

# AATCC



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## **LED Lighting: Seeing Through Rose-Colored Glasses?**

**Mobile Me: What Happens When the Selfie  
Generation Comes to Work?**

**Data Mining Analysis of Unqualified Imported  
Textile Colorfastness**



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## Features

### 22 LED Lighting: Seeing Through Rose-Colored Glasses?

By Iza Wojciechowska

LED lighting is the new normal in retail stores, but they might affect how consumers see the color of textile products. What can brands, suppliers, and color and lighting experts do to ensure the consistency of both the color itself and the brand's color message from the designer's mind to the consumer's closet?

### 28 Mobile Me: What Happens When the Selfie Generation Comes to Work?

By Craig Crawford

What are the expectations of millennials, whose experiences are contextually shaped by mobile apps, as they enter the workforce? A mobile-first workforce will look to apps for a short burst of relevant information that enable decision making. Creative, PLM, and sales-based apps will gain in importance. Apps relevant to making, selling, and bringing textile products to market will allow everyone on the team to contribute toward achieving brand objectives.

## Technology

### 35 Data Mining Analysis of Unqualified Imported Textile Colorfastness

By Zhang Jiake, Xue Wenliang, and Wei Mengyuan

Data mining technology provided a means of analyzing and correlating existing colorfastness related data, by brand and by fiber. A model was used to predict if the textile colorfastness was unqualified ("unqualified" indicated the testing result did not conform to Chinese national standards).





# MOBILE ME: What Happens When the Selfie Generation Comes to Work?

By Craig Crawford

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A man in a dark blue suit and tie is holding a smartphone in his right hand, looking at the screen. The background is a bright, modern office with large windows.

**F**or most of my life I have lived in big cities where I didn't need to drive. I just stepped onto the curb and hailed a taxi. But the other day I stepped onto the curb and no taxi appeared. And then it dawned on me—taxis don't appear anymore; *they are summoned*. There's an app for that now.

As an over-50 digital immigrant, if I've modified my behavior based on my app experience, what are the expectations of millennials, whose experiences are contextually shaped by mobile apps, as they enter the workforce?



## Living Mobile-First

“Millennials are not a single homogenous group; however, there are some common dominant characteristics,” explains Max Moir, Head of Strategy for Somo. With offices in London and New York, Somo helps brands accelerate mobile transformation through rapid innovation to create mobile products and experiences. Somo believes mobile is a behavior, not a channel.

“Technology is the lens through which millennials see the world,” Moir says. “The internet has levelled all aspects of life, and the smartphone has made that change ever-present. Millennials are optimistically ambitious, and they are hyperconnected, mobile-first.”

Millennials socialize in text messages and instant messages, images and video; email is not a communication tool.

“They are also avid second-screener,” he adds. “For example, 72% use a phone or a tablet while watching TV. The Beauty/Fashion/Style-segmented millennials are advanced device users. They are two times more likely to use voice interface on their phones

and twice as likely to use fingerprint scanners to unlock their phones.”

According to Google, 55% of US teens use voice search more than once a day. This year’s launch of Apple iOS10 means that Siri voice control can be integrated into any app, making voice control even more prevalent in the years to come.

Apple’s announcement of offering a Software Development Kit to allow for deep linking in its Map App—allowing consumers not only to locate a restaurant and, map the journey, but to book a table, order a car, even pay for the meal, all without leaving the Map App—means that expectations will be more around anticipating end-to-end experience rather than just one siloed activity.

Expectations for media rich shareable content are high; millennials are twice as likely to post photos and nearly three times more likely to post video on shareable social sites, Moir said.

