



## **Digital disruption in retail**

February 2020



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# Foreword

Retailers function in a dynamic environment witnessing dramatic shifts on key front-end elements, including the following:

**Consumer:** From the perspective of a brand's interaction with its consumers, time and distance have been the major dimensions that have been decreased. This led to greater convenience for customers. Preference for instant gratification, enhanced shopping experience, sustainability, and easy access to social media have led to the creation of new-age consumers who are more confident and expressive in terms of how they think, feel, and act.

**Brand:** It is not only about maximising shareholder value alone but also about the impact that retailers have on local communities, the environment, and the social capital that they build. This signals the brand's commitment to promote inclusion and celebrate diversity in a world where trust levels in big businesses have dropped to a historic low.

**Product:** Return on catchment or pin code is the key driver to defining product assortment at stores. It is no longer sufficient to track same store sales on return on investments at a store level. Shortening product life cycles and the dramatic increase in new product launches have also created the demand for agile and dynamic product portfolio rationalisation.

**Store:** A phydigital store is a place where the boundaries between the physical shop and the online website blur to provide a seamless experience to customers. Digital influence factors have increased across categories and brands usually struggle in aligning their

digital content, transactions, and after-sales service to keep pace with market disruptions.

**Channel:** Direct-to-consumer models, such as exclusive brand outlets (EBOs), are witnessing increased investment from brands seeking to retain their relevance amid squeezing margins due to large format retail (LFR) and large marketplaces. While the share of multi-brand outlets (MBOs)/general trade continues to deplete, we see an increased focus on brands increasing their engagement with the top quartile of MBOs.

The resultant changes in business models are visible across the three areas of demand generation, capture, and fulfilment. There are possibilities of dramatically increasing **footfall, conversion, average bill value** on the front end; improving **merchandising, assortment planning, brand experience** at the store; and driving better **availability, demand sensing, and inventory rotation** in the supply chain, by deploying asset-light digital technologies using the start-up ecosystem. This might result in retailers **accelerating sales** at a lower **cost to serve** to help build more sustainable and profitable **business models for the future**.



**Anand Ramanathan**  
Partner, Consulting

# Foreword

## **A Definitive Guide to Digital Transformation**

Technology advancement and digital enablement are transforming the consumer as well as the market at a rapid pace. Agility in the backend processes such as supply chain, finance, procurement and assortment are the means to remain competent in such a highly competitive environment.

The report 'Digital Disruption in Retail' sheds light on the various digital transformations expected in retail value chain . It delves into the offline to online ( O2O ) as well as online to offline and explores the new business realities that are emerging with it. These include hyper-personalisation of consumer experience, value-driven actions, and technology-driven process. These serve as a means to gain a competitive-edge in a market driven by constant change and disruptions.

Digital transformation is impacting every phase of the retail value chain, from sourcing and product development to marketing and distribution. The way forward for the retail sector is to collaborate and offer integrated solutions to consumers.

This report is aimed at helping readers in their journey towards integrated retail. The best practices by retailers from around the globe will help inspire, learn and grow.

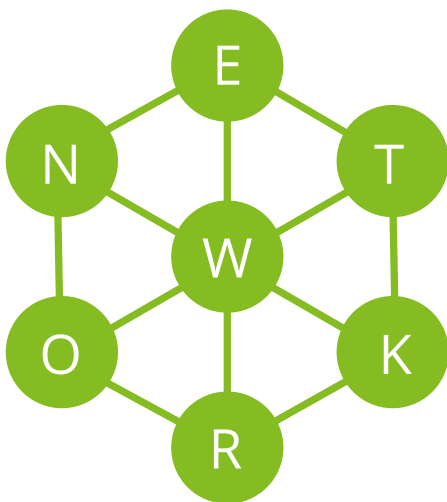


**Kumar Rajagopalan**

Chief Executive Officer - Retailers Association of India (RAI)

# Executive summary

Access to global markets, preference for convenience, and availability of diverse choices for consumers have led to the rapid evolution of retail in India. Further, advancement in technology, higher household income, varied retail channel options, diverse product variety, personalised service offerings, etc., have resulted in enhancing consumers' shopping experience. To stay ahead of this rapid evolution, retailers need to consider embracing agility in their functions and operations. Agility in processes has the potential to lead to collaboration among cross-functional inter-disciplinary members, encouraging iterations for an adaptive best-case process. The concept of agility can be used across functions to augment productivity and efficiency, as well as reduce costs and efforts.



Technology has been the front runner in driving businesses, and enhancing consumer engagement and experience. Apart from understanding consumers'

behavioural insights through advanced data analytics, emerging technologies, such as internet of things (IoT), augmented reality (AR) and virtual reality (VR), artificial intelligence (AI), bots and drones, beacons, and cloud platforms, have played a key role in enhancing consumers' engagement more than ever. Engaging consumers through immersive technologies, bespoke solutions, and custom targeting, is expected to significantly increase the probability of attracting and retaining new-age shoppers. Various new solutions are being offered by established companies and start-ups to woo shoppers. However, these strategies require enabling a digital ecosystem to deliver desired outcomes.

Through this report on 'Digital disruption in retail', we present the aspects of agility in retail organisations' operations. The report then delves into the implications of technology, leading to disruptions across entire retail value chain and transforming consumers' shopping journey at each value point, making it more convenient. In the age of digital marketing and omnichannel offerings, inter-functional networking has become a crucial aspect. With the lines blurring between offline channel and online channel, the best way to put a foot forward in the right direction is collaboration between physical space and digital space, i.e., 'phygital'. Such an integrated model has the potential to ensure a seamless shopping experience to consumers from all forms of strata. It is also a win-win solution for the physical and digital players as it supplements the model's overall efficacy by combining complimentary advantages of individual models.





# Overview of agile retail organisation

As we enter a new decade, retailers must take stock of their current positioning vis-à-vis the market and the industry. It is also critical for them to be aware of customers they are serving and manage operations to meet the rapidly evolving expectations.

Retailers have been periodically investing time and resources in technology. In the past decade, they have developed advanced supply chain operations with a far greater reach and a product line targeting more consumers. However,

with large global retail giants penetrating Indian markets, the competition for acquiring customers has only become more intense. Thus, retailers are realising the need for constantly innovating. The availability of advanced tools is pushing retailers' limits from fully integrated networks to procurement networks that allow them to choose vendors.

The digital customer has never had a better time to shop, with companies integrating tech throughout their systems.



Impact of disruption on a retail organisation

Supply chain

**Shift from traditional supply chain to digital supply networks (DSN)**

A fast-paced shift is being witnessed in the way supply chains function. Advances in computing memory and processing are driving entrepreneurs to develop innovative new digital technologies and capabilities. These technologies, including sensors, artificial intelligence (AI), machine learning (ML), and cognitive computing, create the foundation for analytics and a conversion between the physical world and the digital worlds, transforming traditional, linear supply chains into connected, intelligent, scalable, customisable, and nimble supply networks.

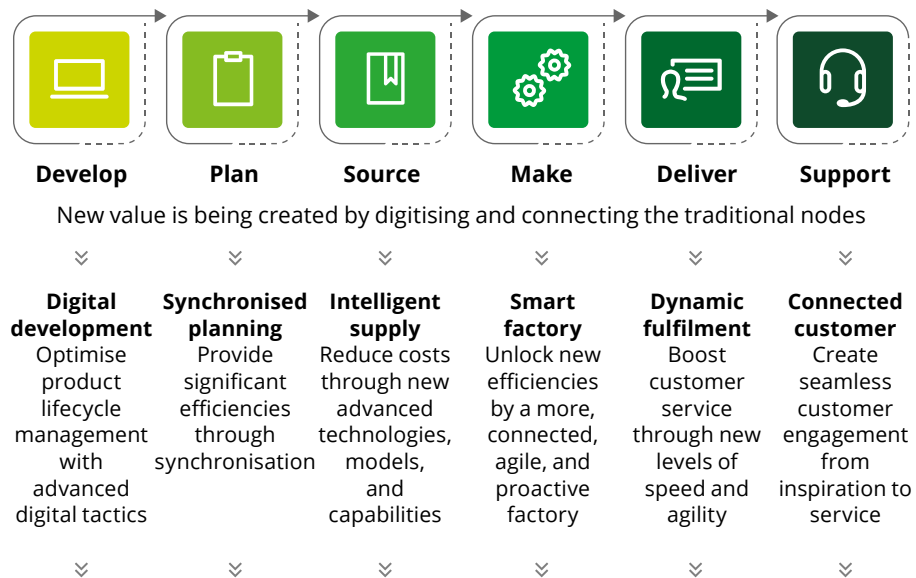
These new supply chains, also known as DSNs, are dynamic and integrated. These chains address the issue related to the delayed action-reaction process of the linear supply chain using real-time data. This enables better informed decisions and enhanced collaboration across the entire supply network, as well as provide greater transparency.

The main characteristics of the DSN include always-on agility, connected community, intelligent optimisation, end-to-end transparency, and holistic decision-making. Each of these characteristic plays a role in enabling more informed decisions and can help organisations address the central question in their strategic thinking: **how to win?**

Organisations need to consider preparing themselves to lead by imbuing agility into systems, processes, and decision-making. Personalisation at scale, leveraging ecosystems, and driving business-led digital strategies are some of the key themes.

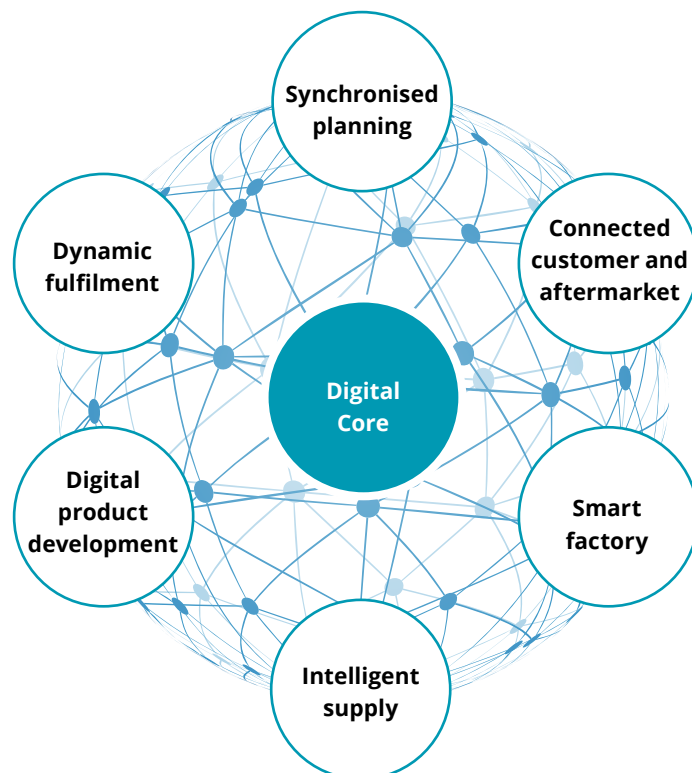
**The collapse of the linear supply chain**

New technologies and tools have allowed the traditionally linear supply chain to collapse into an agile interconnected network that unlocks new value across the digitised nodes



**The birth of the digital supply network (DSN)**

Innovative and disruptive technologies can enable supply chains to transform into DSNs, which can serve as a powerful competition weapon.



Source: <https://www2.deloitte.com/us/en/pages/operations/solutions/digital-supply-networks.html#>

**How to “Turn-On” your digital supply network**

Companies must choose specific supply chain transformation and execute priority initiatives to meet their competitive objectives.

**How many supply chains do you need?**

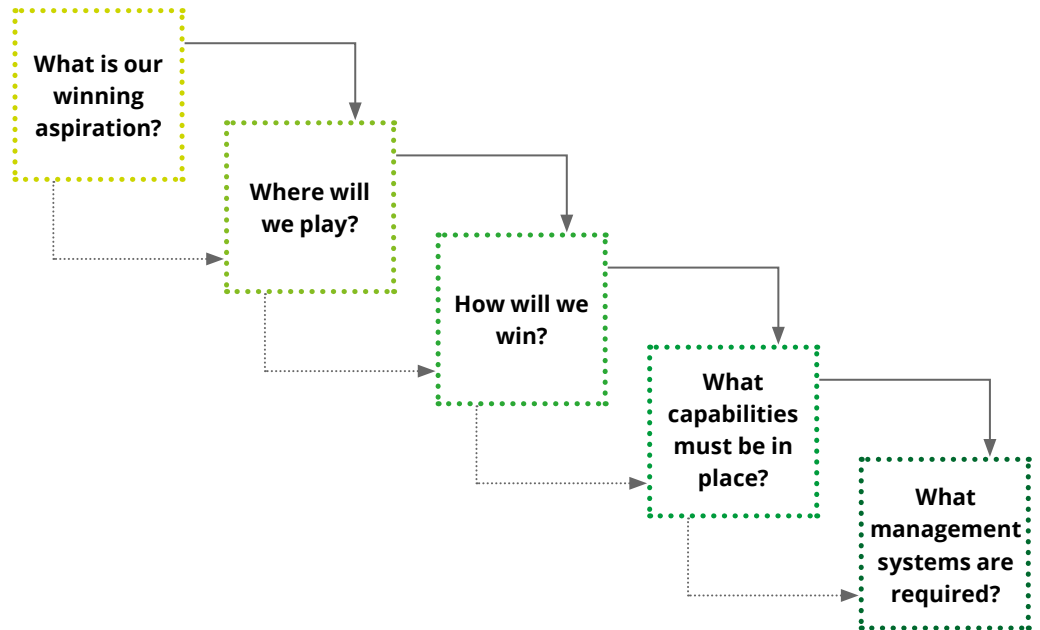
Where will you segment by customer, product, geography, or channel?

**Where will you compete on...**

Speed? Agility? Service? Cost? Quality? Innovation?

**Where do you need to transform your supply chain to meet your strategic business objectives?**

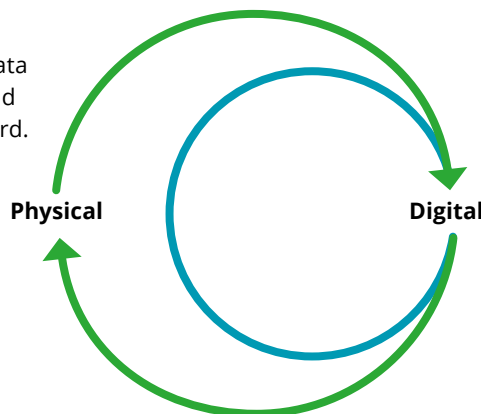
**What initiatives will you deploy to configure your digital supply networks?**



**The digital to physical loop unlocks the value**

The core supply chain issues persist and present opportunities to apply new solutions to unlock unprecedented value

**01 Physical to digital**  
Capture signals and data from the physical world to create a digital record.








**02 Digital to digital**  
Exchange and enrich information using advances analytics, artificial intelligence, and machine learning to drive meaningful insights.

**03 Digital to physical**  
Deliver information in automated and more effective ways to generate actions and changes in the physical world.

Source: <https://www2.deloitte.com/us/en/pages/operations/solutions/digital-supply-networks.html#>

### Digital supply networks (DSNs) characteristics

DSNs share common characteristics that drive differentiated performance and value

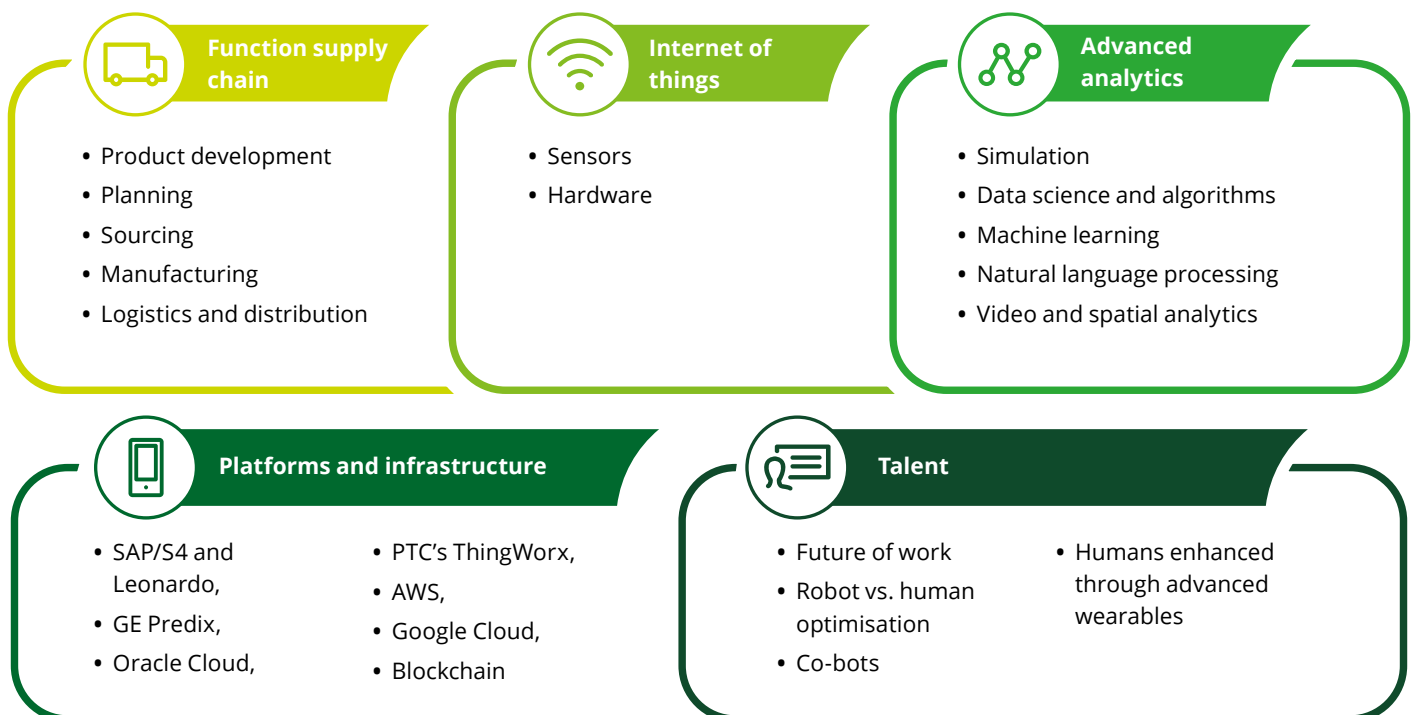
	<b>End-to-end transparency</b>	The ability <b>to see</b> across the network	<b>Capability elements</b> Existing data sets Sensors New data sets Visualisation
	<b>“Always-on agility”</b>	The ability <b>to proactively operate</b> across the network	<b>Capability elements</b> Predictive alerts Advanced analytics Edge computing
	<b>Connected environment</b>	The ability to <b>extend into</b> your suppliers and customers	<b>Capability elements</b> Third-party data sets Real-time collaboration and live data sharing
	<b>Resource optimisation</b>	The ability <b>to identify and</b> use the right worker, human, or machine, for work	<b>Capability elements</b> Artificial intelligence Optimisation algorithms Unstructured data
	<b>Holistic decision-making</b>	The ability <b>to continuously learn and make optimal</b> network decisions	<b>Capability elements</b> Machine learning Voice and thought interaction

