Reinventing Retail

Cisco Reveals How Stores Can Surge Ahead on the Digital Transformation Journey

January 2017

Digital disruption has rocked the retail industry in recent years. And the pace of change shows no signs of slowing. But despite the challenges, opportunities abound. Those retailers that implement digital transformation will win in a complex, fast-changing marketplace.

Which does not mean investing in technology for technology's sake. It means getting digital transformation right.

A recent study by Cisco shows that, surprisingly, many retailers are missing out on some of the most impactful technology investments. Those investments will enable retailers to empower their own workers, understand and engage customers like never before, and capture their share of a vast opportunity in digital Value at Stake.

This research builds on previous findings from Cisco:

- Digital Vortex research from the Global Center for Digital Business Transformation, an IMD and Cisco initiative, predicted that four out of 10 leading retail incumbents would be displaced by digital disruption between 2015 and 2020.

- Cisco's Digital Value at Stake report (2016) projected a US$506 billion retail opportunity through 2018. However, it also found that the industry captured just 15 percent of that value in 2015.

- Cisco's Digital Roadmap (2016) identified the digital use cases that will create sustained competitive advantage and, eventually, innovative new business models (Figure 1, page 3).

In 2016, Cisco evaluated the progress retailers are making on their Digital Roadmap. Over the past 12 months, we held a series of in-depth sessions with more than 200 retail executives representing more than 120 retailers around the world.[1] They discussed openly where they are prioritizing their digital investments, where they lie on the digital transformation roadmap, and the progress they are making towards achieving their business goals and objectives.

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1. Retail executives from U.S.A., Mexico, Brazil, and Western Europe attended Cisco workshops to learn about the company's approach to digital transformation and to work with Cisco experts on their individual strategies.

Reinventing Retail

We learned that almost every established retailer still has significant gaps in digitization. Current investments are rooted in using digital technologies for improving existing processes (such as checkout, ordering, queuing, and loss prevention). A laudable goal, for sure. But most retailers have not realized the full potential of these investments to create true differentiation or deliver disruptive new business models.

The key is a digital transformation strategy that balances investments in value drivers that span all phases in the digital transformation journey. That means expending resources on digitizing operations, differentiating experiences, and creating multiple revenue streams simultaneously. And it demands the foundational technology investments in data center, security, mobility, etc. that will ensure growth, agility, and innovation in years to come.

One critically overlooked value driver is people. In focusing on the operational and customer-experience aspects of transformation, many retailers have missed empowering their own workforces—with, for example, digital collaboration tools, real-time customer insights, and virtual training. A workforce that is armed with relevant knowledge and insights is also essential to improving the in-store customer experience—and a key to differentiating brick-and-mortar retailers over their online rivals.

The stakes are high. Macy's, Sears, K-Mart, and the Limited are among the venerable retail brands that have announced major store closings and lay-offs for 2017. Every retailer will need a clear strategy for digitization—and differentiation.

The Digital Transformation Roadmap
A Framework for True Retail Value

Before pinpointing how retailers can best drive new value, here is a quick review of Cisco's Digital Transformation Roadmap, shown in Figure 1 (next page):

Retailers are embarking on a journey to capturing new value. Cisco's Digital Transformation Roadmap is a framework for looking at digital transformation across three phases:

- **Enable** IT agility and operational efficiency: The Enable phase begins with digital solutions that enable existing capabilities or processes.
- **Differentiate** the brand by providing unique digital capabilities and services: The retailer then uses digital solutions to truly differentiate their experiences and operations from the competition.
- **Define** new business models to create true disruption: By combining new cost models, new experiences, and new platforms, the retailer disrupts existing business models and further monetizes their digital investments. This is sometimes referred to as the "Uberization" phase.

