor Jamie V. Parker, the course goes beyond leadership theory to teach users specific skills and tactics that will help them engage with team members to work toward organizational goals. Participants will learn:

- How to approach leadership in a way that builds relationships and inspires commitment

- The five points of impact listening to create more trust, engagement and team member effort
- The effective feedback formula for consistently getting more of the right behaviors
- The anatomy of good coaching questions that develop a team's decision-making and problem-solving abilities
- How to advance leadership skills and get the very best out of team members

The course is just \$99 for PIA members and \$199 for non-members. For more information, visit www.printing.org/leadership or contact Joe Marin, Vice President of Education & Training at jmarin@printing.org.

HUMAN RESOURCES

How to Help an Underperforming Employee

There are many reasons why an employee may be underperforming, and sometimes it takes a little digging to get at the root of the problem. Let's look at some common examples of performances that aren't as good as they could or should be, and ways to address them...

New employee who isn't meeting expectations

Amy has been on the job for three weeks, but she keeps missing deadlines and leaving tasks unfinished. What's going on? Here are two possibilities:

- **Lack of Ability** – Amy doesn't have the skills you thought she did. If that's the case you're within your rights to terminate her employment. If there was an honest misunderstanding about what she could do, but you're still getting some good work from her, then training along with a performance improvement plan might be the better alternative.
- **Lack of Training** – It's possible that Amy was not shown how to do the job or given adequate time to learn. Alternatively, your expectations may not have been clearly communicated. In both of these cases, in addition to training or communicating expectations to Amy, you should also review your orientation and onboarding practices to ensure that all new employees receive the resources they need to succeed in their roles.



Good performer in a slump

Amadi used to be one of your star performers—the kind of employee you could rely on to surpass his goals and encourage dedication and hard work from his colleagues. Over the past six months, however, he has been showing up late, missing meetings, requesting more days off and failing to complete all his tasks on time. What's going on? Here are two possibilities:

- **Personal issues** – Some personal issue is affecting Amadi's ability to perform, and if so, he may have certain rights to leave or accommodation under state and federal law. Keep these rights in mind when you're working with him to improve his performance.
- **Boredom** – Another possibility is that Amadi is bored. He's been doing the same thing for a few years and now his

heart just isn't in it anymore. If there are no career development opportunities at your organization that would be suitable for him it may be time for him to work elsewhere. In any case, you can make it clear to Amadi that he needs to improve his performance if he wants to stay employed with you.

Star performer who could do even better

Beth is one of your best employees, and you've never had cause to complain about her performance. Nonetheless, you can't shake the feeling that her potential is even greater.

Clearly Beth doesn't need a performance improvement plan. However, having a personal coach who pushes Beth to excel, propels her to ever-loftier goals, and holds her accountable could give you an even greater competitive advantage and set Beth up for greater

success in her career.

Just remember to reward Beth for her improved performance! If Beth were to feel like you're reaping all the rewards for her now even-more-amazing work, she might be inclined to take her developed talents elsewhere.

Best Practices

When you're evaluating an individual's poor performance, the key is not to make assumptions about what's causing it, but rather to investigate why the performance is what it is. In many cases, the issue resides fully or mostly with the employee themselves, and they'll either need to make improvements or find a better fit elsewhere. In other cases, however, the root cause of poor performance lies outside of the employee's control and improving performance may require structural changes, accommodations or new challenges.

In any event, you should begin by informing your underperforming employees that their work isn't meeting expectations and then asking them to explain why they're struggling to perform. Their answers should help you ascertain what the underlying issue is and what you may need to do to address it. As always, document what you've discovered and how problems are being addressed. If you ultimately decide to terminate, solid documentation will be your best friend.

FEATURE ARTICLE

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inform consumers of AR's presence, but this will never happen if consumers are not properly educated. For the time being, users must be informed about the presence of AR and how it is meant to be interacted with before it can be assumed that they will be on the hunt for new AR experiences.

Figure 1: A Potato Chip Bag Enhanced with Zappar AR



Source: Mobile ARNews

Finding the Right App

At this time, the AR solution market is quite large. Although this is certainly a positive for innovation, it can be a detriment to user-friendliness, particularly if certain AR apps are not compatible with others. All Print Service Providers will of course want consumers to view their content, but the average user may get frustrated if he or she is required to download a multitude of apps to view every AR-enhanced product. If the process is not streamlined, some consumers will be inclined to simply abandon the idea of interacting with AR.