### Foundational elements



### Critical components

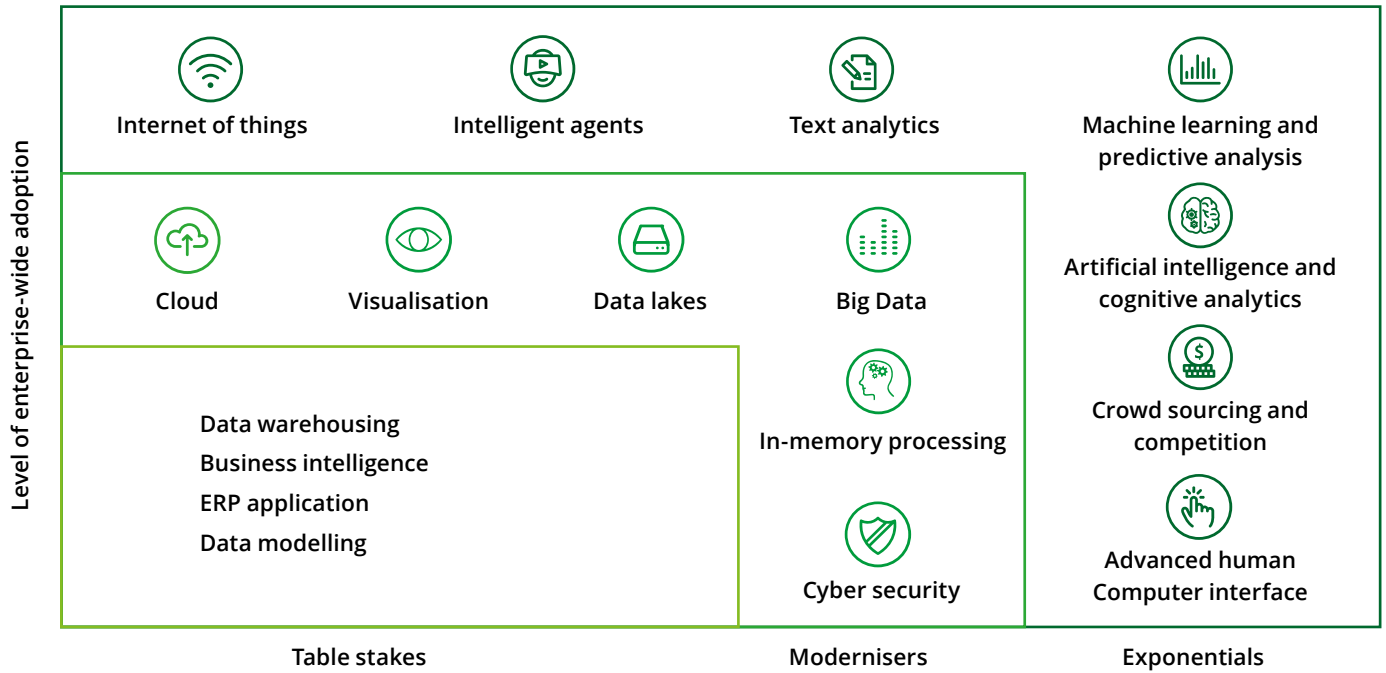
Digital supply networks require an ecosystem of functional and technical resources, tools, and capabilities to deliver results.



Source: <https://www2.deloitte.com/us/en/pages/operations/solutions/digital-supply-networks.html#>

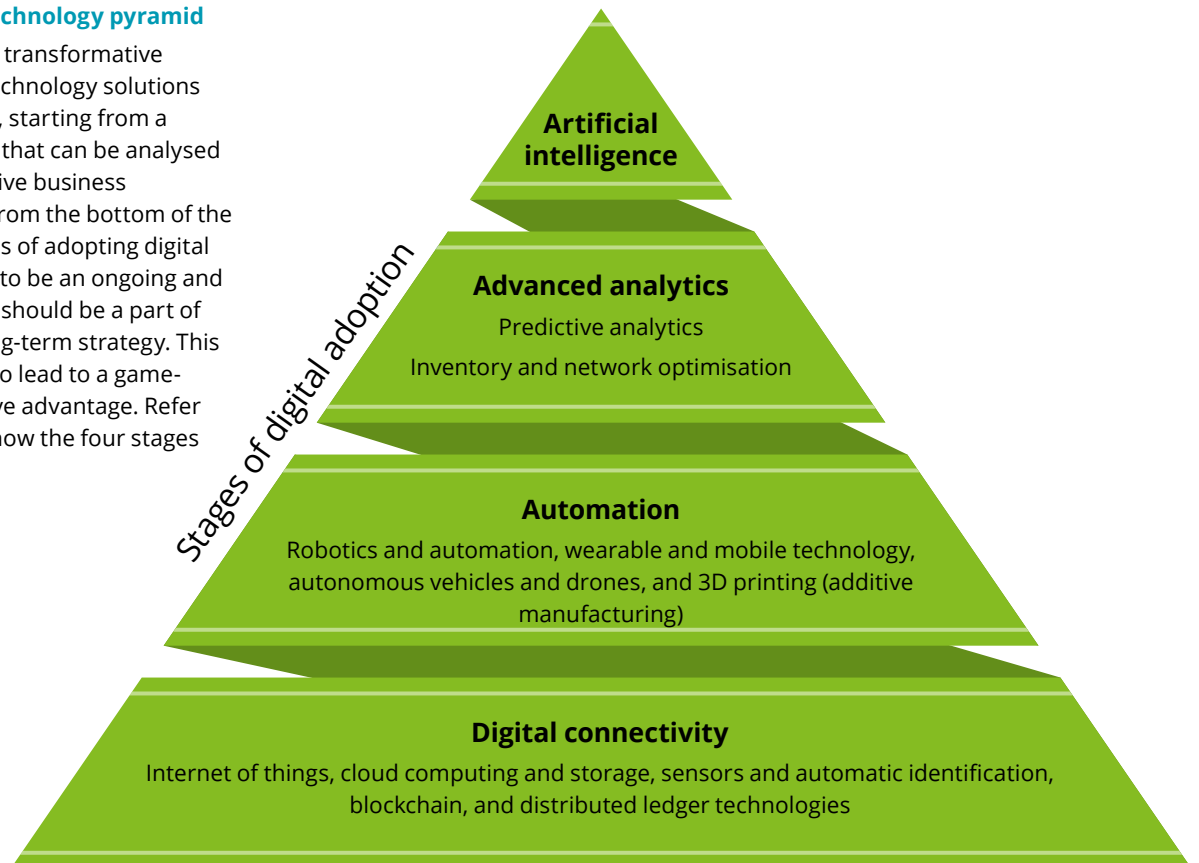
**New tools and technique enable new solutions**

Increased computing power and a reduction in cost have spurred innovation and an array of new exponential tools and opportunities.



**Digital adoption technology pyramid**

Digital adoption is a transformative process that uses technology solutions from the ground up, starting from a unified pool of data that can be analysed and then used to drive business decisions. Starting from the bottom of the pyramid, the process of adopting digital technologies needs to be an ongoing and focused initiative. It should be a part of every business's long-term strategy. This in turn is expected to lead to a game-changing competitive advantage. Refer to the diagram to know the four stages of digital adoption.



Source: 2019 MHI Annual Industry Survey in collaboration with Deloitte

Applications of emerging technologies and tactics across the supply chain

After market sales and service	Augmented reality enabled customer support	End-to-end transparency to customers	Make-to-use with 3D printing	Predictive aftermarket maintenance	
Sales optimisation	Inventory-driven dynamic pricing	Sensor-driven replenishment pushes	Target marketing		
Logistics optimisation	Augmented reality-enhanced logistics	Automated logistics	Direct to user delivery	Driverless trucks	Dynamic/predictive routing
Operations efficiency	Augmented reality-enhanced solutions	Automated production	Predictive maintenance	Sensor-enabled labour monitoring	
Supplier collaboration	Analytics-driven sourcing	Asset sharing	Blockchain-enabled transparency	Cloud/control tower optimisation	Supplier ecosystem
Risk prevention and mitigation	Proactive quality sensing	Track-and-trace solutions	Proactive risk sensing		
Planning and inventory efficiency	Analytics-driven demand sensing	Dynamic inventory fulfilment	POS-driven auto-replenishment	Real-time inventory optimisation	Sensor-driven forecasting
Product optimisation	Data as a product or service	Make-to-use with 3D printing	Ultra-delayed differentiation		
Design process optimisation	Sensor/data-driven design enhancements	Open innovation/crowdsourcing	Rapid prototyping	Virtual Design simulation	

Supply chain transformations

Sample Tactics

Digital supply networks can become a major competitive differentiator with the potential to achieve the following results:



### Increased revenue

- **Reorders and refills:** Smart packaging, applications, and data can be combined either automatically or with minimal intervention to push reorders and refills.
- **Marketing effectiveness:** Targeted marketing, combined with data from inventory and competitive pricing, can facilitate dynamic discounting.
- **Direct connection to customers:** Increased access to customers can drive sales at the precise point of consumption (for example, ordering groceries directly from the refrigerator).
- **Value of data:** Gathering, packaging, and selling data from existing customer bases can open up new revenue channels.
- **Speed to market:** Effective use of product lifecycle management accelerates every step starting from product development to delivery, and enables innovative products to reach customers quickly.



### Improved margins

- **Cost of R&D:** Rapid prototyping can lower R&D cost.
- **Cost of raw materials:** Digital advances can help identify substitute materials or connect buyers to alternate lower-cost sources.
- **Cost of quality:** Increased visibility and monitoring can decrease cost of quality. For example, sensors can identify root errors and drive process improvements that dramatically increase first pass yield.
- **Cost of service:** Digitally gathering data from products and/or users and sending it to remotely located, skilled technicians can decrease the costs of service and transportation of service technicians.
- **Cost of transportation:** Automated warehousing robots and driverless trucks use analytics and dynamic routing to improve efficiency, and reduce accidents and errors.



### Greater asset efficiency

- **Idle assets:** The sharing economy can be used for high-cost and under-capacity assets. For example, a company that only operates two shifts per day could sell its third shift to another company.
- **Supply chain downtime:** Predictive maintenance can maximise performance and reliability of manufacturing devices.
- **Idle workforce:** Sensor-enabled labour monitoring can optimise workforce assignments and scheduling.
- **Click-to-ship time:** Automated inventory management can radically increase supply chain efficiency.
- **Error propagation:** Augmented reality can assist in maintenance, and reducing error propagation and rework costs.



### Meeting shareholder expectations

- **Geographic responsiveness:** Increased connectivity enables rapid responses to unexpected issues, such as natural disasters or supplier shutdowns.
- **Brand responsiveness:** Increased insight to customer concerns or issues enables fast responses to events such as food contamination outbreaks.
- **Proactive risk mitigation:** Increased transparency demands proactive assessment of risks and fast response to customer demands.

Source: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Process-and-Operations/gx-operations-disrupting-business-models-digital-supply-networks.pdf>

**One of the largest global personal care companies: Operations 4.0 digital transformation programme with a focus on a customer-centric supply chain**

The company's supply chain network delivers more than 34 brands producing over 7 billion products a year from 42 factories, using 150 distribution centres, half a million delivery points, and 8 distribution channels in more than 140 countries. The company receives an order every two seconds.

In 2014, the company decided to evolve its earlier approach of segmenting by distribution channel. It re-designed supply chain capabilities and implemented a **world-class integrated information system** that **provided a collaborative compilation of volume forecasts** across sales, marketing, supply chain, and finance teams. These forecasts were then shared with the company's factories and distribution centres worldwide.

**Its operations 4.0 digital transformation programme**, which groups together the business of packaging, purchasing, manufacturing, and supply chain, is harnessing new technologies, including **IoT, connected objects, AR/VR, and AI**, to boost flexibility and efficiency.

With a **keen focus on the customer**, the company **senses and uses customer sentiment**. It senses consumer preferences to **change and align its portfolio to offer personalised products for purchasing anytime and anywhere**. This has pushed the company to ensure **hyper-connectivity** with the final consumer.

**Example:** The company has combined sensors, laser measurement, cameras, and advanced conveyor belts in its new production line in one of its plants. The redesigned production line processes dozens of different products simultaneously and delivers highly personalised products tailored to the individual needs.

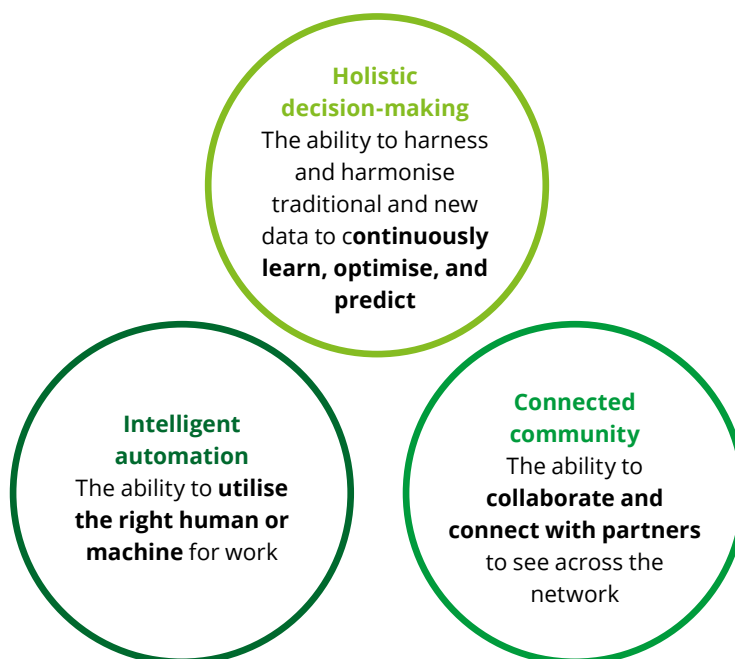
Strategy: **Customer experience** is being used as the **yardstick for the group's digital transformation**. The company has set **five medium-term priorities** for its operations staff: **accelerate design**, raise the share of **connected products**, make **factories and production lines agile**, **emphasise customisation**, and turn **consumer service into a business driver**.

Source: News articles, Company website and Annual report

Logistics and warehousing

With hyper personalisation, customers are becoming more demanding and asking for same-day or even same-hour deliveries. These demands are affecting the logistics and supply chain function. Meticulous planning and execution are needed to fulfill these demands. With the rapid infusion of new-age technologies, the ability to effortlessly coordinate delivery locations, time, and returns mile by mile is no more a novelty, but an expectation. As the online economy grows rapidly, the importance of last-mile package delivery increases—the final step in the competitive and costly process of moving items to customers' homes as quickly as possible.<sup>2</sup> Delivering products 'right now' is the expected norm.

The three pillars of the future movement-of-goods networks



Source: Deloitte analysis

Although in the early stages, we are witnessing progress in the formation of the next-gen global movement-of-goods network.



**Connected community**

The ability to collaborate and connect with partners to see across the network



**Holistic decision-making**

The ability to harness, and harmonise traditional and new data to continuously learn and predict



**Intelligent automation**

The ability to utilise the right human or machine for the task at hand and automate digital processes

Source: <https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/future-of-freight-connected-data-intelligent-automation.html?id=insightsapp>

As these capabilities advance, we are likely to witness a high degree of convergence and movement towards data unification across platforms, which will communicate seamlessly behind the scenes. The highly broken global networks of transportation and logistics providers, ocean carriers, retailers, and other large shippers are expected to witness an incremental but fast-paced movement towards integration, intelligence, and automation that can move more goods more quickly to more places, and with more transparency and efficiency than today.

as connected communities grow in parallel with maturing IoT and blockchain standards, critical supply chain data will begin to flow more freely across the network (amplifying the power of cognitive technologies to drive improved holistic decision-making). In a similar vein, when holistic decision-making merges with automation, the power of automation will shift from cheaper to smarter as cognitive technologies and predictive insights feed into a growing robotic network (creating intelligent supply chains that cannot only see into potential bottlenecks but orchestrate around them).