Retail Digital Transformation Roadmap Framework

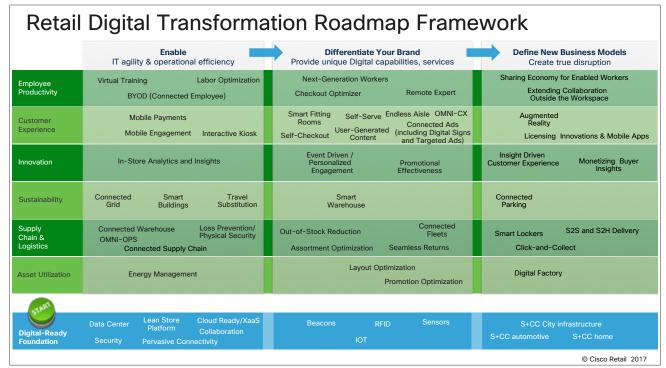|	**Enable** IT agility & operational efficiency	**Differentiate Your Brand** Provide unique Digital capabilities, services	**Define New Business Models** Create true disruption
Employee Productivity	Virtual Training Labor Optimization BYOD (Connected Employee)	Next-Generation Workers Checkout Optimizer Remote Expert	Sharing Economy for Enabled Workers Extending Collaboration Outside the Workspace
Customer Experience	Mobile Payments Mobile Engagement Interactive Kiosk	Smart Fitting Rooms Self-Serve Endless Aisle OMNI-CX Self-Checkout User-Generated Content Connected Ads (including Digital Signs and Targeted Ads)	Augmented Reality Licensing Innovations & Mobile Apps
Innovation	In-Store Analytics and Insights	Event Driven / Personalized Engagement Promotional Effectiveness	Insight Driven Customer Experience Monetizing Buyer Insights
Sustainability	Connected Grid Smart Buildings Travel Substitution	Smart Warehouse	Connected Parking
Supply Chain & Logistics	Connected Warehouse Loss Prevention/ Physical Security OMNI-OPS Connected Supply Chain	Out-of-Stock Reduction Connected Fleets Assortment Optimization Seamless Returns	Smart Lockers S2S and S2H Delivery Click-and-Collect
Asset Utilization	Energy Management	Layout Optimization Promotion Optimization	Digital Factory
START **Digital-Ready Foundation**	Data Center Lean Store Platform Cloud Ready/XaaS Collaboration Security Pervasive Connectivity	Beacons RFID Sensors IOT	S+CC City infrastructure S+CC automotive S+CC home

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Figure 1
The Digital Roadmap for the Retail Industry

For the digitization journey to be a success, retailers must build the infrastructure that enables transformative capabilities at each phase of the roadmap. These foundational technologies are represented by the blue bar spanning the bottom of the roadmap, the "Digital-Ready Network/Foundation." Such technologies are the bedrock for aligning technology investments to business value creation—something Cisco is committed to helping retailers do.

These "blue-bar" platform investments continue to generate value through each phase. For example, investing in a mobility platform may initially fulfill the need for a mobile POS capability (an Enable phase value driver). Moving forward, however, it can serve as the platform for Differentiating services. These could include "endless aisles," where associated can locate merchandise in other non-store channels to fulfill customer needs; or smart fitting room services, where shoppers send requests to the associate's mobile device without having to leave the fitting room. Then, in the Define phase, that same mobility platform can enable new revenue streams as apps, services, and data become value generators—and even drive the creation of entirely new business models.

The Customers Speak: Key Findings from the Frontlines of Retail

Cisco's discussions with over 200 retail customers offer some surprising revelations about the current state of the industry's digital journey.

In retail, much of the innovation—and disruption—is coming from start-ups and non-store retail channels. More traditional retailers don't always know whom they will be competing against or what novel digital consumer behavior will suddenly become the new norm. In response to these ill-defined threats, retailers should be making foundational investments in their operations and digital infrastructure—to become agile, responsive, lean, and ready to respond rapidly to disruptive market entrants.

Among such Digital-Ready Foundation technologies, the sessions showed that retailers are investing in most of the "must-have" platforms for digital transformation, such as data center, security, lean store platforms, pervasive connectivity, and cloud ready/XaaS collaboration. These are the foundational technologies located primarily on the left side of the horizontal blue bar in Figure 1. And there is a reason for that positioning: They are the highest priority platforms and architectures that will enable all other capabilities of digital transformation. Without initial investments in these areas, progress creating differentiation and disruption could be slowed or even stopped, costing a retailer time and competitive advantage.