First and foremost, enterprises want their solutions to be accessible. This means working to deliver a common framework—one that enables AR viewing while minimizing the work that is expected of consumers. Although a ubiquitous AR solution is unlikely, it is important to act now to reduce the number

of applications. Some Print Service Providers might balk at the idea of using the same technology as their competitors, but a solution will be markedly more accessible if a consumer can access many types of content with a single solution. This will improve the overall AR experience and also increase the likelihood that consumers will choose to interact with it again in the future. AR technology is still relatively new, so now is a great time to ensure that solutions are flexible, intuitive and appealing to a wide range of customers. This will help more users understand and interact with the technology as it continues to change and improve over time.

The Bottom Line

AR is a natural extension to print—it can enhance the tactile experience of handling a physical document while also enabling a tried-and-true communica-

tion piece to remain innovative and relevant. Even so, not every business that experiments with AR will be successful. Effectively implementing an AR solution requires foresight and careful testing. At this stage, usability must be the paramount priority. Today's consumers need to be educated about the existence of AR, and the technology must be accessible to the masses without a steep learning curve.

Businesses should carefully research third-party solutions before committing to a platform. Those that opt to rely on an in-house development should take the necessary steps to ensure that the solution is approachable. Minimizing the difficulty of download will help increase user satisfaction and improve the likelihood that more consumers will interact with AR technology in the future.

Provided by Canon Solutions America

CLASSIFIEDS

FOR SALE: Scrap Paper Cyclone system with ducting attachments. High Capacity cyclone is 12' x 14' galvanized steel, MUST SELL ASAP. More info available. System is ready to go, located in San Fernando Valley (Northern Los Angeles) \$2350 obo. Contact richard@impress1.com

Want to place a classified ad? Contact Wendy Ferruz, 323.728.9500, Ext. 262, wendy@piasc.org

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Upcoming Events

Certified First Aid & CPR Training
April 15, 2020

Includes Bloodborne Pathogen Training! Printing Industries, through Occupational Safety Training Systems, is offering a four-hour seminar in First Aid and CPR and one-hour seminar in bloodborne pathogens. Individuals completing the training will receive national two-year certification in CPR/First Aid and one-year certification in bloodborne pathogens. In addition to compliance with Cal/OSHA safety requirements, this program is an opportunity to have trained persons in the workplace who can deal with basic medical situations or emergencies where well-trained response may save a life. The full 5-hour attendance is mandatory for certification, so please be

prompt. Casual attire, such as tennis shoes, jeans, walking shorts, is suggested.

Members: \$65
Non-Members: \$95

To register visit www.piasc.org/events



2020 Continuous Improvement Conference
April 5-8, 2020

The 2020 Continuous Improvement Conference (to be held on April 5 to 8 in Columbus, Ohio) is the only annual event focused on helping custom manufacturers such as printing and converting companies achieve operational excellence by using the concepts of Lean manufacturing and other man-

agement and quality systems. Year after year attendees directly link reduced costs, lowered waste and increased profit margins to ideas gained from conference presentations and networking. Whether you're starting a structured improvement program or are looking for ways to sustain and improve your existing efforts, the conference has content specifically designed for your knowledge level.

To register visit <https://ci.printing.org/registration/>

PIASC Events Calendar

MAR 3

WEBINAR: Can Credit Card Processing Fees be Reduced?
11:00 am - 12:00 pm
Online
Contact: Maribel Campos, Ext. 210, maribel@piasc.org

APR 15

Certified First Aid & CPR Training
8:00 am - 1:00 pm
PIASC Training Room
Los Angeles, CA
Contact: Emily Holguin, Ext. 200, emily@piasc.org

MAR 15

TAGA Annual Technical Conference
March 15-18, 2020
Oklahoma City, OK
www.taga.org/conference/

MAY 1

SAVE THE DATE! 2020 Graphics Night: Making Magic Happen
Disneyland Hotel
Anaheim, CA
Contact: Maribel Campos, Ext. 210, maribel@piasc.org

APR 5

2020 Print Excellence Awards: Submission Deadline
www.piasc.org/printexcellence/
Contact: Maribel Campos, Ext. 210, maribel@piasc.org

For full list of workshops and virtual classes, please visit www.piasc.org/events