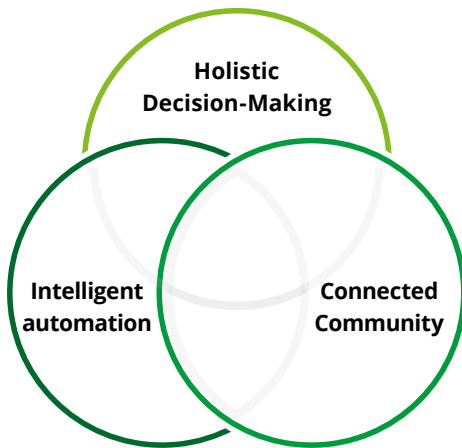
The value of these enabling technologies will unlock as they converge. For example,





## Applying the three pillars

### Core pillars scale



#### Global movers explore, pilot, and scale core pillars

- Broadening ecosystem connectivity to horizontal partners and pure technology players
- Driving digital transformation capable of real-time analytics and more holistic decision-making
- Implementing future of work talent models that harmonise machine and humans

### Core pillars merge



Connected environments

+

Holistic decision-making

Integrated digital platforms form new connective tissue, bond traditional and new data, and enable data to flow freely across the network—amplifying the power of cognitive technology

Holistic decision-making

+

Automation

The value of automation shifts from cheaper to smarter, as predictive insights feed into a growing robotic network, creating the physical-to-digital loop that becomes the backbone of a higher-performing supply chain

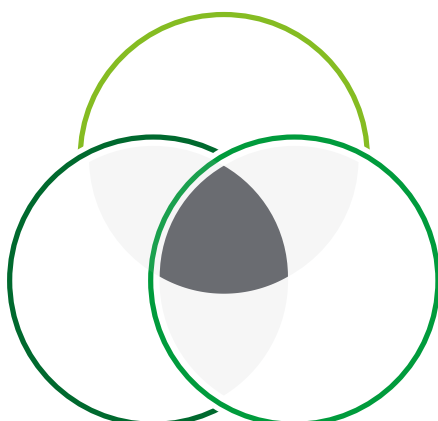
Automation

+

Connected environments

Ecosystem connectivity and data standardisation drive partner-to-partner automation of digital and physical processes

### Core pillars unify



Reactive supply chains mature to predictive and self-learning, automated networks, with little human intervention. Value creation shifts more heavily to customer experience and personalisation, as intelligent and dynamic first-to-last-mile networks proactively reach customers at the right time and place

**Future of order fulfilment**

**01. AI and ML based fulfilment systems:**





The latest AI and ML platforms can help retailers accelerate their order fulfilment process. These technologies allow retailers to automatically map demand conditions with stock availability across stores, warehouses, distribution centres, and even on-road fleet. For example, a US-based footwear manufacturer acquired multiple start-ups with analytics and ML capabilities in the past 18 months. These acquisitions are aimed at combining RFID technology with predictive analytics to accelerate inventory matching and order fulfilment to meet consumer needs. By combining investments in AI and ML technology solutions and rewriting sourcing policies, retailers can be at the forefront of

convenience and provide real-time product availability without having to accumulate unsold inventory.<sup>2</sup>

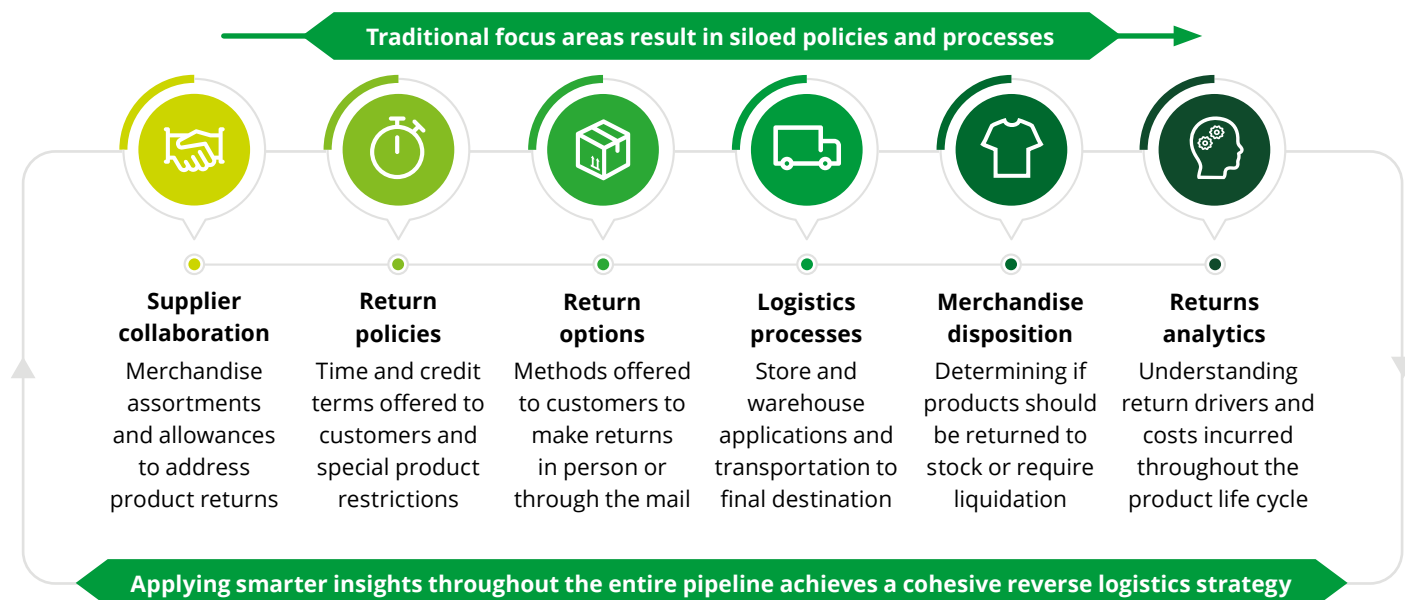
**02. Irreplaceable node in order fulfilment journey:**

While retailers are still contemplating their plans for fulfilment centres and last-mile delivery for convenient order fulfilment, physical stores play a critical role in the supply chain. Retailers are likely to accelerate the conversion of excess space in their stores into micro-fulfilment centres, especially in densely populated areas. One likely hurdle in retailers' plan to redeploy an unused store space could be redesigning limitations due to clauses in existing leasing agreements, thus pushing more redesigns to owned storefronts.

The four key trends in this area that retailers will likely adopt in the short term are given below:

Urban fulfilment	Inventory strategy	Flexible network	Data and technology adoption
 <p>It will give retailers the ability to provide same-day delivery service to the connected consumer in large metropolitan areas. While urban warehousing comes with a high price tag, use of local, small delivery vehicles and reduction in distribution spend can result in a net total cost savings.</p>	 <p>A competitive supply chain is built on end-to-end visibility and capability to quickly flex with changing demand. Optimal quantity and timing of inventory to align with sales and production capacity are key to enabling smart inventory capabilities and reducing waste.</p>	 <p>It enables supply chains to move assets faster than ever. The physical network needs to change and evolve to cater to speed as shippers are forced to re-evaluate their service-level expectations. Retailers with brick-and-mortar stores are leaning on their "buy online, pick up in-store" or "store-to-car" delivery options to provide flexibility and predictability without having to transport the last mile.</p>	 <p>It allows retailers to transform their supply chains with unprecedented visibility and insights from data. Technology integrations should be focused on understanding the customer journey and providing a substantive improvement.</p>

## Reverse logistics life cycle



Source: Deloitte Report: 2020 retail industry outlook-Convenience as a promise

### Major focus should be on returns

Traditional retailers are also placing big bets in the area of reverse logistics to attract store traffic. A major US department retail chain completed the nationwide rollout of returns programme offered by one of the largest e-commerce players. Foot traffic to its stores increased nearly 24% in the first three weeks following the rollout.<sup>1</sup> Emerging retail models, such as direct-to-consumer and subscription services and rental businesses, are built to consume high volumes of returns as a part of their supply chains. Anticipating returns with high-predictability data helps retailers form their inventory strategy. For many retailers, this creates a behaviour for which the current supply chain is not designed. However, to thrive in reverse logistics, retailers should move from return policies to return strategies.

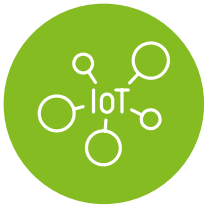
**More visibility, more control:** One of the largest e-commerce giants is building a vertically integrated, closed-loop movement of goods network in the US. Meanwhile a paradigm-changing player is showing what is possible with a truly integrated, start-to-finish supply network and highlighting the threat to

incumbents that fail to adapt their own operations according to the rapidly evolving environment. The movement of goods from China to the United States on its owned vessels in 2018 marked the completion of the world's first end-to-end shipping network. This is the last missing leg joining a chain of cargo planes, fulfilment and distribution centres, long-and short-haul trucks, a rapidly expanding last-mile network through branded delivery service partners, and its own website. The company's shift towards being vertically integrated and having a closed-loop network seems to be deliberate. The company focuses on complete transparency when goods enter its ecosystem from manufacturers, and the movement of those goods between warehouses and sort centres, leaving few dark areas. This transparency is a key part of how the brand can guarantee its growing base of global same-day/two-day shipping customers for more than 100 million different items.

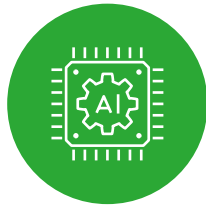
The definition of convenience is constantly being re-written in the age of intense focus on last-mile delivery.

**An American multinational retail corporation operating a chain of hypermarkets, discount department stores, and grocery stores with a significant e-commerce presence**  
 The company is taking grocery delivery to the next level by providing a unified grocery solution.<sup>1</sup> It recently launched an in-home delivery service for close to one million people in a few US cities, where the company's associate enters the customer's home and loads the refrigerator even when the customer is not at home. The associate uses a proprietary smart entry device and wears a camera device while doing this task. The company also focuses on replenishment and wants to stock customers' homes like it stocks stores. The move to use its physical presence with an early focus on grocery pick-up has allowed the retailer to acquaint customers with online shopping for groceries from the retail corporation where it is on track to offer grocery pick-up in 3,100 stores and same-day grocery delivery from 1,600 stores.

Top five transformational technologies within logistics, supply chain, and transportation, and their benefits



IoT



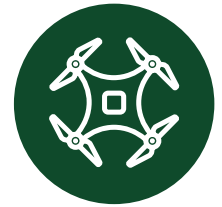
AI/ML



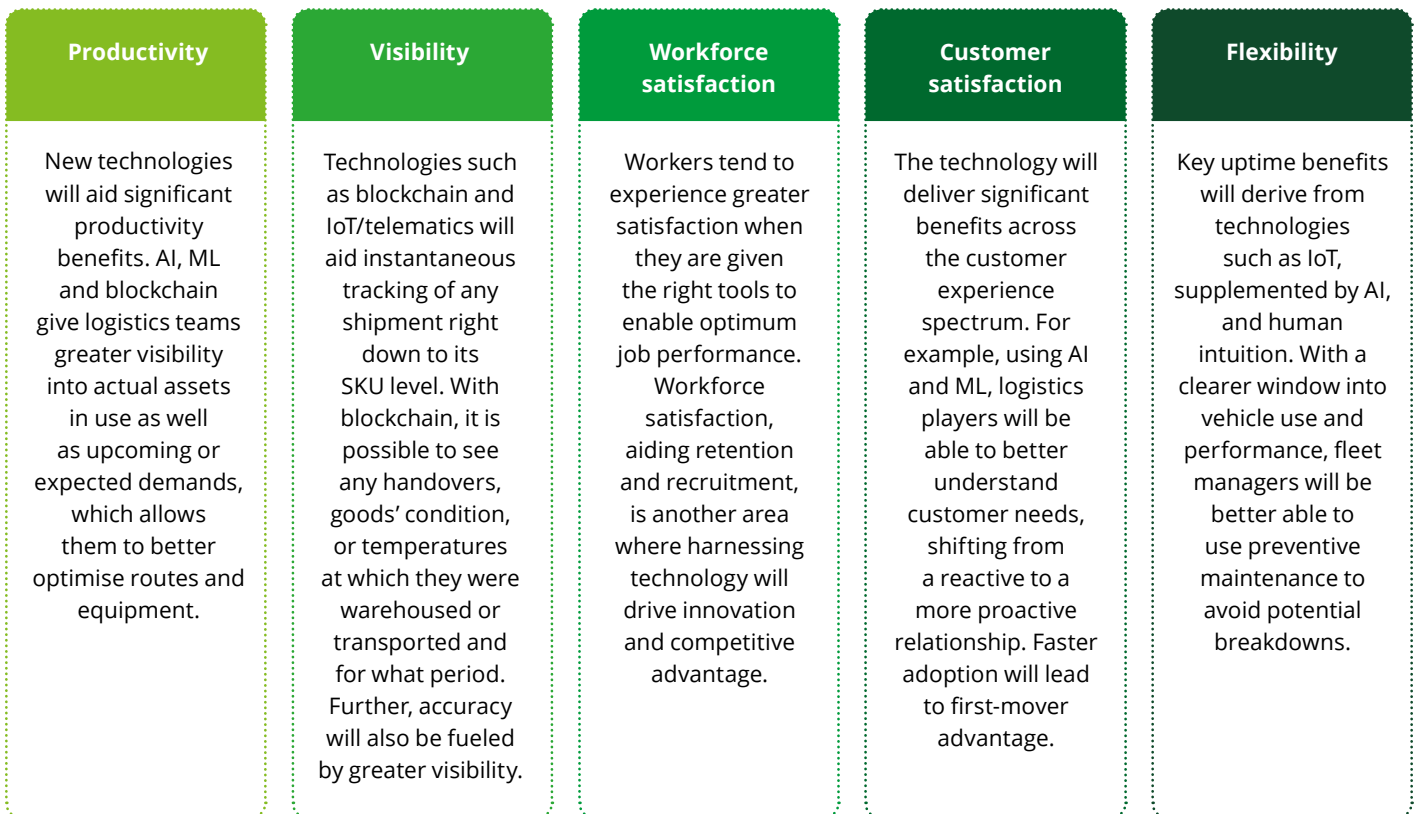
Blockchain



Vehicle safety technologies



Autonomous vehicles



Source: Media articles

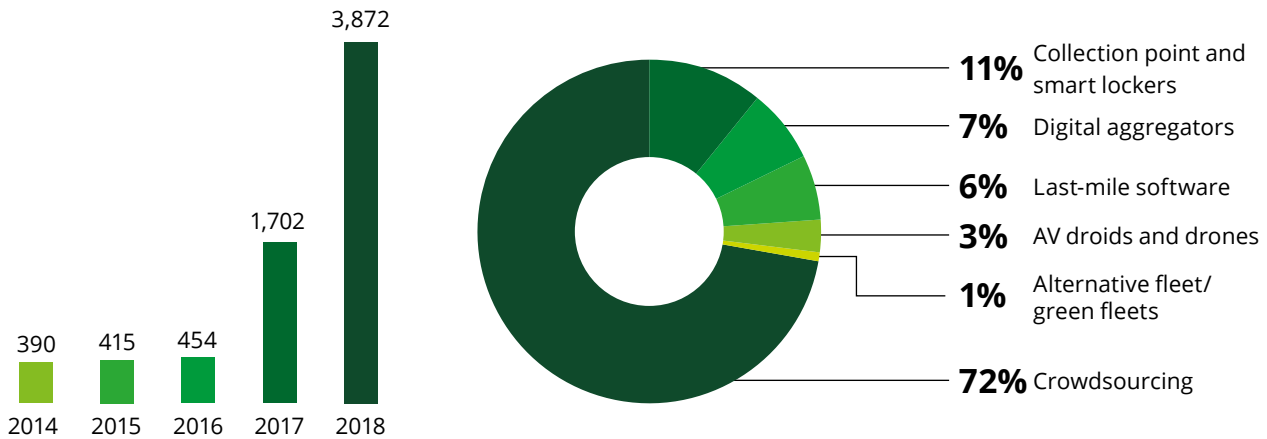
**Competing in the future of the last mile**

Decision-making driven by data is expected to be critical to success in the future of the last mile. Scores of start-ups and old school companies are queuing up to introduce new last-mile solutions in the most difficult and costly leg of the goods

journey. Investment of such vast sums of capital proves that customer-centricity is the new way and drives an influx of new-age tech companies. The infusion of institutional capital points to the wave of convenience and flexibility, which is headed towards consumers.

**“Smart money” has stepped up investment in new last-mile solutions**

Global last-mile start-up investment (2014-18)



Note: CBInsights data based on publicly available rounds of venture capital/ seed funding for 104 selected global last-mile start-ups.

Source: Deloitte analysis

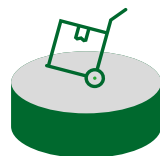
\*figures in US\$ million.

**Trends defining the warehousing industry:** The main theme defining every region is the arrival of social commerce and digital transformation.



**Drop-shipping will increase substantially**

E-commerce and direct-to-consumer growth will continue to transform the fulfilment operations of retailers, manufacturers, and their wholesalers and 3PLs.



**Flexible pick methods for multiple order profiles**

Picking methods, such as batch pick and sort, will become more common as they are ideal for cost efficiently processing high volumes of small orders quickly.



**Time to delivery becomes a key competitive differentiator**

Time to delivery will be equally important as a key differentiator as price. E.g., Amazon



**New workarounds to overcome labour shortages**

In Europe and the US, a tight labour market remains one of the overriding challenges for warehouse operations managers, not so much in Asia, specially India and China.



**Social media commerce returns will make reverse logistics even more important**

Reverse logistics was already an issue for many sellers and will only increase over time, due to the 'Instagram effect'.



**Investing in a WMS is increasingly common**

WMS and partial automation using conveyors or automated sortation systems will remain top priorities. Investment AGVs, transport management systems, voice recognition for picking, and putaways and palletisers will also increase.

Source: <https://www.logisticsit.com/articles/2020/01/09/what's-in-store-for-2020-and-beyond-6-trends-shaping-warehouses-of-the-future>

Over time, consumers across the globe wanting greater delivery volume, speed, flexibility, transparency, and convenience will compel the movement of goods network to adapt according to the evolving needs. Signs of change are underway and centered on core building blocks: connected community, holistic decision-making, and intelligent automation. For global movers, building

a solid foundation around these capabilities is crucial.