For now, these retailers appear to be holding off on the more advanced phases of the roadmap: Differentiate and Define. This is consistent with Cisco's Value at Stake research findings, which revealed that 30 percent of retailers say they are taking a "wait and see" approach to implementing some of the more advanced digital experiences. A lack of investment across two of the three phases of the Digital Transformation Roadmap can leave the retailer severely exposed if competitors implement faster digitization.

The sessions also revealed two key takeaways on Digital Roadmap progress:

1. Retailers place a priority on investing in Customer Experience capabilities and technologies. *But they fail to prioritize investment in the area that drives the single largest value for their money: Employee Productivity.*

   a. Retailers are placing 37 percent of their investment priorities in Customer Experience use cases. By contrast, they are placing only 6 percent of their investment priorities in Employee Productivity.

   b. Cisco research has previously revealed that US$187 billion in Value at Stake lies in the Employee Productivity use cases. In contrast, Customer Experience use cases drive US$91 Billion in Value at Stake. (See Figure 2, next page)

2. Retailers' investments are not balanced across the digital roadmap. *They are prioritizing Enable phase use cases much more heavily. The issue with this strategy is two-fold. First, they may not be generating the full value to their businesses that these investments can provide, by sub optimizing their IT spending. Second, by not using these platforms to create differentiation and disruption, retailers can create an internal culture based on simply keeping up. Externally, they can be perceived as a "me-too" player, eroding brand equity.* Retailers need to take a more balanced approach by increasing investment in technologies and use cases that lie within the Differentiate and Define phases.

   a. Data analysis from the sessions shows that 49 percent of retailers' digital investment priorities are in the Enable phase. However, Cisco's previous research found that 42 percent of the retail Value at Stake lies in use cases within the Enable phase.

By prioritizing the Enable phase and Customer Experience capabilities, retailers are compounding an historic problem in the industry: a low "IT intensity" score (the rate of IT investments as a percentage of revenue). With a culture of low spending in digitization and IT, coupled with an overemphasis on customer experience capabilities, retailers are not getting the value they need from digital technologies.

Retail
$506B Digital Value at Stake
Through 2018

Source: Cisco, 2016

Innovation

USE CASES
- In-store analytics
- Interactive kiosks
- Assortment optimization
- Out-of-stock reduction
- In-store navigation
- Connected ads, marketing

OUTCOMES
- Harness insights from video and store analytics
- Enable in-store personalized advertising

Asset Utilization

USE CASES
- Cybersecurity
- Loss prevention/ physical security

OUTCOMES
- Improve security, reduce theft
- Reduce operations and maintenance costs

Sustainability

USE CASES
- Smart grid
- Next-generation workers

OUTCOMES
- Reduce costs
- Increase staffing efficiency

Employee Productivity

USE CASES
- In-store analytics
- Checkout optimizer
- Remote expert, mobile advisor
- Smart lockers
- Interactive kiosks
- Next-generation workers

OUTCOMES
- Increase employee efficiency
- Better manage opening and closing registers
- Increase utilization of experts
- Improve worker collaboration

Customer Experience

USE CASES
- Payments
- Remote expert
- Self-serve channels
- Endless aisles
- Smart lockers
- Checkout optimizer

OUTCOMES
- Increase customer engagement
- Increase upsell opportunites
- Reduce friction between online and offline experiences

Supply Chain & Logistics

USE CASES
- Connected supply chain
- Assortment optimization
- Out-of-stock reduction

OUTCOMES
- Improve inventory management
- Determine best product mix per store
- Increase revenues

$187B
$131B
$91B
$54B
$38B
$5B

Figure 2
Digital Value at Stake in Retail

Overall, retailers need to move beyond the Enable phase and invest in technologies, capabilities, and use cases that lie in the Differentiate and Define phases. This will allow them to do more than merely survive digital disruption—it will enable them to thrive and win.

When retailers invest in the Define phase, they use their digital capabilities to create new business models, new services, and new sources of revenue. Additionally, retailers need to prioritize Employee Productivity technologies and use cases, which estimates show can generate the greatest value. In retail, investments in workforce digitization deliver value to operations, the labor equation, and talent retention. Since all of these support new and compelling customer experiences, digitizing the workforce enables a value chain that is critical to retail success.

