

April 2019

FEATURE

Mapping Innovation

The NACS/Conexus Technology Roadmap details key differentiators for retailers to adopt and leverage to remain competitive.

BY JERRY SOVERINSKY

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To paraphrase Charles Dickens, 2019 is both the best and worst of times for retail. The so-called FAANG companies—Facebook, Amazon, Apple, Netflix and Google—continue to dominate the news, their fortunes intimately influencing the fate of the stock market. Their common thread—operations dominated by advanced technology—is the very thing that’s missing from (or is leveraged less masterfully by) companies that have been less fortunate, such as Toys R Us and Sears. How easy is it to place an order on Amazon with a smartphone or shop in an Apple Store, with their roaming cashiers? Compare this to your experience queuing up to purchase a board game at a Toys R Us during a holiday rush. Ugh.

All of this might make for instructive investment advice, you say, but what does it have to do with convenience retailing? With Amazon Go coming to a city near you, Starbucks offering delivery of one coffee at a time, multiple companies fueling cars on demand, and Amazon delivering packages to cars and inside garages, do you really need to ask?

For the convenience industry, the value proposition is becoming more ubiquitous, with physical boundaries that are eroding. The coveted corner location may be great for the commuter crowd (so long as Waze routes them by your location!), but millennials, hipsters and every other consumer who’s never heard of “Matlock,” Pet Rocks and Abe Vigoda, shred the importance of planograms, LED lighting and clean bathrooms. Their priority: Getting what they want. When they want it. Where they want it. And how they want it.

“We’ve got to break out of the mentality of Cokes, smokes and gas; otherwise, what’s the differentiator?” warned Gray Taylor, executive director of Conexus. “Most convenience stores sell the same stuff with the only difference coming from location. We must do something that makes us totally unique.”

The differentiator, Taylor argued at last year’s NACS Show, alongside Ed Collupy, executive



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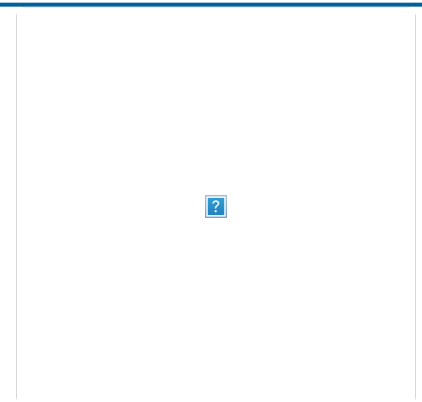
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consultant of W. Capra Consulting; Dae Kim, vice president of research for NACS; and Doug New, chief technology officer for Yesway, lies in how well you adopt and leverage technology. It is no longer just a facet of retail but a fact of retail, they argued, as convenience customers embrace a digital lifestyle.

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We have to start acting and thinking like disruptors.

Incorporating advanced technologies into your business will affect all facets of your future operations—marketing, sales, supply chain, human resources and fuel retailing, to name just a few. It also will minimize the risk that FAANG companies and those who emulate their practices will take a fatal bite out of your operations.

But there's a selective component involved, especially for convenience retailers that must

balance efficiency, effectiveness and long-term ROI. Which technologies—existing and prospective—are essential for remaining competitive? Our experts weigh in, along with top considerations for implementation.

A CULTURAL SHIFT

“We have to start acting and thinking like disruptors,” Taylor said, “because everyone is trying to offer frictionless commerce today.” This begins with a reexamination of your existing operations and an assessment of whether such a mindset exists—or is attainable—among c-suite executives. “The culture is key; your organization must be prepared for these things, whether top-down or bottom-up,” Yesway's New added. “There must be an innovation mindset.”

And the existing industry paradigm must evolve. Today's store model is characterized as a fuel-providing, commodity-driven business, offering limited assortments (3,500 SKUs) with one-size-fits-all offers and promotions. But tomorrow's c-store must be an energy-providing, service-driven business, offering hyperlocalized assortments with customized experiences and services. Easier said than done.

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Our tech-centric era can be characterized as 4IR—industrial revolution 4.0—with six key focus areas for technology adoption: big data, internet of things, artificial intelligence, robotics, autonomous transport and augmented reality. “These are the major technologies that are being advanced and disrupt huge swaths of existing business models,” Taylor said.

But it's not a “Field of Dreams,” if-you-build-it-they-will-come mentality that will win the day. “What scares us is the pace of change and what we *don't* know,” Taylor said, adding a giant disclaimer to the work-in-progress roadmap Connexus and NACS are developing together.

“Our roadmap initiative is an industrywide attempt to identify technologies and key elements of those technologies that we need to take action on, so that you can integrate it into your business plans.”

BIG DATA

Big data is providing a new, strategic advantage for retailers, the group said, as long as you are able to extract actionable insights accordingly. “As AI [artificial intelligence] evolves, if you have a lot of historic data, you can get insights into future behaviors,” Taylor explained. “Big data will allow us to personalize our offers, as well as predict what a customer will purchase.”

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INDUSTRY PARADIGMS

WHERE WE ARE

WHERE WE ARE HEADED

Fuel provider	Energy provider
Commodity-driven business	Service-driven business
Limited interaction with consumers (< 4 mins)	Best-in-class customer experience—destination that delivers convenience in products, food and services
Offers & promotions = One size fits all	Tailored & personalized experiences and services
Limited assortment (coffee, tobacco ...)	Hyperlocalized or differentiated assortment
Traditional buying channels	Omnichannel, frictionless options

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While expanding your customer base is always desirable, boosting the economic value of your existing customers is far more efficient and productive. “Big data give you the ability to do that,” he said. And while myriad suppliers offer solutions that help you mine big data opportunities, there is a cultural change needed to take advantage of the opportunity. “You must be data-driven, not customer-based,” Taylor said. “Human bias is hard to get rid of, but you must adopt tools that can prove your intuition wrong.”