The following illustration suggests strategic questions that leaders should begin asking as they continue their journey with introducing technology across their supply chain.

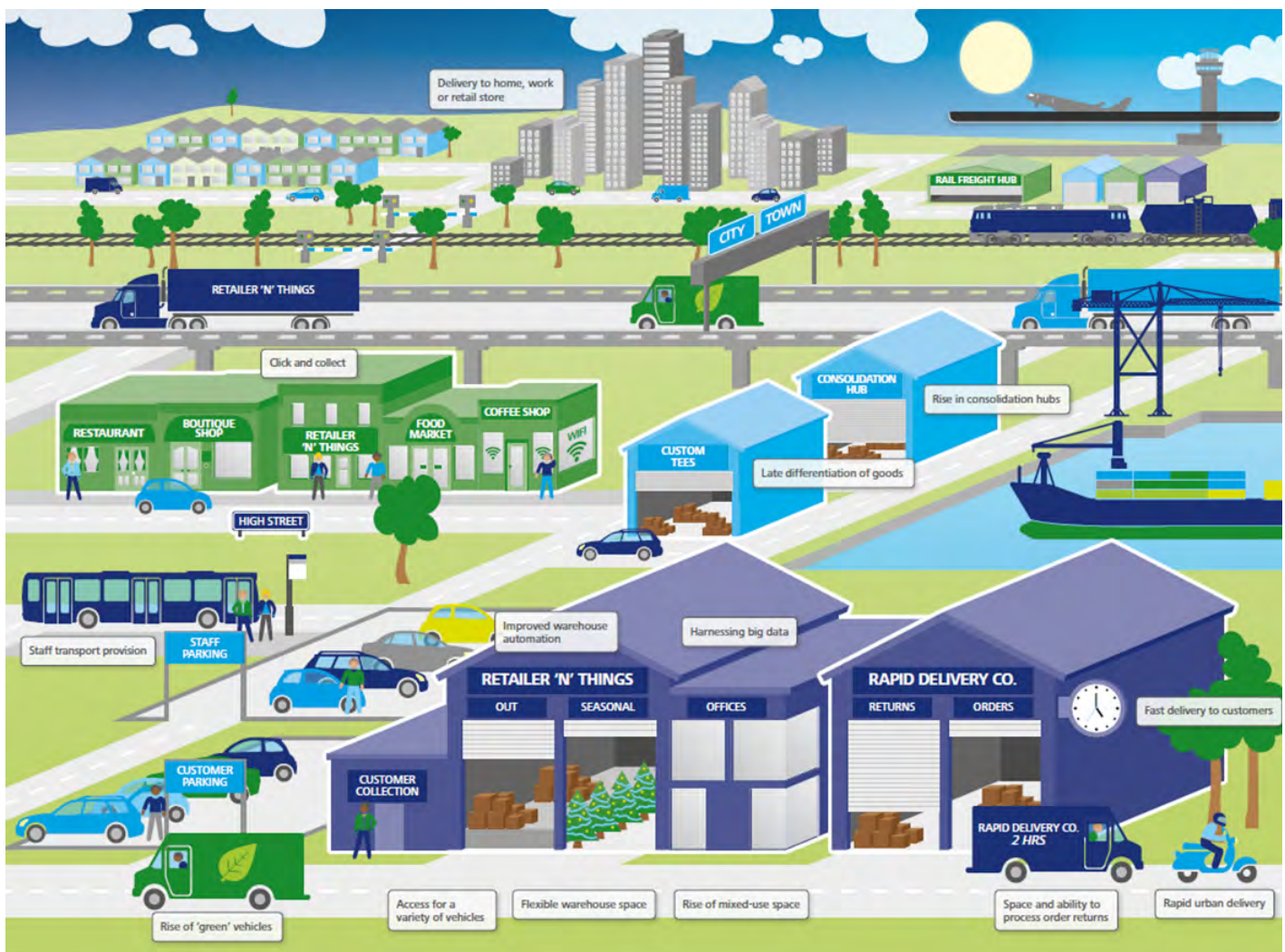
**Building a foundation: Key question to ask**

	Connected community	Holistic decision-making	Intelligent automation
	Connect and collaborate with partners to see across the network	Harness and harmonise traditional and new data to continuously learn, optimise, and predict	Use the right human or machine for work
<b>Application modernisation</b>	Where can new, integrated data-sharing platforms create benefit for participating ecosystem players and unlock new value for consumers?	How will you strategically balance investments between legacy ERP systems and the emerging technologies that enable holistic decision-making	Where can robotic process automation help efficiently connect legacy ERP system to emerging technology?
<b>Cloud</b>	What off-the-shelf cloud solutions can provide quick on-ramp to partner connectivity?	Where can you use the processing power of cloud computing as data sets grow in size and complexity?	Where can cloud-base applications support the automation support the automation of workflows, such as pricing, customer approval, compliance, and reporting?
<b>Next-gen talent</b>	Where are the opportunities to employ new and emerging talent models (e.g., gig work) across the network?	How will your arm teams with the right skills and training to work with new analytics platforms?	How will you blend the strength of essentially human skills and automation?
<b>Cyber risk</b>	How will standards of practice for secure development be created and enforced with new partners?	How will new data steams from RFID, IoT, and mobile technologies be examined for weakness and vulnerabilities?	Where can safeguards control for vulnerabilities of new robotic technology, including new software, firmware, and over-the-air updates?
<b>AI</b>	What AI solutions are being used by supply chain partners that can be integrated into your organisation?	Where can AI combine wit new data streams, such as smart city sensors, connected transportation, and smart packaging to drive deeper insights?	Where can you implement AI to drive more value from rule-based robotics and automation?
<b>IoT</b>	Where can collaborative IoT implementations and IoT data-sharing protocols improve ecosystem inefficiencies?	Where can IoT combine with AI to improve transportation safety, predictive maintenance, fleet monitoring and routing, and product life management?	Where can sensors turn physical events into the real-time data needed for automation?

<b>Blockchain</b>	Does your network exhibit the characteristics that make blockchain a viable solution, including a shared repository of data, multiple entities that modify it, and lack of a trusted intermediary between transactions?	Once data is on the blockchain, how will it be accessed and what data will be on versus off chain?	Where can the use of smart contracts help automate existing processes?
<b>Robotics</b>	Where data standardisation and exchange support the automation of physical work at partner connection points?	Where can you apply machine learning as a continuous improvement opportunity?	In addition to ROI, how does labour scarcity impact decision-making when evaluating automation opportunities?

Source: Deloitte insights: How are global shippers evolving to meet tomorrow's demand? The future movement of good

**What would the logistics and warehouse of future look like?**

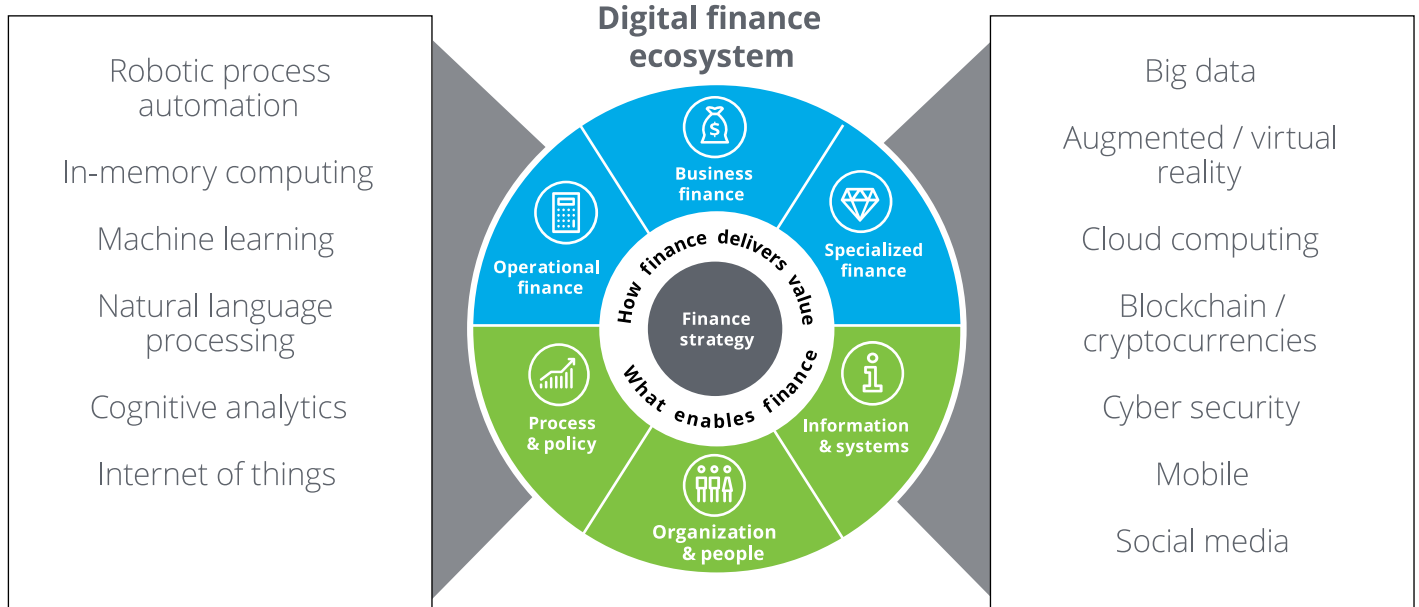


Source: The shed of future: Deloitte report





Finance services must take advantage of break-through technologies to drive exponential benefits around economics, risk, and value to stakeholders.



Source: Finance in the digital age, Deloitte analysis, 2017

# What finance people actually do

Smart machines are already augmenting human activities in Finance. In a few years, they'll deliver even more capabilities.

- Learn
- Worry
- Remembering
- Speak
- Greet
- Make judgments
- Compare things
- Read
- Listen
- Persuade

Source: Crunch time III: The CFO's guide to cognitive technology—Deloitte report

## Cognitive tools at work in finance organizations today

Five cognitive tools are ascendant in Finance, and each can be used independently or in combination with others.



### Machine learning

Machine learning is the ability of computer systems to independently improve their own performance by exposure to data, outcomes, and a feedback loop. Machine learning can detect patterns in vast volumes of data and interpret their meaning.



### Robotic cognitive automation

Robotic cognitive automation is the rules-based automation of routine tasks combined with analysis of unstructured data and capabilities that mimic human learning and decision making.



### Natural language processing (NLP)

Natural language processing (NLP) is the ability of computer systems to decipher and understand text to engage humans with personalized information and service. NLP takes unstructured data and converts it into structured data to be used by other tools.



### Natural language generation (NLG)

Natural language generation (NLG) is an automation technology that generates narratives and commentary from structured data, e.g., commentary to accompany a monthly financial reporting package for executive audiences.



### Speech recognition

Speech recognition is the ability to accurately transcribe and understand human speech.

Source: Crunch time III: The CFO's guide to cognitive technology—Deloitte report

### Impact of cloud on Finance

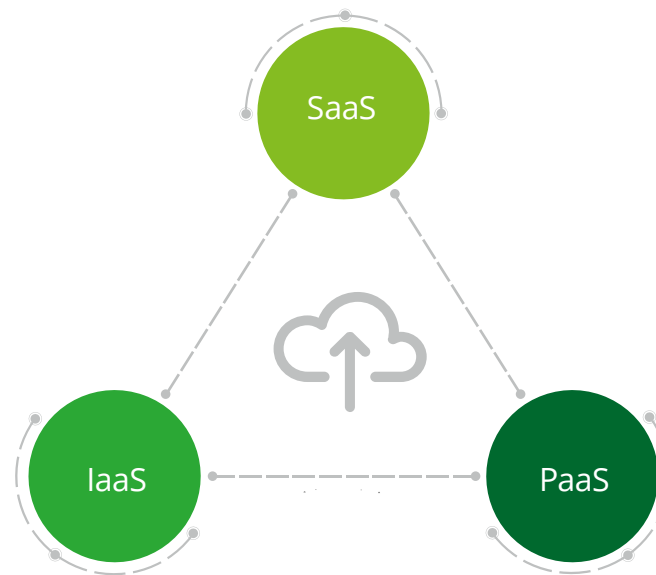
CFOs know that cloud investments (whether motivated by the need for innovation, cost reduction or both) will be part of the future. For some organisations, the area of finance itself is a promising cloud opportunity. For example, with cloud capabilities in hand, this area could produce and deliver real-time management reporting to help business leaders make better decisions faster. Cloud can also enable finance operations to be standardised

and simplified. Given the challenges, these capabilities might be considered almost priceless. Even in other business areas, such as sales and marketing, supply chain, R&D, and customer care, cloud is being frequently brought in conversations about opportunities for innovation. CFOs need to be aware of those opportunities. The key to make the effective use of cloud is to have a workable plan starting with pilots that can be implemented when needed.

## The three flavors of cloud services

### Software-as-a-service

SaaS is the most commonly used cloud service. With SaaS, companies pay for finished applications on a subscription basis. Almost any software you can think of is available as a service or will likely be available soon.



### Infrastructure-as-a-service

IaaS allows customer to obtain resources without actually purchasing hardware. This approach has the potential to eliminate capital expenses. The marketplace for IaaS has matured rapidly, with dozens of providers eager to handle almost any need you have.

### Platform-as-a-service

PaaS can be used by organisations that want to develop new software applications without needing to acquire and install the hardware and operating system. It also provides access to different, new, and innovative services, such as facial recognition, internet of things, and artificial intelligence.

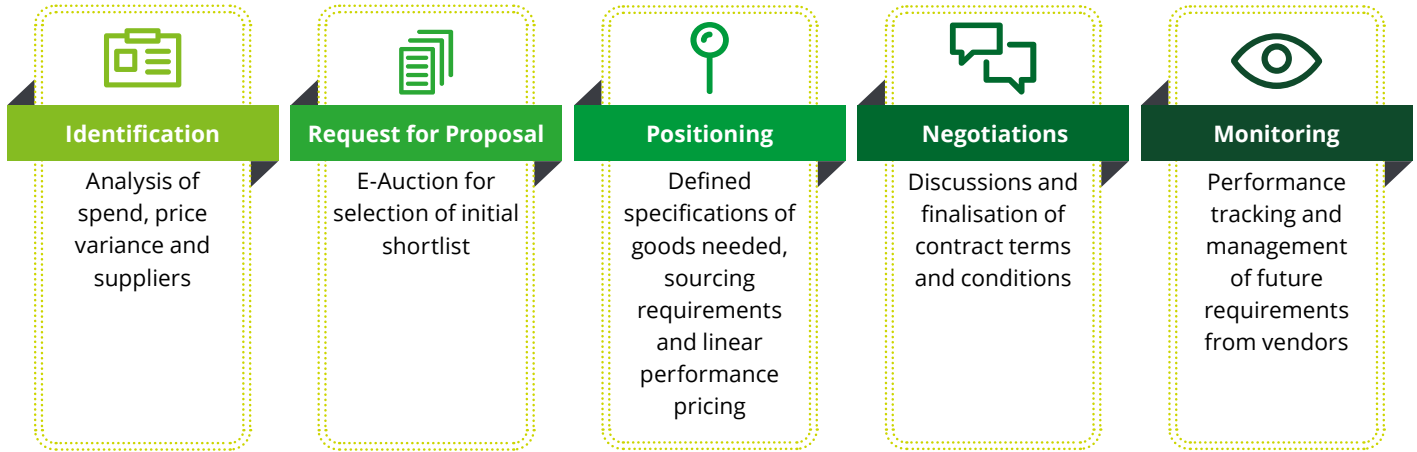
Source: Crunch time 8: The CFO guide to Cloud-Deloitte Report

## Procurement and vendor management

The past decade saw companies moving towards a digital model, with many companies stating that digital innovation within their procurement and supply chains is key to their growth. Companies have been facing more complexity in their supply chains. However, with the transformational digital capabilities, they have the ability to revolutionise the procurement process.

As the cost of implementing technology is reducing, there has not been a better time for companies to digitise their operations. Most of the emerging technologies have been built to enhance older legacy systems and involve minimal investment. The purchasing value chain can be optimised using these digital tools and approaches.

Procurement Value Chain



Source: Deloitte analysis

Digital procurement solutions have led to a technological disruption to the purchasing value chain by fundamentally altering the impact of each element. Sourcing is becoming more predictive, with **eSourcing** providing a strategic route to facilitate best pricing and value. Transactional procurement is becoming

more automated with **predictive analytics** and **artificial intelligence**.

These advancements have provided chief procurement officers access to previously unavailable data or massive (previously unorganised) data sets to solve their complex procurement needs.

**Large global retailer: Acquiring companies to strengthen digital capabilities and build omnichannel customer experiences**

The company has made several key acquisitions in India in the past few years, indicating that it is not averse to acquiring from companies for the underlying tech and the people that built it.