Where Digital Transformation Succeeds—and Lags

Feedback from the survey discussions reveals where retailers are succeeding—and where they should rethink their investments.

Enable Phase

Most retailers in the sessions prioritize their investments in the technologies and use cases that lie in the Enable Phase. Let's look at which line of business use cases are driving these current initiatives:

As we have seen, 49 percent of retailers' current investments lie within the Enable phase. However, Cisco research shows that only 42 percent of the retail value lies in this phase.

Where Retailers Invest

Within the Enable phase, retailers are prioritizing the majority of digital investments (46 percent) in Customer Experience use cases, compared to 20 percent in Innovation use cases and just 9 percent in Employee Productivity use cases. Within the Enable phase, retailers are prioritizing the following Customer Experience use cases:

- Mobile Payments
  - Example: Apple Store's mobile store associate and mobile check out functions, which were once considered disruptive, are now considered an Enable technology for most retailers.

- Mobile Engagement
  - Example: Panera Bread's mobile app that allows customers to order in advance; Starbuck's mobile order and pick-up services; True Religion's use of wearable technologies to drive customer relationship management and clientelling.

- Interactive Kiosks
  - Example: Panera Bread's self-service mobile tablet allows customers to place an order themselves; Rebecca Minkoff stores allow shoppers to select items from a digital screen and have them placed in a fitting room, saving time and providing a better store browsing experience.

Where Retailers Should be Investing

Cisco's Value at Stake research suggests that the highest value lies in Employee Productivity use cases:

- BYOD—Bringing data insights and collaboration to employees' own devices.
- Labor Optimization—Freeing staff for more high-value interactions by digitizing lower-value tasks. Leveraging specialized resources through digital presence across multiple stores.
- Virtual Training—Empowering the workforce with easily accessed educational content. Increasing consistency of experiences in-store and maintaining more control of on-brand messaging.

Recommendations

Within the Enable phase, retailers have focused on investments in Customer Experience technologies. However, they need to also increase investments in Workforce-related technologies. Digitizing the workforce will help them retain the best employees, while in turn improving the customer experience by enabling better in-store interactions.

Retailers should invest in labor optimization tools that will make their employees more productive or add to their skill-sets and training. Examples include virtual on-demand training, management of orders and merchandise using collaborative tools, improved access to corporate messaging and information, dynamic scheduling through their personal mobile devices, and enabling employees to download planograms or send snapshots or video of planograms.

Retailers should also seek new ways to streamline work. For example, self-service kiosks and digital screens in the aisle can free in-store staff. By accessing them, customers can research an item in a different color or size, or see if it is in stock at another location. By automating processes and offloading some tasks, the staff is freed to provide more high-value and high-touch interactions, such as "clientelling" to build relationships with loyal customers. Such high-value customer experiences are only possible by digitizing remedial functions and improving internal and external collaboration.

> Digitizing the workforce will help retailers retain the best employees and improve the customer experience by enabling better in-store interactions

Retailers should especially invest in in-store data analytics. A better understanding of store operations, workflows, and customer behavior is key to optimizing workforces by, for example, predicting demand. Real-time analytics lets retailers know if there is going to be a rush on the fitting room or at checkout registers. Retailers can then reassign staff to where they are needed most. Analytics can also provide insight into planogram compliance.

Ultimately, optimizing the workforce improves the customer experience. Customers are often frustrated by long checkout lines, untidy store floors or fitting rooms, and ill-informed sales associates. Simply throwing more labor at the problem won't solve these problems. They are instead addressed by using people more efficiently.

Differentiate Phase

In the Differentiate phase, the retailer uses digital solutions to truly separate their in-store experience and operations from the competition. Technologies that can be described as part of the Internet of Things (IoT)—that is, digital transformation technologies—drive great impact at this stage. These can include beacons, sensors, RFID tags on items or employee ID tags, digital screens, etc.