INTERNET OF THINGS

The Internet of things (IoT) includes everything in the store that generates and analyzes data in an effort to promote smarter decision-making, also providing custom interaction with the consumer based on that real-time decision making. “When we look at IoT, this is what is going to make better predictions to help guide decision-making,” Taylor said. “There are so many companies providing solutions here that address inventory and cybersecurity, for instance.” When considering options, don’t overlook system networks, which must remain reliable, secure and nimble. And there must be a structured way to distill the data, especially for retailers that incorporate multiple solutions from different vendors.

For example, CoolerScreens provides cameras and sensors on cooler doors to assess customer movements and selections. In addition to creating highly attractive product visualizations, it customizes messaging to passersby, targeting age, gender and numerous other factors to maximize engagement. The solution offers an opportunity not only to maximize beverage sales, but also to differentiate your brand with dynamic, highly targeted point-of-sale advertising.

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Tomorrow’s c-store must be an energy-providing, service-driven business, offering hyperlocalized assortments with customized experiences and services.

ARTIFICIAL INTELLIGENCE

“[AI] is the backbone of 4IR, and it is critical for data security,” Taylor said, “while allowing highly efficient one-on-one digital marketing.” When it comes to data security, legacy antivirus (AV) products rely on signatures that need to be continuously updated, with frequent alerts monitored for severity. AI helps automate this process far more quickly, eliminating the need for signatures, updates and alert monitoring, providing “thousands” of tireless “eyes” evaluating data flow in realtime. But this is not just about being more efficient, it’s about being more precise and gaining a predictive advantage. For instance, most legacy AV products use these updated signatures as a detection device for known malware (for example if XYZ is present, it’s malware), which is useful but only for known strains.

Unfortunately, today’s hackers are steps ahead and are launching unknown strains,

ransomware and fileless attacks that go undetected by legacy AV products. This is not the case with

AI, which incorporates machine learning to find anomalies in a number of factors that are far beyond the scope of this article. The bottom line: AI can stop these unknown or “zero-day” attacks, which is a tremendous security advantage.

As a result of this and other AI-related factors, those who choose to forego the AI advantage do so at their own economic peril, Taylor warned. “Leaders and first adopters into AI, for instance, can expect a 40% to 50% profit advantage to those who are fast followers, according to McKinsey.”

ROBOTICS PROCESS AUTOMATION

“It’s estimated that 52% of the global workforce could be redirected into robotics-assisted tasks,” Taylor said, citing a J.P. Morgan case study that involved 300 attorneys who were reviewing contracts. After the company discovered it could automate the task with the use of robotics, it was able to eliminate all 300 attorneys.

“And how easy is it for you to pull together a quarter-end close?” Taylor asked rhetorically. “Robotics process automation could automate the majority of that, bringing it down from a week or two to a matter of a couple of days.” Consider situations when companies have deployed robots to automate simple tasks—flipping hamburgers, for instance—while creating engaging theatre.

AUTONOMOUS TRANSPORT

Autonomous transport (AT) has dominated the news lately and it has deep implications for convenience retailing, but not on the consumer front, where much of the media attention is focused. “It’s tough to find drivers today, which is causing a huge spike in trucking rates, up around 70%,” Taylor said. “This is impacting costs for everything we sell, including beer. As a result, we’ll see AT play a big role on the commercial end.”

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Leaders and first adopters into AI can expect a 40% to 50% profit advantage to those who are fast followers.

Such an approach will have a big impact on last-mile costs, which eventually will drive consumer adoption. “So now we’ll see AT used for store deliveries, as well as home deliveries,” Taylor said.

On the downside, while AT will make the delivery process more efficient, once product reaches your store, without trucks or rack jobbers dropping off product, you’ll need to add store staff to take on unloads and restocks. Fully leveraging AT benefits for supply chain will take a concerted re-evaluation of how we disrupt ourselves, by our retailers and all of our trading partners.

And as to consumer adoption implications, with AT vehicles shuttling consumers and

commuters, “This one scares me; this could drive people away from convenience stores,” Taylor said. “This speaks to disruption more than anything because location will stop being an asset.”

Kim of NACS shared some important perspectives, noting that adoption may be speculative, but only quantitatively. “This is more inertia than resistance,” he said.

AUGMENTED REALITY

Over the past several years, anyone who has noticed groups of teens wandering by city landmarks, their eyes glued to a smartphone while playing Pokémon Go, has seen augmented reality at work, which continues to grow in popularity. “Look at the video games that kids are playing today. They’re immersive,” Taylor said, when discussing the engagement opportunities available by leveraging augmented reality. The process involves sharing data with customers—“You’ll need to make sure that your network is reliable and fast,” Taylor said—and includes applications such as self-checkout and personal pricing, which already are being deployed.

CLOSING THOUGHTS

The mandate is disrupt thyself, and obsess on the ways you can be disrupted. And the NACS and Conexus technology roadmap—while a work in progress—provides strong guideposts to help you navigate that disruption. “Once you adopt the innovation mindset, make your technology platforms agile, try a lot, take smart risks, learn and move on,” Taylor stated.

In the meantime, recognize that all data has value until proven otherwise, and that you must begin (or continue) structuring and storing it, building widespread data-sharing capabilities into your strategy.

Kim wrapped things up with a final assessment, an overriding directive that will guide any retailer’s roadmap considerations: “Ultimately, you still need to figure out if you can make money with any of these.”

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BY CHRIS BLASINSKY

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