While millennials are leading the way in day-to-day mobile behavioral change, the launch of Apple’s iOS9 has already changed mobile behavior for all of

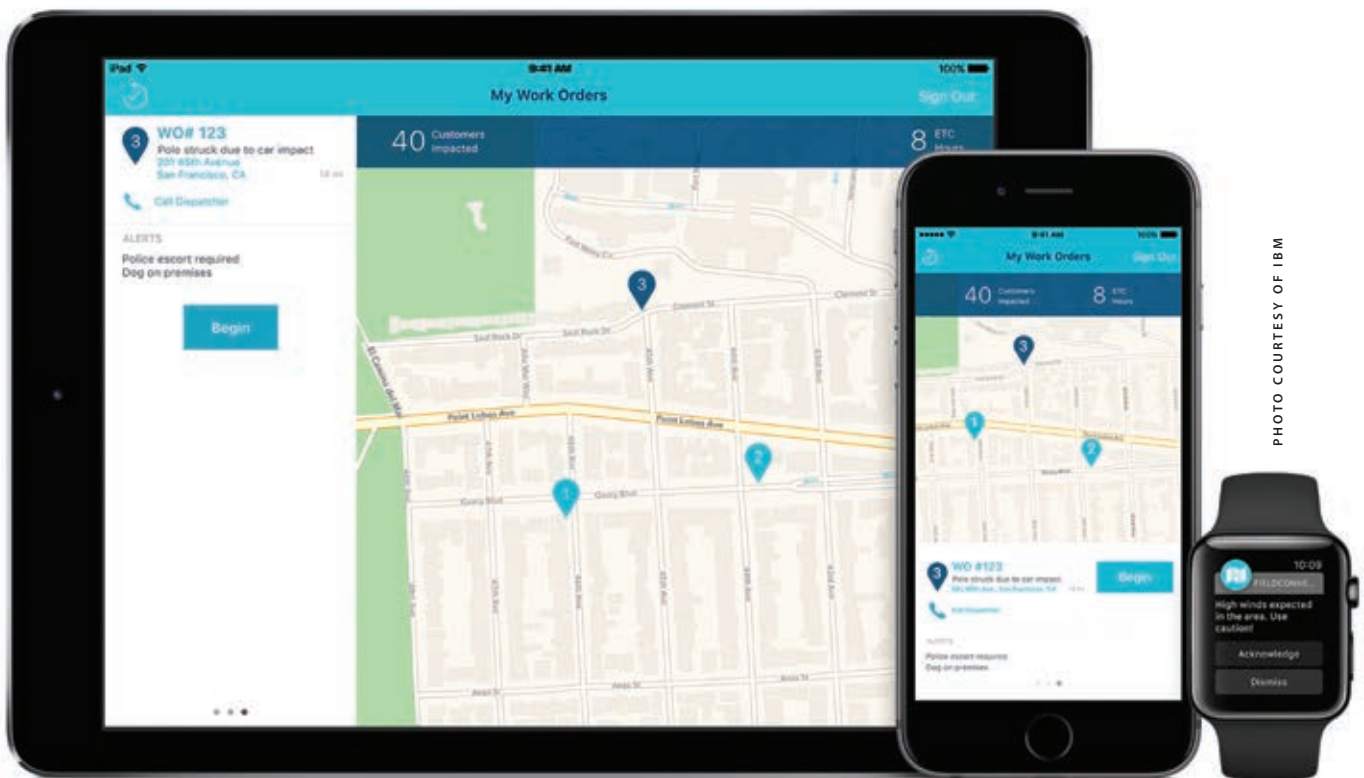


PHOTO COURTESY OF IBM

IBM MobileFirst for iOS: an IBM and Apple partnership. The Field Connect App allows Energy field technicians to receive prioritized repair information, including mapped locations and work conditions via an iPad, iPhone, and Apple watch.



us. In the last year, one out of three consumers have used 3D touch, 24% have tried Apple pay, and 36% used Siri.

“Mobile has shifted our mindset and sets new expectations, providing us with what we want in the context and moment of need,” Moir explains. “Mobile is the remote control of our lives.”

## Mobile at Work

So what does this mean for work? Millennials are coming to the workplace with interaction-based expectations.