As in the Enable phase, most retailers are focusing their investment priorities in Innovation (34 percent) and Customer Experience use cases (27 percent) while investing 6 percent in Employee Productivity use cases.

Where Retailers Invest

- Promotional Effectiveness
  - Example: By integrating mobile data, Wi-Fi, and location sensors with past purchase history, retailers can activate mobile promotions that are personalized, targeted, and relevant. For example, if a loyal Coke consumer walks past the Coca-Cola aisle, the retailer can send a personalized promotion to the customer's mobile phone.
  - With digital technologies, retailers gain greater insight into which promotions worked best. Retailers can see, for example, if the Coke drinker did in fact take advantage of the promotion.
- Event Driven/Personalized Engagement
  - Example: When customers enter a store, sales associates "recognize" them via an opt-in app on their mobile device. If a customer tends to wear blue and has been browsing online for swimwear, an associate can direct them to the right section and point out new items in blue. To achieve this, retailers need data and analytics on the customer's past purchases and browsing history; mobile technologies that recognize the customer's mobile device when they enter the store; and beacons and other technologies to detect and engage the customer in the store.

Where Retailers Should be Investing
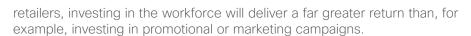
Cisco research suggests that the highest value opportunities lie in Employee Productivity use cases. Yet only 6 percent of our survey retailers prioritized this in the Differentiate phase.

Employee Productivity use cases that drive the greatest value within the Differentiate phase are:

- Next-Generation Workers (US$96B value at stake)
  - Examples include optimizing the workforce through data analytics, supporting BYOD, and dynamic scheduling through mobile devices (for example, sharing shifts with co-workers). By optimizing the next-generation workforce, retailers reduce turnover and costs.
- Virtual Expert (US$49B value at stake)
  - Using remote experts and video to train workers to be more efficient and effective. This same platform also allows retailers to deliver expert resources that may be more scarce. For example, through high-quality telepresence, customers can be connected with remote experts on tool brands, nutrition and health, or style and design. These can be accessed via mobile interfaces or in-store screens.
- Checkout Optimizer (US$11B value at stake)
  - Using data analytics, retailers anticipate when there will be a rush on the checkout and preemptively move staff. This improves efficiency and customer experience.

Recommendations

Customer experience and innovative technologies are not the only ways to differentiate a retail brand. Within the Differentiate phase (as in the Enable phase), the greatest value lies in Employee Productivity technologies. For many

retailers, investing in the workforce will deliver a far greater return than, for example, investing in promotional or marketing campaigns.

"Next Generation Workers" is a particularly valuable use case in the Employee Productivity section of the roadmap. Employee frustration with current scheduling practices (getting schedules without enough notice, no flexibility to make changes, etc.) leads to high turnover. By leveraging digital capabilities for workforce scheduling, retailers can increase employee productivity and satisfaction and reduce turnover. This in turn reduces costs, especially as labor regulations in some states are already demanding improved scheduling predictability for part-time employees.

Some additional use cases:

- Smart fitting rooms/smart mirrors—Some high-end retailers and brands are adopting this technology. Luis Vuitton, for example, places an RFID tag on each of its custom handbags. When a customer approaches a smart mirror, it shares details about the bag (where it was made, what materials were used, who designed it, etc.).

> For many retailers, investing in the workforce will deliver a far greater return than investing in promotional or marketing campaigns

- Inventory management/Planogram—Other retailers (such as Target) are concerned about keeping inventory on shelves correct and well stocked. Digital technologies ensure that stocking and planograms are accurate to provide continuous service to shoppers. These promotional operations improvements can significantly increase the return on marketing campaign and promotion funding.

Define Phase

In the Define phase, retailers use their digital technology investments to create new services, revenue, business models, and even markets.

Again, data analysis from the sessions shows that within the Define phase, retailers are prioritizing the majority of their investments in Innovation (37 percent) and Customer Experience (32 percent). They are once again missing out on a large opportunity by investing the least (just 2 percent) within Employee Productivity.