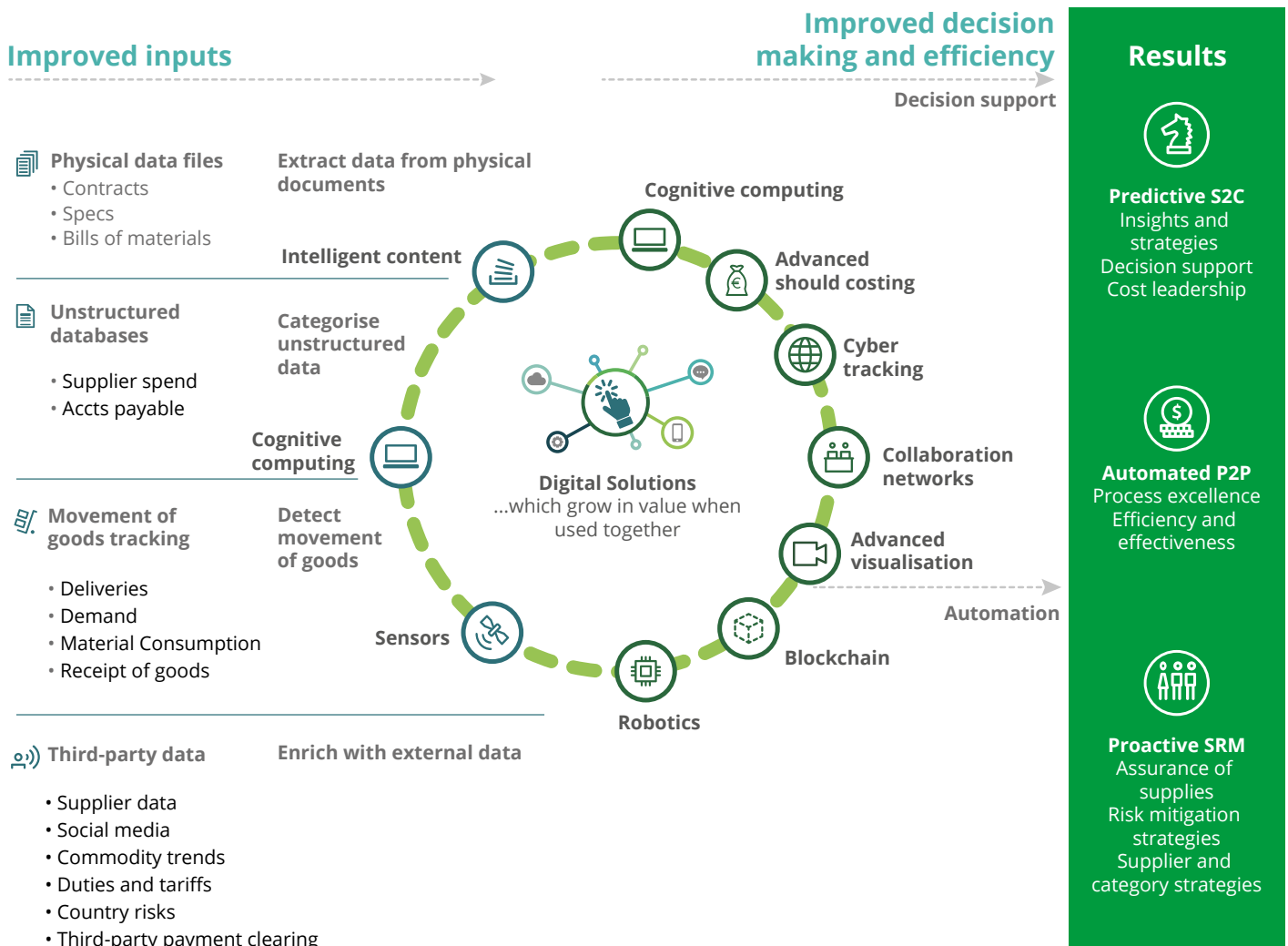
**Procurement solution platform:** The platform simplifies the buying and selling processes for business. In essence, it allows businesses to directly connect with various manufacturers and sellers to negotiate and transact.

**Healthcare retail company:** This Bangalore-based company provides customers access to affordable and scalable healthcare services. The core tech team joined the retailer's customer technology team.

Source: News articles

The solutions available today allow for more inputs to be connected, thus providing users greater access to data to drive better decision-making and improved efficiency. This in turn, produces more and higher quality insights, which can enable leadership

to develop better strategies. Increased visibility and transparency lead to a greater control of processes (such as procurement of products and services), provide more assurance of the supply, and lower risk.



Source: Deloitte Thought Leadership–The Future of Procurement in the Age of Digital Supply Networks

**GeM: e-Procurement for government functions from private players on integrated e-Marketplace**

The Government of India (GoI) launched an eMarketplace in 2016 to provide government individuals and departments access to an “efficient, transparent, and inclusive” marketplace for the procurement and sale of goods and services.

Customers can purchase consignments of goods from resellers or original equipment manufacturers (OEMs), to compare prices and trends between two different suppliers.

**Key Stats**

**325,000+**  
Sellers and Service Providers

**42,000+**  
Buyer Organisations

**~3,200,000**  
Orders

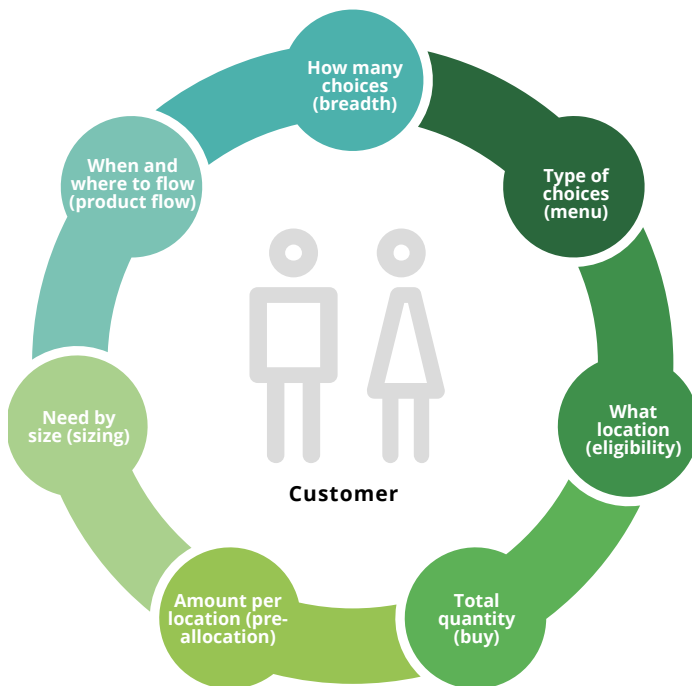
**45,000+**  
Transaction Value, in INR Cr

## Assortment mix and planning

In 2019-20, customers have access to a multitude of options while purchasing products and services. Companies must strive harder to meet the needs of consumers, particularly millennial consumers. To attract customers, companies need to consider adopting a

demand-driven model to optimise their assortment strategies. With the use of technology, they can carry out data analytics to plan the mix. Companies need to take several decisions while planning its mix that are mentioned below.

### Assortment management decision points



Source: Deloitte

One of the trends we see emerging from the analysis is that companies are using automation to provide consumers what they want before they even know it. For example, a company can provide recommendations based on previous customer baskets or email reminders to

consumers that they need to replenish their stock of products. Engaging with consumers in this manner allows companies track what is selling, what future demand could look like, and what needs to be changed.

#### Leading e-commerce company: Using contextual data to drive personalised offers and suggestions

This company has stated that using data and analytics enables it to provide personalised services to customers. Their CEO had earlier stated that the company's mission is to improve customer experiences.

Using big data, the company has been able to identify customer needs, provide recommendations, and tailor its product offerings to maximise the probability of making a sale.

Source: News articles

Companies have been moving away from a generalisation model in which consumers receive blanket offers and suggestions to a new model that offers a higher probability of sale by giving customers hyper-personalised offers.

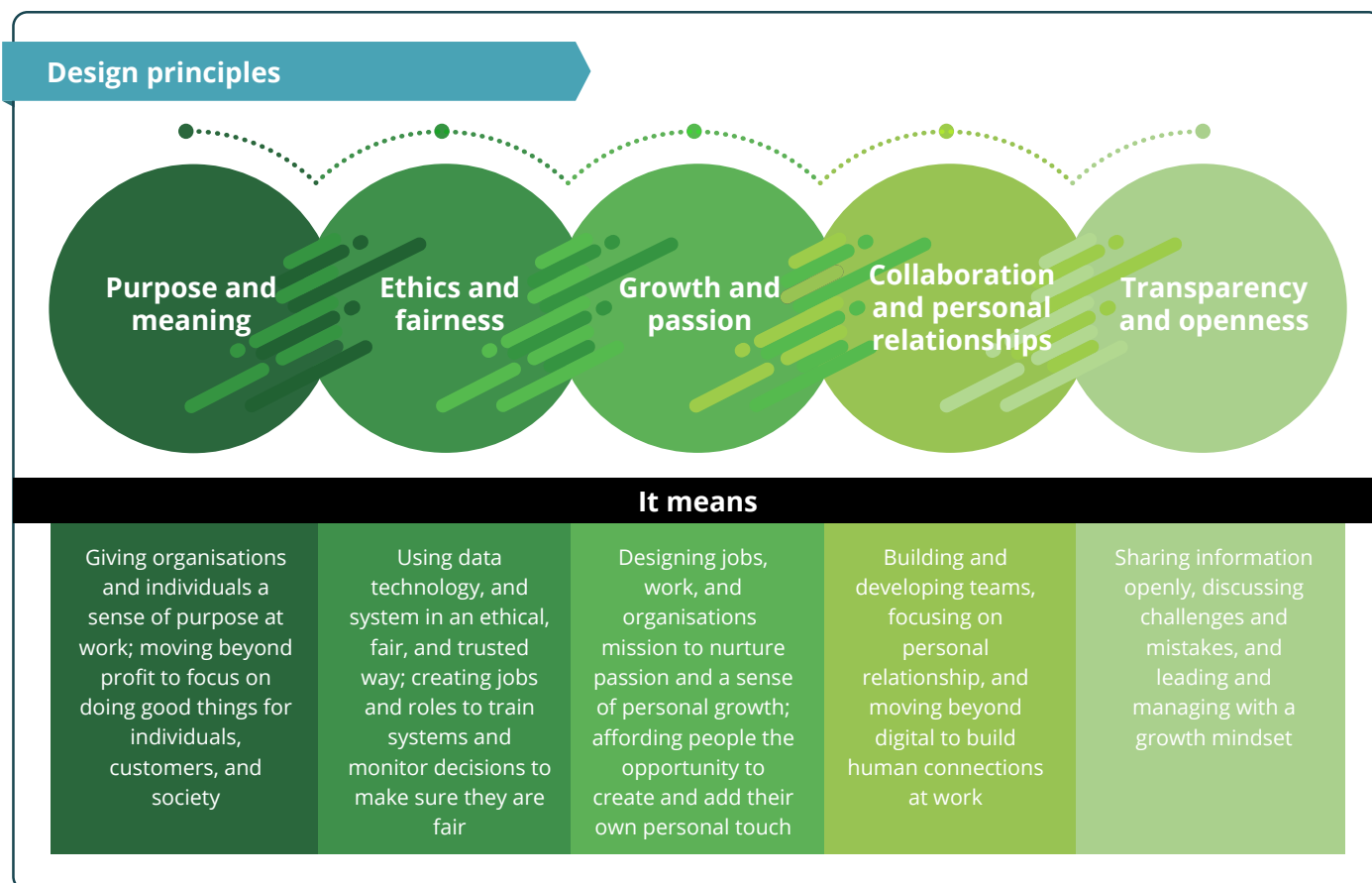
This new model can provide customers a feeling of personal touch and can win their loyalty. This customer data is expected to be one of the keys in the future of retail as brands fight to win over buyers.

## People

The fourth industrial revolution is bringing disruption in many ways, including the way companies build their store face and operate their supply chains. This disruption is making an impact on work, workers, and employers, and issues such as income inequality, wages, and the role of businesses in society are under debate. Organisations

need guidance to wade through these choppy waters. Hence, we have put together a list of five principles that frame the “human focus” for the social enterprise. These can serve as a benchmark against which we can measure any action or business decision that can affect people.

### Human principles for the social enterprise: Benchmark for reinvention

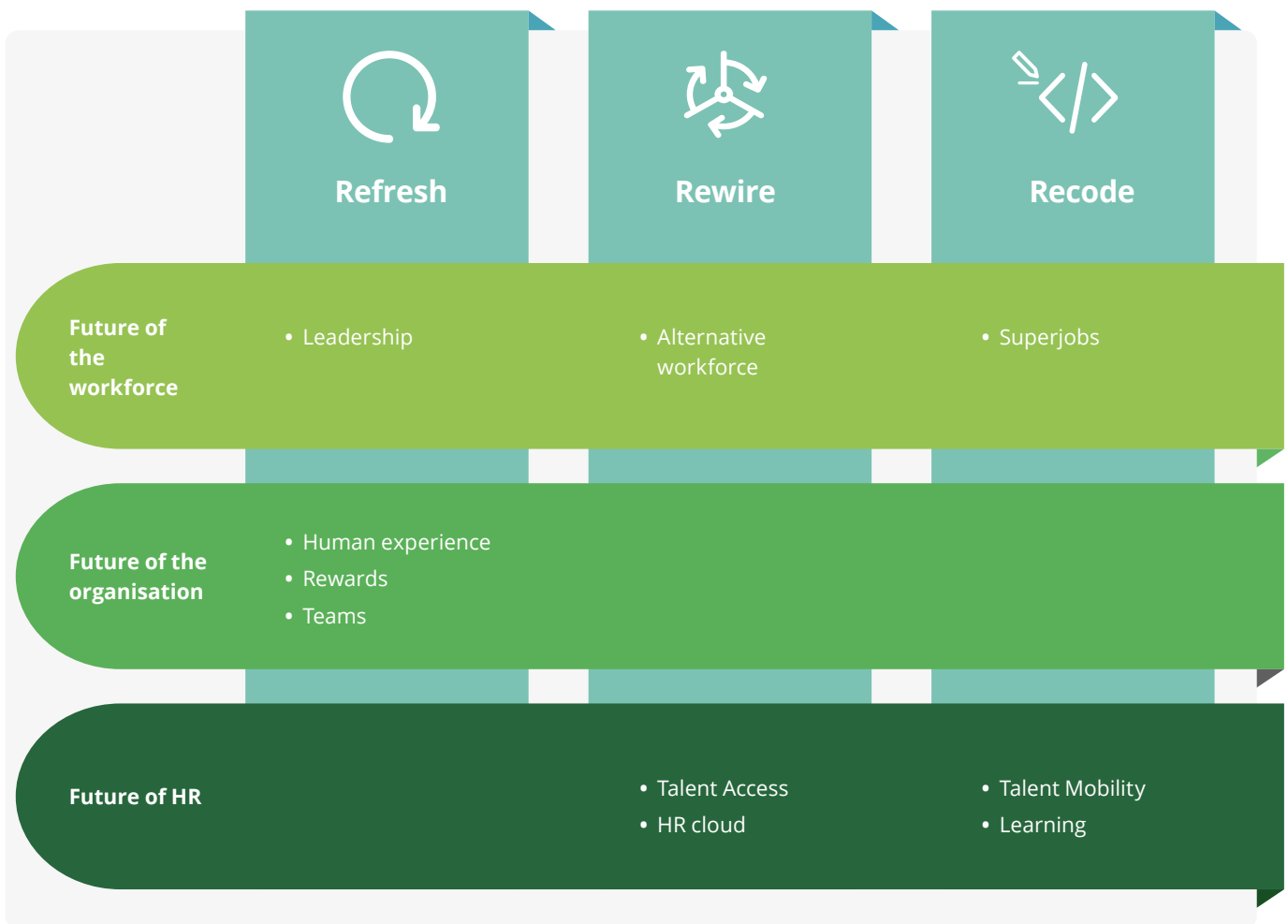


Source: Deloitte Global Human Capital Trends survey, 2019

Many trends are emerging that we believe will be crucial for the success of organisations and their people in the future. We can categorise them as follows: future of the workforce (how organisations should adapt to the open talent economy, external forces affecting job, work design, and leadership); future

of the organisation (which discusses how people build their networks and how the approach for reward and recognition are driving forward business performance); and finally future of HR (what is the function doing to step up and transform its capabilities and technologies to lead a revolution across enterprises).

Three domains for reinvention, three approaches to change



Source: Deloitte analysis



Some major technological advancements expected in the people management space in the future are mentioned below:

**Access Talent:**

As the job market remains competitive and demands undergo rapid changes HR need to leverage different tools to bring the right talent on board. Using technology can augment the search and boost recruitment productivity.



**HR Cloud:**

Cloud systems have helped streamline and make HR more engaging, personalised and data driven. As needs of companies evolve, systems must also keep up and provide innovative new platforms and automation to complement them.



**Talent Mobility:**

With the world becoming more accessible, people at top enterprises are also following suit. It is no longer “easy” to recruit top talent. Therefore, companies must nurture and promote the idea of mobility to retain talent within the global organisation.



**Learning and Development:**

An earlier Deloitte survey had over 85% of respondents citing learning as an important or very important issue. It is up to HR to make it more personal, and make it effective for the employee’s lifetime in the company.



Retailers have started revolutionising their operations, from using data analytics and finding key shopper trends, to building a more transparent supply chain. They have implemented several key initiatives to optimise their businesses. These initiatives include implementing automation and analytics in their operations to reduce costs, and providing customers and employees a more bespoke experience to attract and retain them.

Companies are adopting a more dynamic and integrated supply chain solution to overcome the issues with linearity. Using their connected environments, companies are providing customers faster delivery of products and services.

They are using advanced methods to encrypt transactions to provide more security to customers. For their products, companies are looking at a more transparent procurement model that has the ability to negotiate with multiple providers and secure the best price for products. They are looking to find the correct mix of products using big data and advanced analytics. They are trying to find, recruit, and retain staff in a more competitive manner by designing tools to train, reward, and mobilise them.

The disruption in the retail sector is being driven by changing behaviour of customers; companies are trying to evolve with them.




# Technology transformation of the physical store

Disruptive digital forces in the retail and consumer products market are challenging the status quo. Digital provides organisations opportunities to acquire new customers, engage better with existing customers, and reduce

the cost of operations with a positive influence on revenue and margin. Blending physical and digital experience to bring the audience closer to the brand is what we call `a 'phygital' experience.


### The need for digital transformation

Retailers need to adapt to an environment where consumer tastes are constantly evolving, thereby creating a need for continuous innovation to retain them.