An app is not an application; it is not a virtualization of the desktop. Instead, it is a short burst of relevant information that enables decision making. An app removes the clutter and allows everyone to work more toward achieving objectives. An app needs the enterprise platform to interact with.

According to Gartner, by 2020, more than 75% of enterprises will have adopted at least one mobile app development platform to accelerate their digital business transformation strategy, up from approxi-

mately 33% in 2015. Gartner places IBM as the current leader in this space.

Launched Q4 2014, IBM MobileFirst for iOS is redefining how businesses empower employees. Apple defines the user experience; IBM powers the enterprise data and analytics. The partnership leverages the strength of both technology companies.

Some industries are already on this journey with IBM and Apple:

**Air Transportation:** One European airline has an app that allows crew to calculate fuel requirements based on real time information about weather, air traffic, baggage, and passenger weight. Another European airline allows passengers on a delayed flight destined to miss a connecting flight to choose alternative flights/routes while still in the air, feeding these decisions back to ground personnel who can act accordingly before the delayed passengers land.

**Banking:** Mortgage officers can initiate applications from their phones, track progress via the Apple Watch, prioritize those most likely to be approved, keeping it all secure via Apple's Touch ID access.



Energy and Utilities: field technicians are connected to systems of record and receive personalized alerts to manage shifting priorities and work conditions in and out of the truck.

## Mobile Apparel—Product Design and Lifecycle

So where are we in the apparel industry?

Adobe recognizes that for a creative, great ideas can happen anywhere, and offers a suite of subscription-based apps. Creatives can sketch, paint, draw, create layouts, edit photos, even make videos on the apps.

And by syncing the digital assets to the Creative Cloud, Adobe offers Digital Asset Management as a service. Gartner places Adobe in the mobile business app leader quadrant, just slightly below IBM.

So how mobile is Product Lifecycle Management (PLM)? “PLM has evolved, and modern PLM now results in more than gains in efficiency. It is being used to lay the foundation for operational models centered around flexibility, agility, and speed to market,” explained Humberto Roa, VP of Innovation at Centric Software, the first to bring mobile apps for PLM to market.

“Mobile apps for PLM create unprecedented agility and real-time reactivity without [the user] being chained to a desk, helping capture information that would otherwise be lost,” says Anastasia Charbin, Centric VP Marketing. “Centric’s new Field Testing App is one example of how capturing data live, in

the moment, is an incredibly valuable and natural way of working.”

Specifically designed for outdoor, footwear, and apparel companies, Centric’s Field Testing mobile app allows users to capture product performance feedback during wearer trials.

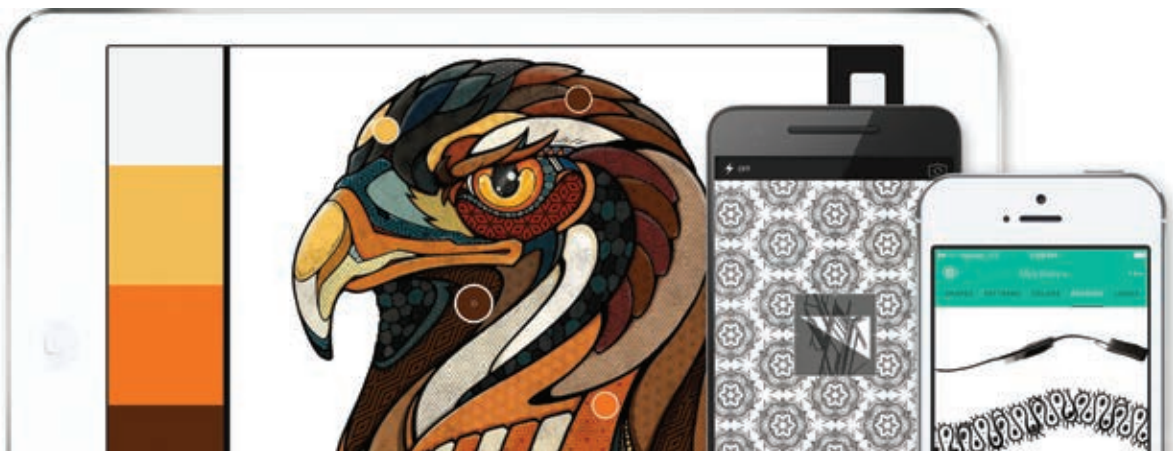
“To make end-to-end PLM truly mobile, we probably need 100 apps,” explains Roa. “And we aren’t there yet. However, PLM apps work because they allow for data to be keyed in at source, where decisions are being made.”