Where Retailers Invest

Within the Define phase, retailers are prioritizing these Innovation use cases:

- Insight-Driven Customer Experience
  - Retailers can now create exceptional experiences based on insights they would not have had even a few ago. For example, using sensors and other technologies, retailers can identify when a customer enters the parking lot, or when they're standing in a specific location, such as the pet food aisle. The retailer can combine that location data with other information, such as the customer's social media activity—a Tweet or an Instagram photo showing their new puppy. Retailers use this insight to send an immediate note of congratulations or a discount on puppy food to the customer's mobile phone or a nearby digital sign. In this way, they are able to deliver promotions or other hyper-relevant experiences in real time.

- Jet.com is an example of an entirely data-driven model. As a customer adds items to their cart, it offers other products in real time—with discounts based on what margin has been spent. Insight also influences how the store is managed. Stocking and staffing can be driven by the time of day if, for example, customers are shown to buy more beer at 5 p.m.
- Monetizing Buyer Insights
  - Beyond improving customer and workforce experience, retailers can use data insights to create new revenue streams. For example, a restaurant might use a customer's retail purchase history data to sell personalized meals that meet specific dietary needs.

The second highest investment priority within the Define phase is in Customer Experience use cases. Examples of Customer Experience use cases that retailers are investing in include:

- Augmented reality
  - Shoppers can use augmented reality apps on their mobile phones to display hyper-personalized recommendations as they look throughout the store.
- Licensing Innovations/Licensing Mobile Apps
  - In the Define phase, retailers that have created mobile apps can then white-label them and sell them to other retailers, creating a new revenue stream.
  - Starbucks has created a mobile ordering and mobile payment app that they could sell to other retailers.
  - Amazon Web Services offers its cloud infrastructure to handle bursts of activity during peak shopping seasons.
  - Such licensing innovations allow retailers to recoup some R&D costs, while turning digital capabilities into new revenue streams.

Where Retailers Should be Investing

Cisco research suggests that the highest value opportunities lie in the following Employee Productivity use cases:

- Sharing economy for enabled workers
  - This phase builds upon the "Next Generation Workforce" capabilities outlined in the Differentiate phase. For example, by extending collaboration outside the workplace, workers become brand ambassadors rather than just retail staff. An example is the website 3point5.com. Retail workers use this site as a self-study tool to learn about different brands, test their knowledge, and gain certifications. When they are certified on certain brands through this on-line program, they improve their skill set and their resume. They may receive incentives to wear or use the products of the brand and be their voice in the market.
- Extending collaboration outside the workspace
  - Digital technologies also provide employees with the flexibility to meet personal demands —picking up kids from school, for example—while remaining connected with fellow workers or customers. This lowers turnover and reduces costs for the retailer.

Recommendations

In the Define phase, digital transformation reinvents opportunities presented by the core business. For example, Starbucks does not consider itself a coffee shop: They are a technology company that serves coffee. Car companies such as Audi have redefined the "remote open" concept. Remote open used to just be a convenience for the car owner. But through a partnership with UPS and Amazon, the owner can leverage the shared economy to "rent out" their trunk to receive packages. For example, Audi owners can receive packages for themselves, co-workers, or friends who fear a package left on a doorstep could get stolen.

Also within the Define phase, retailers can begin to leverage the sharing economy to create new revenue. The sharing economy can be employee driven (as the example of the 3point5.com website listed above) or it can be customer driven. An example of customer-driven sharing is Domino's in Australia. They are allowing consumers to make their own combination of pizza, share it via their social channels, and then get reward points and monetize dollars around it.

> Digital transformation reinvents opportunities presented by the core business

Another key concept in the Define phase is the potential for improved or complete rebranding based upon value created from digital capabilities. Through digital transformation, for example, a generator company can use sensors and predictive maintenance algorithms to replace a part before it fails. The brand may once have been known only when its products failed and literally left its customers in the dark, which left the PR department in a constant defensive crouch. With digitally enabled predictive maintenance, the company can re-brand to a more positive slogan such as "The Generator that Never Fails" or "The Generator that's Always On." Digitizing key areas of the product or operation can literally improve the brand value, creating market leadership in ways not previously available.