**Achieving omnichannel is expected**


Omnichannel approach can no longer be deferred. Consumers wish to shop anywhere and at any point of time, expecting retailers to be able to fulfil all their wishes across channels. Hence, online to offline and offline to online channels are being developed cater to consumers' demands. Consequently, there is a need for separate distribution channels, organisational structures, and product catalogues.



**Competing against digital native competitors**

Consumers today have diverse choices with the emergence of digital-native competitors. These companies have used digital channels since their inception and have formed deep connections with consumers.

Traditional retailers must quickly adjust to compete in a world of increasing choices.



**Becoming digital first**

Consumer shopping habits will continue to change as new technologies emerge.

Retailers need to adapt quickly and use new technologies with a customer-focussed mind-set.

### In-store/Physical store transformation

We are in the middle of yet another transformation. Technology improvements, along with change in consumer mind-sets, are transforming the retail landscape. Consumers have more options. Switching costs and brand loyalty are low. Retailers cater to individual consumers' tailored need—transforming their value propositions and business models.

Stores need to be a powerhouse of data that helps companies make informed decisions to drive sales and optimise costs, making a positive impact on both the top and bottom lines. The ability to collect, process, and share large quantities of data has led to some fundamental disruptions in the design of business models. Companies need to stay ahead of the changes driving the marketplace.

Customers now expect a more interactive, personalised brand experience where the organisation uses available touch points or channels to connect with them. Following are some use cases, which can help enhance the in-store purchase experience for customers.

**Optimise fitting rooms:** Retailers adopt solutions that provide optimal service at fitting rooms and ensure shoppers' in-store experiences are fulfilled. This is facilitated through analysis of data regarding which products are being taken to the fitting room and co-relating that with the products that are left behind vs products purchased using computer vision and point of sales (POS) data. The data is further linked to consumer demographics and their social media usage to develop actionable preferences and insights regarding their buying

behaviour. Data driven tools may provide product details for a quick scan, save the product for later purchase (through an app), or post the product on social media for receiving others' opinions. Digital stylist and digital fit tech recommends complimentary products with a scan/smart mirror.

### **Assisted recommendation engine:**

The in-store recommendation engine is designed to act as a sales assist tool, which enables store staff to have a much richer and detailed conversation about offerings.

The reco-engine assists customers in selecting best suited products on the basis of their requirements. It uses an algorithm that analyses customers' preferences to make suggestions for something that they might be interested in. The engine uses data filtering tools that use algorithms and data to recommend the most relevant items to a particular user.

### **Emotional intelligence**

Humans' attention span, on an average, is scientifically proven to be less than that of goldfish. About 95% decisions are made by our subconscious mind. Some retailers using multi-model tech combined with AI, to help brands measure the cognitive and emotional responses of consumers to their content and product experiences. Turning emotions into actionable insights helps them optimise their brand experience journeys and solve real business problems across industries. This in turn helps increase marketing ROI.

### **Touch table**

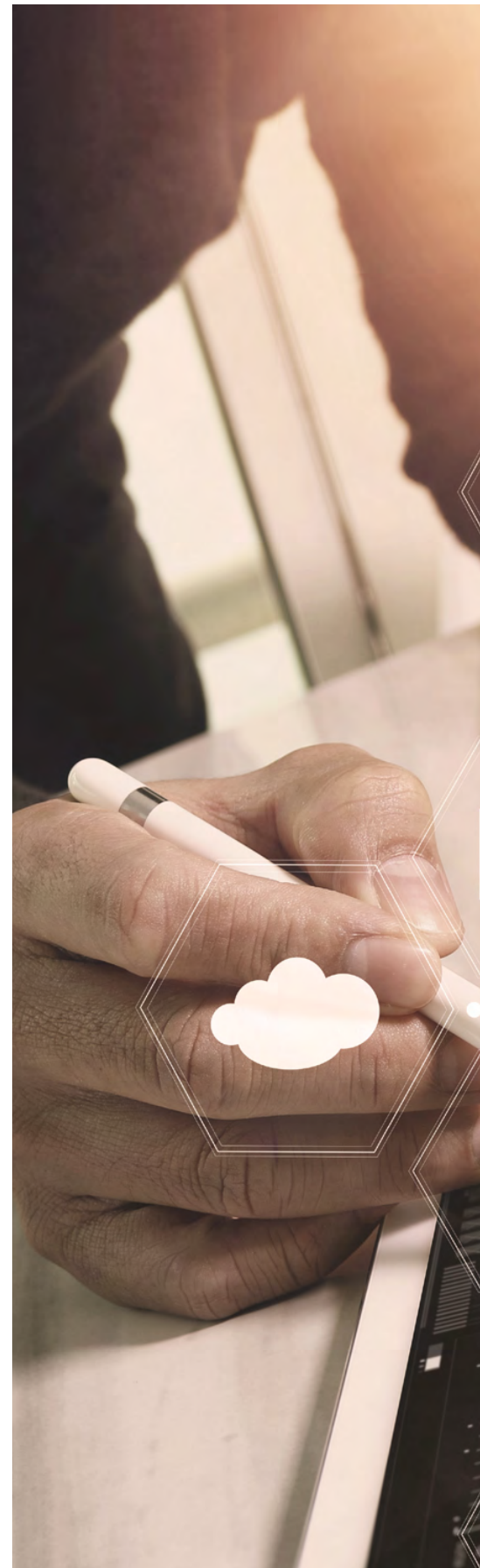
It is a multipurpose interactive presentation module, primarily used to showcase products and their features. In the touch table, the look and feel, and

content structure are highly customisable and support data in multiple formats, such as video, images, pdfs, and web. The table showcases the features and specifications of the products placed on it. The content is designed to make users explore various product parameters. The look and feel is elegant to ensure there is no undesired visual noise. The interactive nature of the touch table makes the whole experience much more engaging, playful, and memorable compared with any traditional method of showcasing products.

### **Know your sales**

Only by knowing your sales conversion numbers, you can begin to grow your business. Analysing this information highlights what are the areas of improvement and the follow-up processes. A POS solution can increase the efficiency of the process by leaps and bounds if it runs in a secured environment. User and user group authentication, user log details, task management, SMS, and email communication ensure transaction patterns are adequately reducing the risk of organisation being exposed to fraudulence.

Using the smart inventory management module of POS solution, retailers can stay ahead of demand curve, keep the right amount of products on hand, and plan ahead of seasonal challenges. Apart from capturing customer information and generating sales trends for a set of stores over a specific period of time, the POS solution provides various advantages. These advantages include serial number tracking, multi-location tracking, managing customer loyalty, stock correction and update, and sales order management.





Sales recording at regular intervals helps business owners know when inventory stock is running low, whether this should be reordered, and if so, how much to purchase. Sales recording and analysis fundamentally eases the planning process with the help of a sound inventory system. This can help identify and resolve issues of under-stocking and over-stocking items that can directly affect cash flow. In turn, this helps the business owner keep track of profitability and make decisions about the future.

The POS solution gives store and the retailer an end-to-end visibility on the stock purchased from suppliers, stock on hand, and sales trend observed for a specific period. It allows a business owner keep track of inventory at various stores. This also address the concerns around theft by employees or pricing inconsistency between two locations. Employee efficiency can be maintained. POS systems take care of the problems that arise when the management is not present. These systems also offer stock transfer among multiple stores through transfer out and transfer in.

Promotions, discounts, and coupons can also be tracked through POS, and the impact of these promotions are recorded every day. Monitoring the impact of product development is almost impossible without online POS software. POS systems feed inventory, sales, account receivables, and transactions data into retailers accounting programme for more efficient use. Multi-channel POS systems also offer services such as buy online and pick up in store.

## Customer experience, personalisation, and telling stories

In this digital era, consumer behaviour is changing rapidly driven by a wide array of smart technologies. Shoppers are more informed than before and have access to multiple sources of information. They demand more information, and are less patient and forgiving. Consumers are more attracted to brands that tell a story; data helps these brands frame a better story. A retail store provides a unique opportunity to convey the brand story to customers. Retailers need to adopt technology interventions in store that help capture key touch points of customers. This in turn helps understand

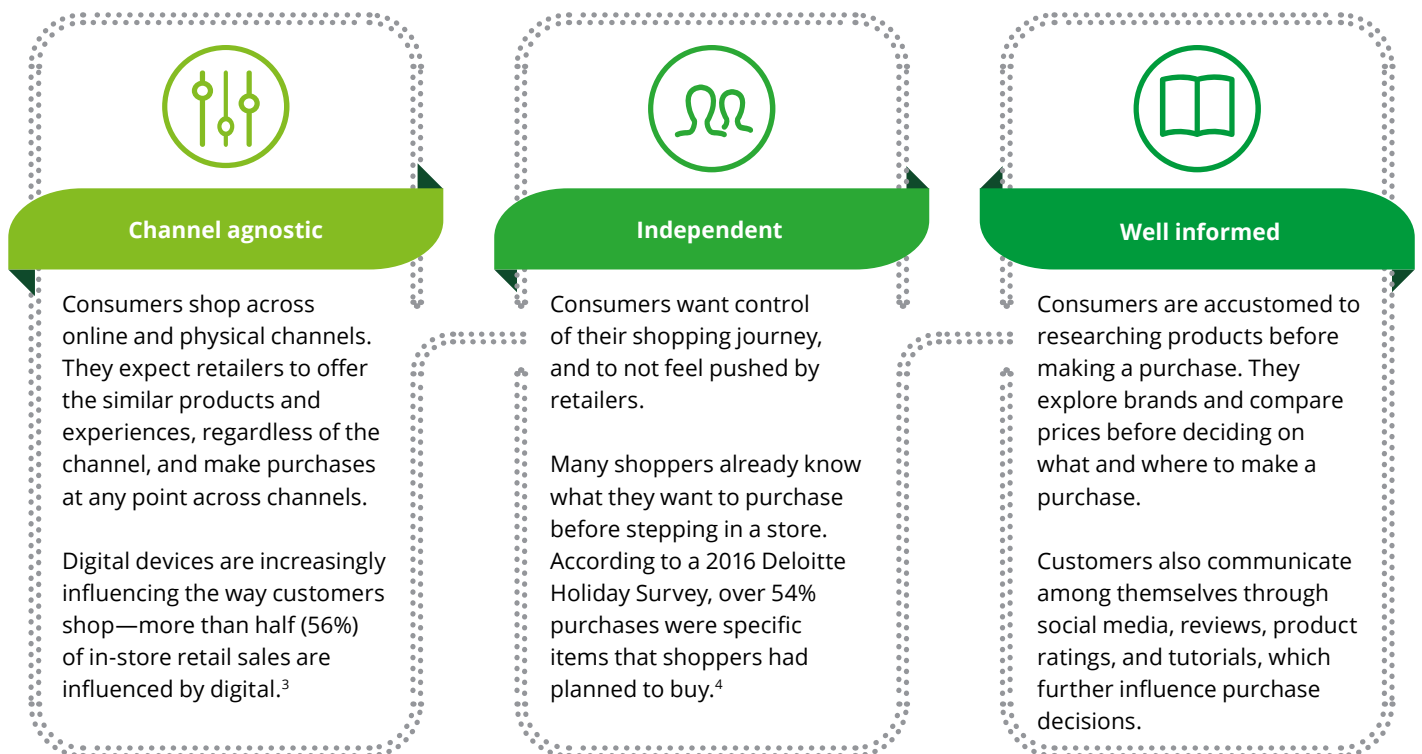
the entire customer journey. Physical stores do not have enough visibility of consumer behaviour and store performance. The following are the key challenges facing the stores in today's era:

- Lack of visibility into store performance, staff productivity, and operational efficiency
- Limitations in understanding consumers and their behaviour and purchase intent
- Inability to identify and track customers across segments and give them personalised recommendations

### Consumers dictating their own journey

Consumers are controlling where and how they shop for products. Faced with an increasing number of retail outlets, ranging from traditional department stores to specialty stores, they seek to make well-informed purchase decisions.

### Today's customers have the following three traits:



Sources:

1. The New Digital Divide: The future of digital influence in retail
2. 2016 Deloitte Holiday Survey

## Know your customers

Digital consumers are increasingly connected, have easy access to information, and expect businesses to instantly react to their needs. Attracting and retaining consumers is the shared objective of the entire network. Digital interventions can help understand consumer needs (e.g., audience insights), provide greater assortment (e.g., assortment generator), help shoppers decide (e.g., virtual trial rooms), lower cost (e.g., robotics and process automation), and enhance customer service (e.g., in-store recommendation engine). The customer relationship management system provides an integrated view of customers, helps run customer-specific promotional campaigns, and generates insights from results. Stores can optimise store visual merchandise and staffing using accurate data around customer gender and age; run better offline campaigns; optimise costs by accurately measuring their impact based on customer demographic insights and store insights; and improve store sales and conversion with insights about what merchandise sells best at every store. Below are a few listed avenues of capturing customer information

01. Demographic sensing technology provides insights and a view of the demographics for better understanding of the prospects. This is done by capturing the types of clothes of the prospects and performing an estimation on the age.
02. Heatmap sensing provides information on the customer traffic movement in the store; this provides insights into where customers are walking and where they are dwelling. This can be used to influence staff to customer ratio.
03. Lead management is used to capture leads/prospects in the store, set reminders for follow up, and nudge and engage with potential customers.

Government initiatives to drive digital adoption, along with increasing internet affordability, have leapfrogged India's digital maturity.

Customers with an exceptional purchase experience spend 140% more compared with those who had poor experience.

Customers with positive experience will likely remain with the brand for five years longer than those with negative experiences.

While 54 percent of the consumers enjoy points-based loyalty schemes, a similar number of consumers (53 percent) do not always redeem their points.

About 150 million customers in India are currently digitally influenced in retail.

About 40% companies have witnessed a direct impact on sales growth, basket size improvement, and profit driven by personalisation.

This helps in understanding the following:

- Accurate store traffic
- Enriching consumer demographics
- Lead management
- Fashion profiling
- Personalised recommendations
- Staff efficiency
- Dwell-time and store visitor patterns
- Repeat customer identification
- Measure power hours
- Compare both real time and historical visitor traffic within single stores, between different stores and across different regions
- Identify stores and locations that have the best conversion rates

## Technology driven opportunities for start-ups

Technology evolution has led to the emergence of various start-ups in the retail space which are leveraging digital solutions to make the retail journey more convenient for the consumers and more insightful for the retailers. These solutions exist in all three categories of demand generation (through marketing/

advertising, consumer engaging activities, etc.), demand capture (through data analytics, consumer behaviour and preferences, etc.) and demand fulfilment (through distributor intelligence, loyalty programs, etc.). The table below highlights the existence of such solutions in India through start-ups:

Demand generation	
Area	Solutions offered by start-ups in India
Marketing	Online social influencer marketing
	Consumer intelligence-driven mobile marketing
Experiential activations	Visual discovery using augmented reality and image recognition
	Immersive experiences using mixed reality–Augmented and Virtual

Demand capture	
Area	Solutions offered by start-ups in India
Data analytics	AI and Machine learning based platforms for consumer understanding
	Data analytics for engagement
Consumer behaviour and preferences	360° view of consumer perceptions
	Measuring cognitive and emotional responses for product testing, user interface, brand research, etc.

Demand fulfilment	
Area	Solutions offered by start-ups in India
Distributor intelligence	AI and computer vision to analyse in-store product display
	Retail visual intelligence
	App-based self-checkout solution for offline retail stores
Consumer loyalty	Personalised loyalty and incentive programs
	Loyalty using QR-tech/AR-tech on packaging

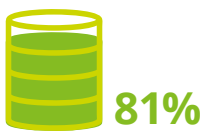
Source: Deloitte analysis



**Summing it up—Data is the new currency**

A retailer’s underlying technology empowers the organisation to perform data-enabled tasks. The technology stack directly influences the quality and timeliness of data, and the way it is collected, stored, analysed, presented, and acted upon.

Companies have been able to use the digital data trail that shoppers leave behind to improve engagement and conversion. Digital is at the core of a retailer’s ability to translate raw data into insights and actions. Companies understand the importance of data collection and insights, but fall short of driving retail decisions based on data.



companies say they gather shopper insights



say data collection and insights are important for their department’s performance



report that insights are critical for organisation’s overall performance

However, **16%** consider themselves experts when it comes to data harnessing.<sup>2</sup>

Companies that use data-driven sales are:

- five times more likely to make faster decisions than their competition;
- twice more likely to have top quartile financial performance; and
- three times more likely to execute decisions as intended.

Below are the areas where data can be used to enhance customer experience, increase revenue, and improve operational performance:

 <p>Establish a single customer view</p>	 <p>Increase average transaction value, identifying trends and upsell opportunities</p>	 <p>Improve margins- optimise the mix of physical and online locations or identify new store locations and plan franchise territories</p>	 <p>Better Assortment Planning</p>	 <p>Target the right audience and make the right decisions</p>
 <p>Leveraging demographic and location data</p>	 <p>Optimise marketing investment-identifying repeat customers and build long term relationship</p>	 <p>Target the right product at the right time</p>	 <p>Predict customers buying behavior and help the business to grow rapidly</p>	 <p>Compare and predict outcomes of various promotions and campaigns</p>

Bringing any change in business is not easy especially when the future is uncertain. Big changes require commitment from retailers to pursue testing and scaling, and incorporate the most successful ideas as foundations for their evolving businesses.