“An app has to be focused on the user and the utility,” he explains. “Strategies around notifications, interface, and gestures are very important. Interfaces such as voice and fingerprint—even facial recognition—are crucial in the apparel and footwear industries because people are often using their hands to develop and refine products.”

Centric’s Fit Review App allows a fit professional to enter measurements and comments during a fit session against styles in the PLM system. No more note taking and rekeying of data afterward.

Centric’s Factory Audit app streamlines the vendor compliance process by allowing onsite visits to be conducted and documented on the spot. In addition to quick checklists, the app allows text, audio, and photographs to be recorded as part of the report.

Currently there are approximately a dozen Centric PLM apps. They also offer a Software Development Kit for brands to create apps that will integrate



Adobe’s capture app for iPad and iPhone allows users to extract color, create a pattern or brush, or turn objects into vector-based shapes from photos.

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Rank	Fabric Sample Name	Resilience
3	Cotton after 10 wash	26.52
	Tencel A100 after 10 wash	20.01
	Tencel A100 after 10 wash	19.34

Rank	Fabric Sample Name	Smoothness
1	32 Blank	53.53
2	16 enzyme Dose 2	51.27
3	4 enzyme Dose 1	51.03
4	4 enzyme Dose 1	49.22

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with the PLM platform. Perhaps more importantly, Centric has created a new Bridge Service adapter which allows companies to use Centric Mobile Apps with ERP or other enterprise systems, including non-Centric PLM solutions, paving the way for the market to take advantage of mobility regardless of platform or PLM provider.

“How do you know when a millennial is in the room?” Roa asks. “They are the ones with their faces in the phone, and we tell them ‘Put that away and get back in the room!’ What if we said, ‘Hey everyone, we are in a meeting, so pull out your phones?’”

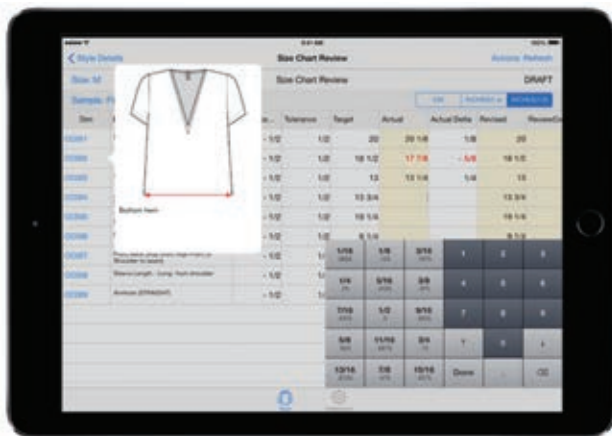
Roa envisions each person in the room looking at their smartphones to know in real time what to contribute to collection development: raw material qualities and price, lab dip approvals/issues, technical issues with style fit, assortment plans, best sellers, etc.