Examples of retailers moving to the Define phase:

- REI offers expert advice and a place to stage high-end products. For example, even if a store doesn't carry the full inventory of Go-Pros, knowledgeable associates can educate customers and help them make the purchase online.
- Apple's in-store Genius Bar is similar. People come to the store just for the expert advice. Even if consumers don't buy the products in-store, the Genius experts and other knowledgeable sales associates educate and guide them to order online for home delivery.
- Pizza Hut is leveraging the Internet of Things (IoT) to speed orders. Customers simply tap their wearable device to automatically order their favorite pizza. At an outdoor event such as a concert, Pizza Hut can also sponsor a temporary tattoo. By tapping the tattoo, the customer orders the pizza and it is delivered to them at the event (leveraging localized sensors and receivers to identify the location).

It is important to note that if a retailer jumps into the "Define" phase without clearly defining the desired business outcomes, they can fail. When a retailer's core business is digitally disrupted or commoditized (for example, it's available online or customers are unwilling to pay a premium for it), they need to move

quickly to the Define phase and create a new model. But they must have clear business goals in mind.

In the beauty supply business, for example, few customers come into a store for products they can buy online. But in the Define phase, beauty suppliers can offer consulting or other services that improve all stages of the buying process. Sephora, for example, offers a service called Color IQ, in which associates scan a customer's skin with a digital device. Products are then matched to that specific skin tone.

However, not all retailers need to focus on the Define phase. Customers will still want to come into the store to try out some products, and are often willing to pay a premium for a good experience. Those retailers can still thrive in the first two phases (Enable and Differentiate).

Among Retail Segments, Key Differences Emerge

Geographic Differences

Significant differences emerged between geographic segments in the study. Retailers from the South America session (Brazil) are making greater investments in Enable (67 percent) compared to North American retailers (51 percent). This indicates that North American retailers may be further along the digital roadmap than South American retailers. Presumably this is because of economic conditions in Brazil. Retailers in Brazil are focused on investing in foundational technologies (such as asset utilization and energy management); these will help them prepare for the more advanced phases.

Looking at the horizontal use cases that span all three phases of the digital roadmap, data analysis revealed that investments in "Innovation" use cases is higher in North America than South America (34 percent vs. 19 percent of investment priority) whereas investment in "Customer Experience" use cases is higher in South America compared to North America (46 percent vs. 40 percent). In the Netherlands session, a group that consisted entirely of online retailers, investments in Customer Experience use cases were highest (42 percent), while investments in Employee Productivity use cases were lowest (4 percent).

Differences in Other Segments

Additionally, analysis showed that retailers who attended a session held in Dallas, Texas, (department stores, retailers from Southern U.S. states, and a mixed segment of retailers) were making higher investments in the Enable phase (61 percent). This contrasted with retailers in the Northeast session held in New York (42 percent), which consisted primarily of apparel manufacturers/retailers. The results showed that apparel retailers are heavily focused on innovation and should balance their digital roadmap investments by investing more in operational efficiency—with, for example, use cases that will improve distribution, production times, retailer insights, and use of data.

For example, Gap is emphasizing a data-driven model. Whereas traditional decision-making relied almost exclusively on the instincts of creative directors, merchants and designers, the new automated and integrated approach is based on customer insight. By driving close alignment to customer needs, while investing in technologies that enable efficiency and lower prices, the

retailer hopes to win a huge portion of the market. In doing so, Gap is following companies like Zara, which has had great success with a data-driven approach to retail fashion.

Five Recommendations for Achieving Digital Transformation

Further recommendations for retailers to consider as they navigate the Digital Retail Roadmap:

- As retailers identify their own specific roadmap, they will need to consider priorities for their brand and their market positioning. For example, retailers should ask themselves some key questions: Is customer service the brand priority, or is being the low-cost leader? Does the brand's value lie in its innovation, or in product exclusives? Is the brand becoming less relevant with today's consumers?

- Balance should be sought across the three phases. However, it does not need to be perfect balance. For example, retailers can focus on creating operational efficiencies and cost effectiveness (key characteristics of the Enable phase) while at the same time pursuing digitally disruptive initiatives in the Differentiate phase or the Define phase.