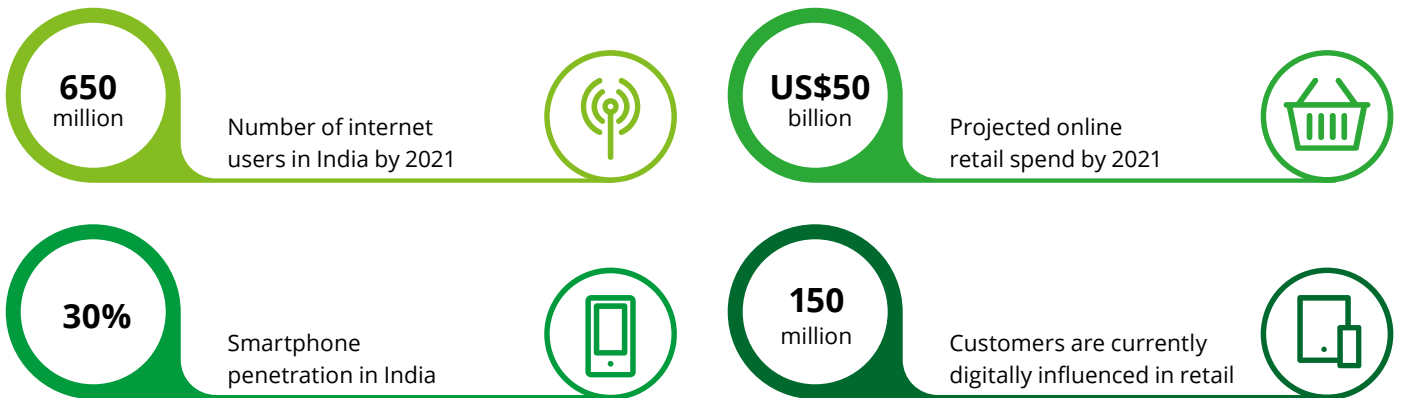
# Disruption through data unification and marketing

Ability to capture consumer data and evolved analytical tools have changed the way business decisions are taken. Earlier consumer data was not readily available; businesses had to make assumptions and rely on trial-and-error methods to derive conclusions.

Now businesses can capture data from different consumer touchpoints. However, deriving actionable insights from the humongous amount of data is a challenging task. Tools such as AI and ML are evolving and helping businesses capture and unify the data, and automate complex analyses.

## Omnichannel

Smartphones and exploding internet penetration have made consumers more tech savvy.



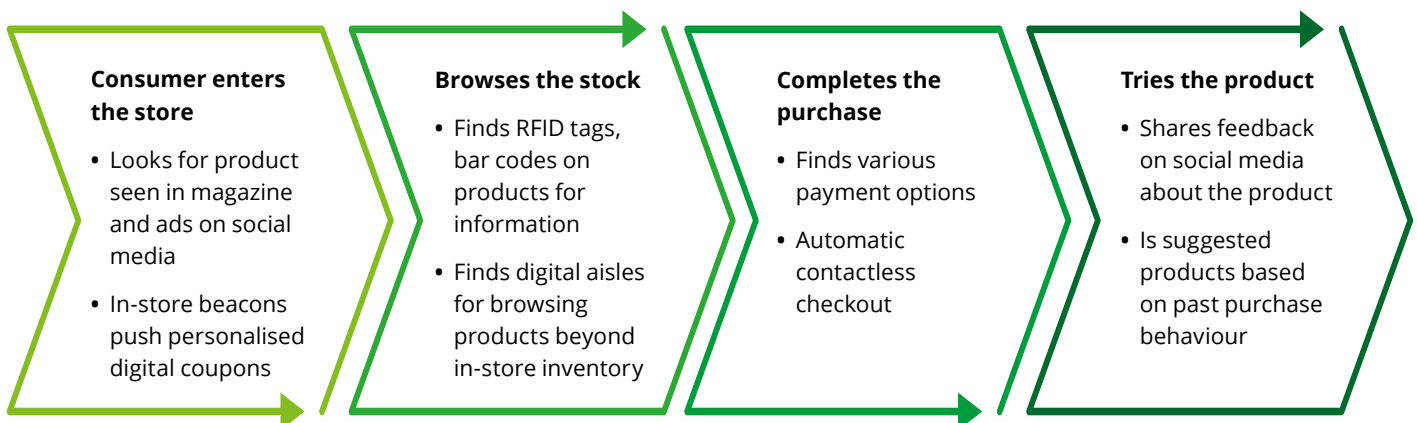
Source: Media articles, Industry reports

Today's consumers:

01. use multiple information sources, such as in-store, digital, and social, to gather knowledge about the product they are interested in purchasing;
02. are bombarded with promotional messages across devices, and have a short attention span and access to a lot more information than before;
03. do not differentiate between channels and shift channels per convenience; and

04. demand flexible buying, delivery, and payment modes.

Hence, a lot of retailers have adopted omnichannel retailing, i.e., they have combined mobile, brick-and-mortar, and e-commerce. They use data from each channel to provide a seamless experience to customers.



The data collected from various channels is used to improve consumer experience, and make business decisions, such as segmentation, positioning, pricing, and improving operational formats. Now retailers can do the following:

- Create a customised assortment and visual merchandising plan using heat-maps and in-store/online browsing data for the store. They can use the heat-map/online data to move products with a low sell-through rate to a highly foot-trafficked area, lower the price, or simply order fewer units of the product next month. Various luggage retailers and others use store heat-maps to understand their shoppers' in-store activities, test new merchandising strategies, and play with layouts.
- Enable customers to add select products to the cart, and then visit the store and physically experience products without the hassle of browsing all sections of the store. There are a few online jewellery and spectacles portals where buyers can use their mobile applications to see how products will look on them before placing an order.
- Make product suggestions or provide information on other variants of the same products after scanning a tag. A British luxury fashion retailer uses RFID e-tags to provide customers access to additional information. Scanning an item in front of a "magic mirror" will call up details on how the product was crafted, along with other suggestions.<sup>1</sup>
- Enable customers to self-checkout or visit robotic-checkout counters to quicken the pace of in-store checkouts.

### **Case study: A global fashion brand**

The brand partnered with two major online B2C platforms to create a digitally connected store. The store uses "connected glass shopping walls" and digital fitting rooms to guide shoppers

while collecting data related to customer preferences and trends. Within six months of implementation, the brand saw a six to sevenfold increase in ready-to-wear sales, which it attributes to enhanced in-store experience.<sup>1</sup>

### **Case study: Convenience store chain**

In December 2016, one of the biggest e-commerce portals introduced a convenience store chain covering an area of 1,800 square foot. In the store, customers can shop and walk out with their products without waiting in line or checking out. Shoppers use the app that leverages multiple technologies, such as computer vision, sensor fusion, and ML, to add items to the virtual shopping cart on the app and track items. When they leave the store, the shopper's account connected with the e-commerce portal is charged.<sup>1</sup>

### **Case study: Multinational hospitality company**

The company uses master data management, analytics, and data governance towards a solution that caters to users across geographies. For example, customer preferences and experiences are shared across hotels, leading to highly valued customer experiences on future visits.<sup>1</sup>

### **Case study: Fitness start-up**

A leading health tech and fitness start-up in Bangalore has adopted an omnichannel strategy. Its core offerings are fitness centres. The company started with an app where users have to register, buy gym membership, and book classes online. Via the app, the company gained customers for the food service that offers fresh, healthy, and wholesome meals, with an option of home delivery. The food service also has physical stores. It intends to attract customers to the physical store and talk them into buying other services listed on the app.<sup>1</sup>





## Marketing and distribution tech

In this digitised world with various options to consume data, the consumer has a short attention span. Therefore, the brand communication served to each consumer has to be hyper personalised. Traditional retailers are bringing digital channels to their stores and pure-play online retailers are opening physical stores to serve the connected consumer. The aim for both is to create a hyper personalised, consistent, and seamless shopping experience across all touchpoints. From merchandising, promotions, loyalty programmes, and POS experiences have to be enriched digitally. To achieve this, retailers need to do the following:

- Define micro consumer segments through data mining.
- Understand media consumption behaviour of various segments.
- Serve tailored promotions to each segment via a preferred media channel.
- Build inventory in the preferred channels.
- Standardise the online and in-store shopping experience.
- Enable consumers to share their experience on social media.

### Case in point-Heat-maps

A heat-map is a visual representation of data that displays various kinds of information based on colour coding and intensity of the colours therein. In a retail store, heat-maps can help identify locations on floor (and in chain) that are or are not being engaged with. To validate rent costs in each of its respective stores, an international luggage retailer used a visitor analytics company's heat-map technology. In so doing, retailers can extract the information needed to make critical business decisions such as lease renewals and negotiations.<sup>1</sup>

Store heat-maps can also show where within a single store shoppers walk towards or spend time the most. An IT solution provider can create heat-map based on foot traffic during a given daypart and the frequency with which products are touched in a given zone.

Heat-maps can also be used to gauge how many products are sold to customers in comparison with how much is in stock. These maps can help in inventory management. They can help decide how much inventory a particular store needs on a real-time basis.

Heat-maps are also used in warehouses to improve operational efficiencies. It helps managers understand the concentrations of warehouse labour over time that may enable them to identify efficiency opportunities within a warehouse operation.

### Case in point-Beacon technology

In the time of micro segmentation, blanket discounts have limited success. Consumers expect personalised marketing. In this context, beacon technology is a classic example that uses information such as device, location, and other contextual data to make personalisation more dynamic.

The technology can identify customers in a store's particular section. It can dig their preferences in real-time based on their purchase history. The technology can then act and send a customised discount for a product the customer with a higher probability of conversion.

Retailers have already started conducting pilots for such technologies. For example, one retailer deployed 300 beacons across its shopping centre in Bengaluru.<sup>1</sup>

A French supermarket chain is one of the first retailers to extensively use the technology across its stores. Customers can use mobile phones or tablets attached to shopping carts to receive in-store routes and personalised promotions. As customers are guided around the store, the beacons collect data about their behaviour and purchasing patterns, which the retailer uses to continuously improve operations and store layout. With more than 600 beacons deployed across 28 supermarkets, the chain has seen a 400% increase in its digital application's engagement rate and a 600% increase in app users.<sup>1</sup>

**Case in point-Digital supply networks**

Data-based decision-making has entrenched itself in the retail domain as well as has transformed supply chain networks. As individual nodes in traditional supply chains become more capable and connected, the supply chain collapses into a dynamic, integrated supply network, also known as digital supply networks (DSN). Digitally enabled logistics services, augmented by the internet of things (IoT), enable continuous monitoring of logistical elements from shipments and transportation assets to infrastructure, workers, and delivery.

AI-based solutions are being adopted for deliveries that empower on-time and cost-effective deliveries. These help reduce cost by minimising empty mile journeys, eliminate vehicle idling time, and optimise the productivity of delivery executives by assigning them highly efficient routes.

An Indian e-commerce giant processes over 1 lakh shipments every day, with the help of automatic guided vehicles (AGVs or cobots) which work alongside 1,000 company employees. The company also uses algorithms to figure out the optimal placement of inventory in and across warehouses to ensure the shortest delivery distances.<sup>1</sup>

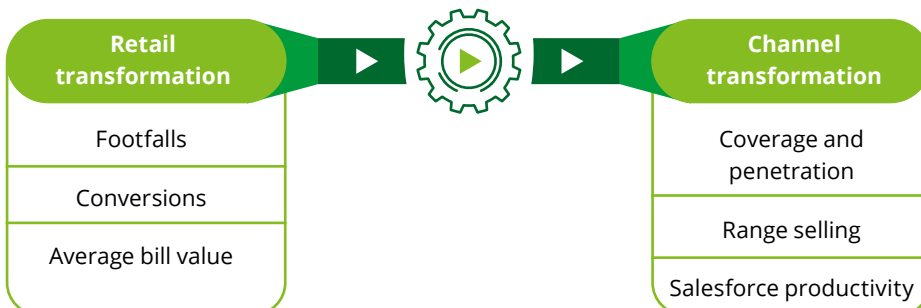
Another e-commerce giant deploys box sizing algorithms at fulfilment centres to calculate the right size box for orders. It also uses picking optimisation software that determines the most efficient route an employee should take to pick products stocked in shelves and have them ready for despatch.

A logistics start-up uses IoT sensors for live tracking of vehicles to suggest the best route and monitor drivers' behaviour.

**Enhancing revenues through retail and channel transformation**

Business transformation strategies, including retail and channel transformation can dramatically improve the conversions and sales of a retail store.

**Business transformation**



Source: Deloitte analysis

- **Retail transformation**

Retail transformation lays emphasis on enhancing the store sales growth by focusing on the following areas:

### Footfall

Parameter	Key focus areas
<b>Marketing/ campaign</b>	<ul style="list-style-type: none"> <li>• Increase awareness</li> <li>• Increase local advertising and customer engagement initiatives</li> </ul>
<b>Product</b>	<ul style="list-style-type: none"> <li>• Ensure exclusive product and services range</li> <li>• Right product mix at each store</li> </ul>
<b>Planogram Ease of locating</b>	<ul style="list-style-type: none"> <li>• In-store experience for customers</li> <li>• Appropriate tagging of store addresses</li> <li>• Ensure visibility of stores within a mall/complex/street</li> </ul>
<b>Marketing/ campaign</b>	<ul style="list-style-type: none"> <li>• Complete range of product/schemes catalogues to be made available</li> <li>• Marketing POP to be added inside the store</li> <li>• Appropriate assortment mapping in concurrence to the catchment profile</li> </ul>

### Conversion

Parameter	Key focus areas
<b>Product</b>	<ul style="list-style-type: none"> <li>• Availability of products and accessories</li> <li>• Proper display of newly launch products</li> </ul>
<b>Demo/ display</b>	<ul style="list-style-type: none"> <li>• Placing proper display mannequins with latest merchandise</li> <li>• Training staff with current product portfolio knowledge</li> </ul>
<b>In-store promotor</b>	<ul style="list-style-type: none"> <li>• Staff training with product portfolio knowledge</li> <li>• Soft skills to understand customer requirements and persuade customers</li> <li>• Educating customer on product features</li> </ul>
<b>Payment options</b>	<ul style="list-style-type: none"> <li>• Efficient and time saving bill entry mechanisms</li> <li>• Providing alternative payment options</li> </ul>

### Average bill value

Parameter	Key focus areas
<b>Average selling price</b>	<ul style="list-style-type: none"> <li>• High visibility of high price products in the store</li> <li>• Incentivise staff for selling high-value products</li> <li>• Upsell on the basis of customer needs and persona</li> </ul>
<b>Basket size</b>	<ul style="list-style-type: none"> <li>• Educate customers value for multi-pack products</li> <li>• Promotion of best selling high-value products</li> <li>• Implement in-store branding</li> </ul>

Source: Deloitte analysis

• **Channel transformation**

Channel transformation lays emphasis on enhancing distributor and salesforce productivity, and establishing a structured approach to sales

Key intervention areas	Potential benefit/identified opportunity
<b>Increasing coverage and penetration</b>	Enhance coverage in rural and upcountry towns
<b>Range selling opportunity</b>	Potential to increase coverage for <b>new categories</b> in additional outlets
<b>Establishing key account management framework</b>	Increase market share in key accounts across large format stores, regional retail chains, and other lead retailers
<b>Enhancing distributor ROI</b>	Improving distributor rotation and profitability to free-up working capital; thereby leading to an increased capacity availability
<b>Improving Salesforce productivity</b>	<b>Opportunities for salesforce load balancing</b> by re-allocation of workforce

Source: Deloitte analysis

## Emergence of digital marketing

With about 560 million internet users, India is the second-largest online market in the world after China. By 2021, the country will have more than 600 million internet users. With about 44 percent digital buyer penetration in 2016, online shopping is also a popular activity. In India, retail e-commerce sales were forecast to increase from just US\$ 6 billion US\$ 25 billion by 2024.<sup>2</sup> Considering the above-mentioned numbers, digital marketing becomes

an essential topic to be addressed. It involves marketing services and products through various digital technologies to promote the business. Different digital channels, such as email, social media, and websites, are being used to interact with the prospective consumers in an efficient way. Digital marketing increases brand awareness and can save you a lot of money. It also makes possible a direct communication path between businesses their targeted customers.

## Data privacy

As digital technology has become ubiquitous, the retail industry is transforming into a data-driven one. Companies are adopting various technologies to collect data about customers' behaviour both online and in-store. They are beginning to spend more on niche data acquisition and analyse technologies to get better results. This data is then used in the following facets of the retail business:

- Forecasting and production planning
- Stock allocation and replenishments
- Inventory management
- Distribution and logistics
- Inventory visibility across the channels
- Product pricing and discounts
- Product recommendations for up-sell and cross-sell



- Customer experience management
- Social listening
- Determining store layouts, planning POS merchandising, etc.

As retail businesses mine more data to fuel digital disruption, there is mounting scrutiny of big data. With the tech industry battered by a series of privacy-related scandals ranging from the biggest social media website to a leading Indian retailer, stricter data security laws and privacy standards, especially around issues such as customer insights and personalisation, will be critical in retail evolution over the next few years. For example, consumers can now choose to opt out of having their data collected. However, Deloitte finds that 79 percent consumers are willing to share their

data with companies to get relevant communication from brands.

India has proposed ground-breaking rules, akin to Europe's General Data Protection Regulation (GDPR) that would require technology companies to garner consent from citizens before collecting and processing their personal data. At the same time, the new rules also state that companies will have to hand over "non-personal" data of their users to the GoI. The new rules, proposed in the nation's first major data protection law dubbed "Personal Data Protection Bill 2019," would permit the government to "exempt any agency of government from application of Act in the interest of sovereignty and integrity of India, the security of the state, friendly relations with foreign states, and public order."

## Case studies

### Leading QSR chain in India

A leading QSR chain in India installed a facial recognition technology in select cafes. Per the firm, the aim of collecting data was to reduce purchase time for customers. The firm told that the data was encrypted, would not be shared, and customers could choose to opt out.

However, customers took to social media to complain about the camera technology they said captured images of them

without their consent, with no option to opt out and no information on how the data would be used.

Consumers and various digital rights groups believe the lack of legislative safeguards to protect against the misuse of data can lead to privacy breaches, misidentification, and profiling of individuals (which may be perceived by consumers as intruding privacy).

### Versatile digital assistant device

A Portland customer claimed that her digital assistant device secretly recorded a private conversation between her and her husband and sent it to an acquaintance.