“Behind each screen is a person with a point of view—and all views are equal and contributory,” he says. “So bring your phone out and contribute! ‘If we make this shirt, in this fabric, in this colour, what

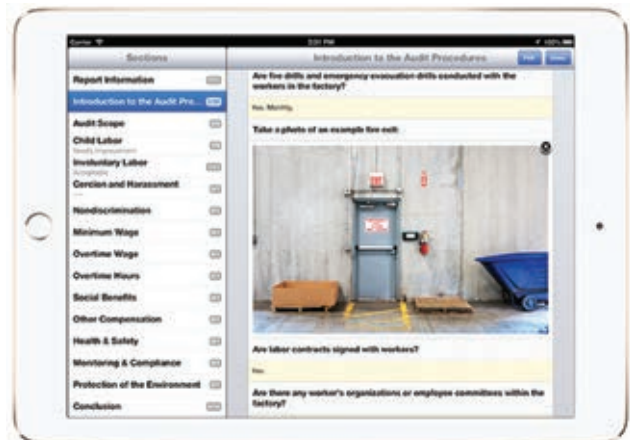
are the challenges? Are the lab dips approved? Are there issues with fabric quality or cost? Can we get the buttons made in time? Will we have too many similar shirts? Are there any issues with ordering and tracking samples?’ Each of these areas can be addressed by the experts in the room, with real time data, and actioned instantly as decisions are made,” he explains. “Gone are the days of worrying about someone sneezing and causing a Post-It note to fall off of a storyboard.”

“In a group meeting, it’s the extroverts that dominate the conversation and the decision influencing. I like to think of this new way of working as ‘the rise of the introvert’ because everyone will have an opinion based on relevant facts that are equal to collection creation decision making,” Roa says.

When a collection is final and market opens, the Centric Collection Book app allows a brand to take orders during market. This then feeds back to PLM and allows a brand that “makes to order”



Centric8's Fit review app for iPad allows garment technicians to capture sample measurements in real time in the sample room or during a fit session.



Centric8's Factory Audit app allows anyone visiting a supplier's facility to rate the factory against a simple checklist as well as post images that ensure Corporate Social Responsibility (CSR) compliance.

PHOTOS COURTESY OF CENTRIC SOFTWARE





PHOTO COURTESY OF NUORDER

*NuOrder's digital catalogue iPad app allows brands to push product selections to wholesale as well as retail buyers facilitating ordering that includes real time inventory management.*

know quantities and raw material commitments, eliminating ERP integration until numbers are final—goodbye “market consolidation” that usually occurs post-market-closure.

“We close the gap between inspiration and the customer,” Roa says.

### Mobile Apparel—B2B Sales

According to research from *Intership*, half of B2B vendors sell their products via mobile, and about 75% of B2B companies adopted mobile marketing initiatives by the end of 2014.

Since 2011, with offices in NY, LA, and London, NuOrder has been offering brands and retailers a central cloud-based hub to browse products and catalogs, access real time inventory data, and place orders from a mobile app—24/7/365. Brands can create customer line sheets and templates for their wholesale accounts, and allow retailers to reorder as needed for replenishment.

“We’ve digitized the B2B sales and buying process,” explains NuOrder CEO Heath Wells. “We believe sales teams should spend time selling, not scribbling.”

The Fashion GPS Radar app by Launchmetrics is the heart of runway shows globally. New York, Paris, Copenhagen, Milan, and Moscow Fashion weeks are all organized on the cloud-based platform. Show attendees—editors, buyers, influencers—can RSVP to show invitations that automatically create calendar appointments to keep them on track dur-

ing the fast-paced week. After the shows, brands can push images via the app to these VIPs, who can then request samples (digital or physical) via the app for editorial coverage. The platform allows brands to monitor the requests, track and manage shipped samples, and even assess impact and influence once digital sharing begins. *Vogue* included Radar in their top ten apps to win Fashion Week.

### In With the (Mobile) New

It looks like mobile technology will be the new way of doing things for the apparel industry, as well as other industries. As when other new technologies and ways of doing business were introduced, inevitably there will be some resistance to mobile in the apparel sphere.

“Humans fear change. And there aren’t too many trends striking fear into our hearts quite as much as technology,” Wells explains. “What scares us most about technology is the non-humanity of it. But the time saved by the streamlining effect technology has on the process allows us to spend time building quality relationships with those we would otherwise not have time to engage.”



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