- Because the retailers surveyed agreed that disruptive threats would most likely come from new entrants to the industry, high priority should be placed in the enablement phase of the Digital-Ready Foundation (the blue bar across the bottom of the roadmap). This is where a retailer can create agility, lower cost execution and simplicity, enabling the organization to quickly respond to disruptors, threats, and opportunities.

> High priority should be placed in the enablement phase, where a retailer can create agility, reduce costs, and simplify

- Security is a critical priority for the enablement phase of the Digital-Ready Foundation. Most retailers have tremendous existing vulnerabilities in their operations that need to be secured. But security concerns can also prohibit future digital innovation. Without a secure and agile foundation, retailers cannot begin to transform or innovate in the Differentiate and Define phases. This is becoming widely recognized. We see most retailers investing to secure all aspects of the organization, protecting current operations and customer data, but also preparing their business for disruptions that are inevitably going to be part of their future operation.

- Wireless connectivity and video will be critical investments. When retailers think about the Digital-Ready Foundation across the bottom of the roadmap, they need to consider pervasive connectivity as a launching point for all other investments. Pervasive means a wireless infrastructure that can support shopper and associate functions throughout the store and beyond, to include the parking lot and even shipping and receiving and trash receptacle areas. Employee safety is driving some of these less obvious focus areas.

It is important to remember that without those foundational "blue bar" investments, particularly in the enable phase, innovation cannot be scaled across the organization. But once those investments are made, they will continue to pay off. For example, today's Wi-Fi investment can lead to basic

Guest Wi-Fi, which in turns creates shopper behavior analytics. In short, by implementing pervasive Wi-Fi, a retailer is creating a shared-services platform that can be used in the differentiate phase for personalized/event driven engagement and other use cases.

Moreover, no single use case is a "magic bullet." True disruption happens when retailers combine three areas of value: 1) a fundamental change in the cost value model for the product or services they provide, 2) a significant evolution in the value provided by the customer experience, and 3) an increased reliance on digitization platform value, such as the sharing economy and peer-to-peer capabilities.

"Combinatorial disruption," in which multiple use cases in these three areas are fused, can create truly disruptive new business models and change the way consumers are served in every step of the shopping journey. (see Figure 3).

Frictionless Life	Hyper Relevance	Community
Cost Value	**Experience Value**	**Platform Value**
Price transparency	Customer choice	Marketplaces
Consumption-based pricing	Personalization	Crowdsourcing
Reverse auctions	Automation	Peer-to-peer
Buyer aggregation	Lower latency	Sharing economy
Rebates and rewards	Any device, anytime	Data monetization

Source: Global Center for Digital Business Transformation

Figure 3
Digital Business Models
Connect Customers
with Value Better,
Faster, and Cheaper

This combination and recombination of technologies and other sources of value also blurs the lines between industries. Tesla provides a good example of combinatorial disruption. Beyond a car company, Tesla is also an agile digital platform that mixes use cases and technologies at will. In 2015, Tesla spanned industries by unveiling inexpensive batteries for the home and business markets, which can be used to store energy generated by solar panels.

Conclusion

This new research reveals that retailers are not always taking the most effective path in their efforts to achieve digital transformation. It reveals that there are major exposures for retailers who don't use a balanced approach that spans the three phases of digital value creation outlined in the Retail Digital Transformation Roadmap framework.

All retailers we worked with expressed common concerns, challenges, and a desire to map out an effective strategy for their organization's transformation. But we clearly see that retailers from all segments and from multiple geographies around the world are struggling. They must align their digitization initiatives to a strategy that accomplishes everything required for today's complex retail environment. And they need a framework that ensures they don't just survive this industry transformation, but creates a clear path for growth and even disruption.

Many retailers are now embracing Cisco's Digital Transformation Roadmap framework. They are revisiting their plans to ensure that core digital-ready ("blue-bar") platforms will support success in all phases of their digital transformation journey.

By creating a more balanced approach to the phases of digitization and by focusing on the most impactful use cases, such as workforce transformation, retailers are accelerating the journey to new value creation and success.