The owner company clarified that it takes privacy seriously, and has investigated what happened and determined this was an extremely rare occurrence. They also said they are taking steps to avoid such instances in the future<sup>8</sup>.



# Collaboration in the digital age-Retail ecosystem

The past few years have witnessed a phenomenal rise in mobile commerce, coupled with rising consumer expectations, and digital is at the centre of this change.

Digital transformation is gradually becoming an industry wide trend in the retail sector. More organisations are beginning to recognise the benefits of digital transformation and embrace it to their business, both internally and externally.

Digital transformation has levelled the playing field for many retailers as they face competition from online competitors. It has enabled them to achieve success in an omnichannel world that incorporates both sales environments for an inclusive shopping experience.

### **Value proposition of digital infusion into the retail space**

Digital infusion has tremendously increased the complexity of retail marketing and retail supply chains. However, it has increased the availability of operational and customer data that can provide valuable insights, which drive growth and profitability.

Stakeholders across the retail value chain that include manufacturers and retail executives recognise the value of decision-making enabled by integrated data and analytics.

Data-driven collaboration establishes a connection that allows key stakeholders to achieve shared objectives, including increased product sales, growth in revenue, and brand loyalty.

Digital provides retailers opportunities to acquire new customers, engage better with existing customers, and reduce the cost of operations with a positive influence on revenue and margin.

### **What has brought about this infusion?**

Due to rising level of customer expectations and the complexity introduced by omnichannel, retailers and manufacturers have realised the need to become more customer centric, insight-powered, and digitally empowered organisations.

Today's digital consumer is increasingly connected, has more access to information, and expects businesses to instantly react to their needs.

Government initiatives to drive digital transformation, along with increased internet affordability, has also propelled growth of the digital footprint in the retail sector.

The effective exchange of information, using common platforms and analytical insights driving integration in supply chain processes, can offer not only what is best for customers but also what is best for the category and brand.

### **Need for collaboration**

The changing consumer behaviour has transformed how companies are engaging and interacting with their customers. Earlier consumers used to obtain product information from advertisements and by interacting with salespeople in physical stores. Shoppers aggressively research and compare products before physically visiting a store or even while in the store by checking out other retailer outlets on their smartphones and tablets. Due to the mobile revolution, prices, product variations, and reviews are more available and easier to compare than ever.

Retailers are experimenting with a myriad of approaches to respond to these high customer expectations, transform the retail experience, and manage processes more efficiently.

Digital transformation at the organisational level has been instrumental in the success of these approaches.

The increasing need for collaboration (involving convergence among sectors), breaking down functional barriers within organisations, opportunities for co-opetition and co-ownership, focus on co-creation, and an orientation towards continuous learning through feedback has been fundamental to this transformation.

An integral component of the digital approach is retail ecosystem. The ecosystem is a network of suppliers and technology providers, supporting the retailer in developing capabilities with long-term objective of maximising customer-lifetime value. The need to serve customers better has paved the way for building long-term and strategic retailer-technology partnerships.

Retailers recognise that technology is a fast route to accessing transformative solutions and data science to improve their business models.

At present, technology is no longer a utility but essential to the strategic transformation of retail offerings and operations in an increasingly challenging environment.

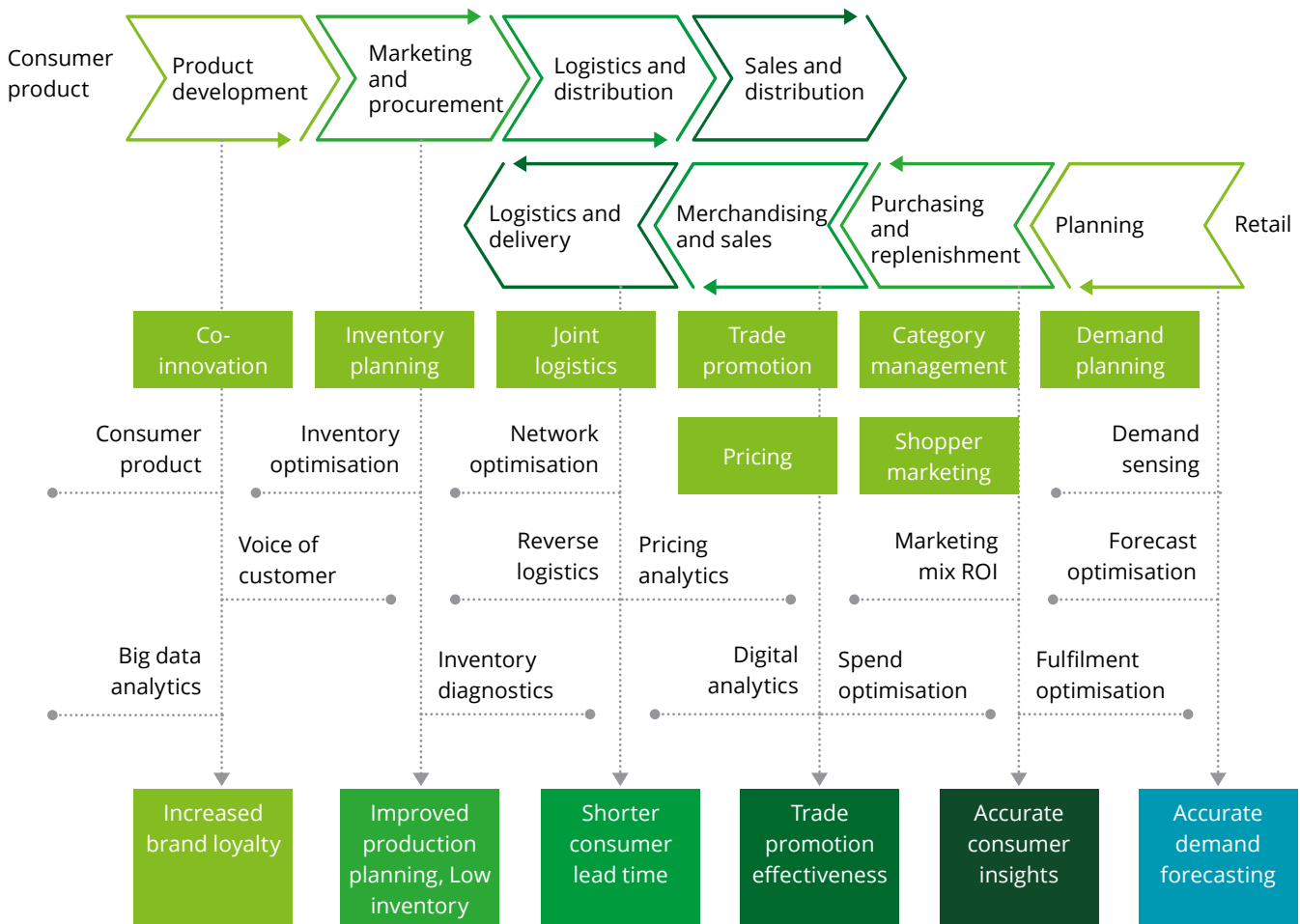
Digitally powered collaborations among various stakeholders in the retail value chain have helped optimising processes ranging from product innovation to demand planning and marketing.

### Collaboration models

Collaboration type	Key collaboration areas	Select examples
<b>Supplier-Supplier</b>	Coopetition (collaboration with competition)	<ul style="list-style-type: none"> <li>Two competing technology giants collaborated for synergistic growth for software and chips</li> <li>A group of leading FMCG and beverage companies established a non-profit organisation for developing sustainable refrigeration technologies to combat climate change</li> </ul>
<b>Supplier-Retailer</b>	<ul style="list-style-type: none"> <li>Revenue margin enhancement</li> <li>Process improvement</li> <li>Cost reduction</li> <li>Sharing real-time POS DATA</li> <li>Creation of eco-systems</li> </ul>	An American multinational technology giant partnered with a leading Indian retail brand for special offers and plans.
<b>Retailer-Retailer</b>	<ul style="list-style-type: none"> <li>Extended networks</li> <li>New channels</li> </ul>	An Indian e-commerce payment system and financial technology company's collaboration with several traditional offline stores
<b>Retailer-Customer</b>	<ul style="list-style-type: none"> <li>Co-creation of customer-focussed documents</li> <li>Crowdsourcing for innovation</li> </ul>	Several clothing brands establishing online communities where members can submit their own designs and suggestions
<b>Retailer-Digital Service Provider</b>	<ul style="list-style-type: none"> <li>Consumer-centric solution development</li> </ul>	A leading multinational retail corporation collaborated with a global technology giant for 'voice controlled shopping'

Source: Deloitte analysis

**Leading to sustained success for all entities**



The supply chain stakeholder have a choice: collaborate digitally

Source: Collaborate 4.0: Optimising the consumer value chain

**Case study 1**

A leading multinational technology company's collaboration with a major British retailer for AI-led digital transformation

The British clothing, homeware, and food retailer plans to implement ML and computer vision technologies across all touchpoints—in store and behind the scenes.

The aim behind this collaboration is to understand the full potential of how technology and AI can improve the in-store experience for customers and the efficiencies of wider operations.

Technology tools have enabled every surface, screen, and scanner to create data. Following which, AI is used to gain insights from it and enable employees to make decisions. The retailer aims to use intelligent edge devices to improve the customer experience and enhance operations for optimal productivity.

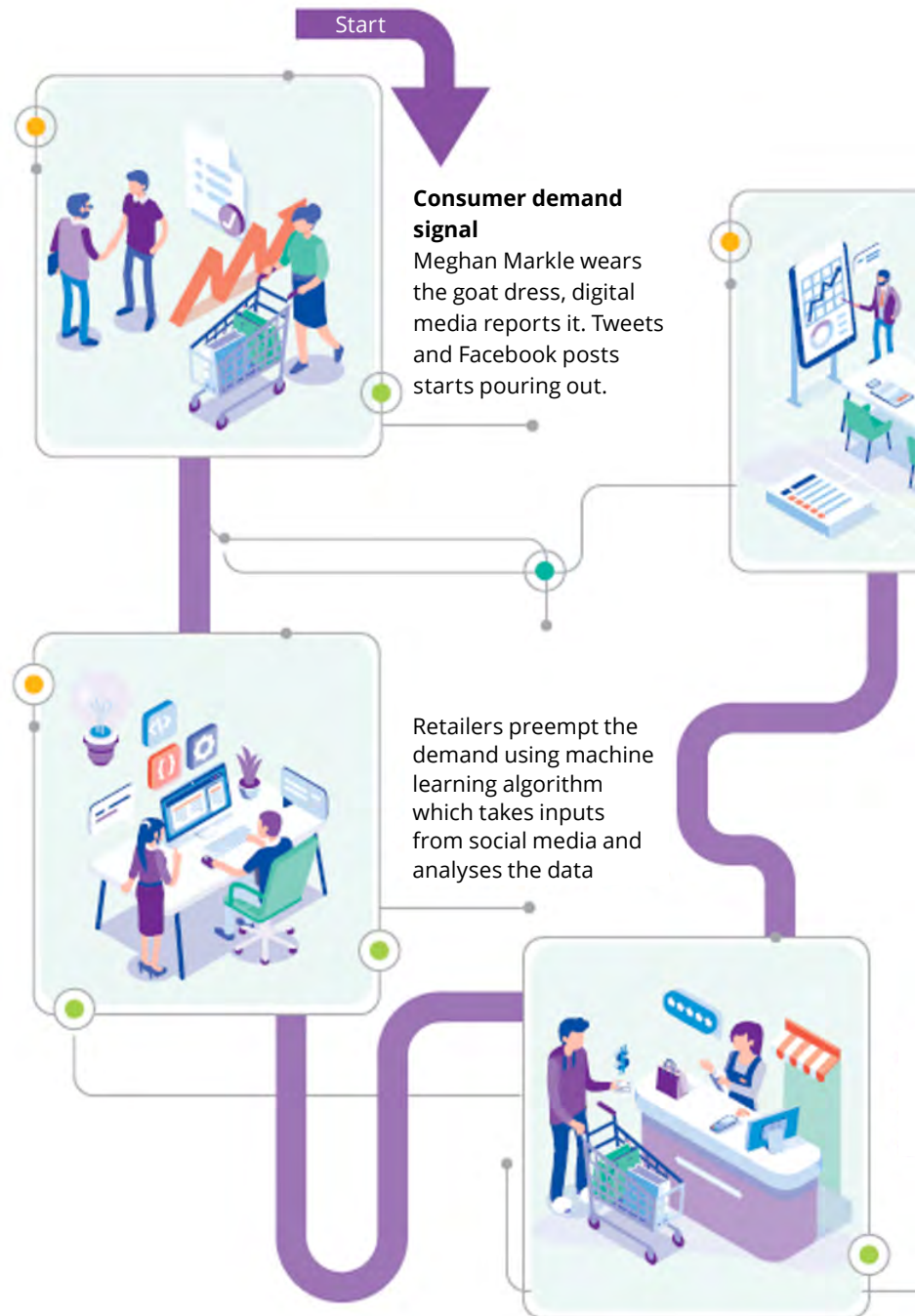
With computer vision, cameras can spot when an item is dropped, resulting in an unexpected reduction in stock. The computer can then log an entry in the stock system and communicate alerts to appropriate staff, enabling the retailer to track, manage, and replenish stock levels and deal with unexpected events.

Cognitive services can also assess products' physical location in store and create solutions, such as moving products to a different section of the store. In this instance, technology can help the retailer satisfy demand by making the right products available at the right places, and improve the store design and product promotion.

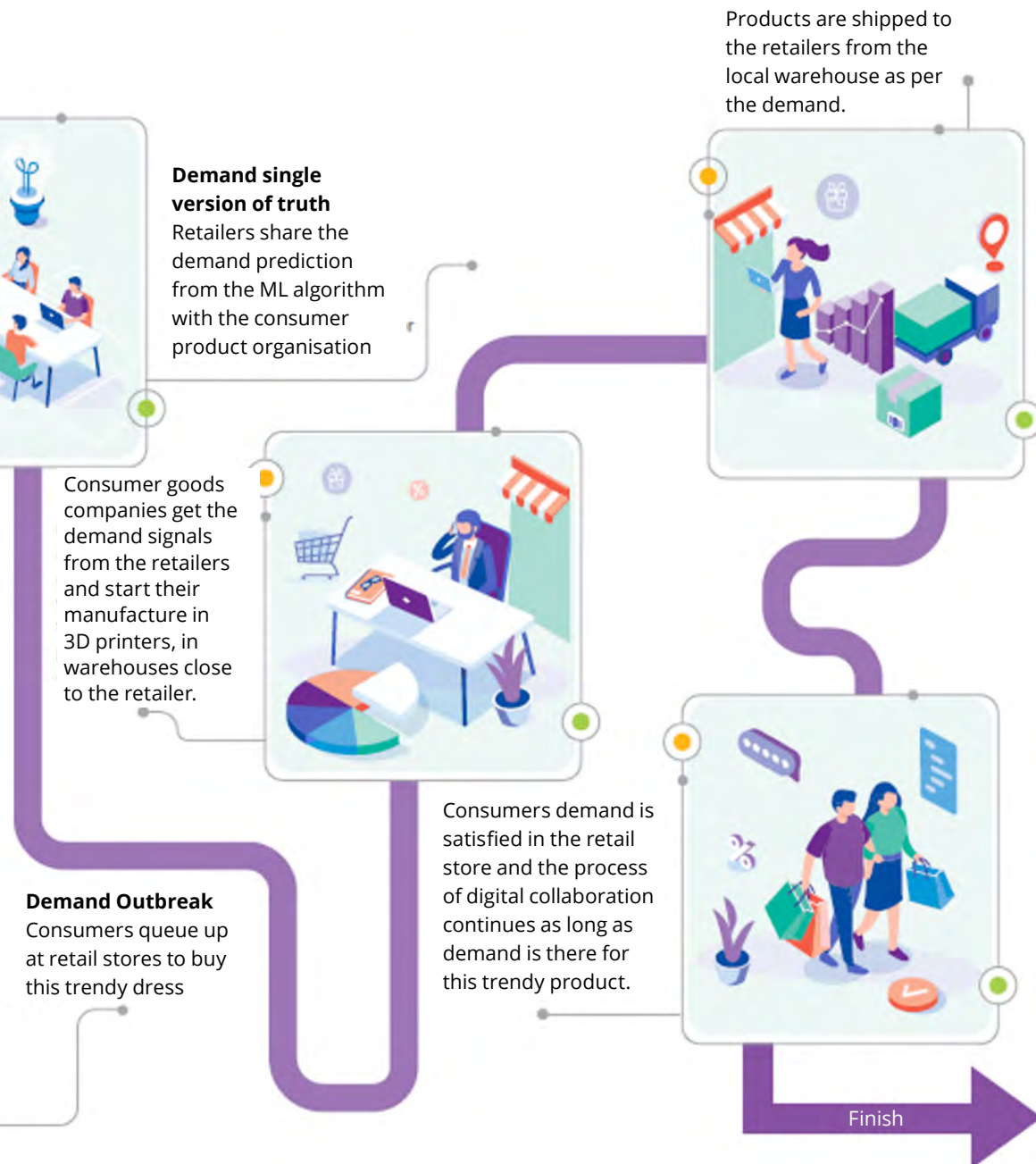
### Case study 2

A use case for how digitally empowered retailer-manufacturer collaboration can help effectively forecast demand for a celebrity's popular outfit at the annual Christmas lunch in Britain. Within 24 hours of the arrival of the celebrity at the event, the dress sold out. Social media helped consumers identify the celebrity and subsequently spot the dress, driving up demand beyond retailers' ability to respond. The retailer had access to the latest ML technology that would have helped it foresee this opportunity. He would have relayed demand surge signals to the manufacturer that would have immediately shipped dresses to the retailer. If demand is quite high, the dressmaker can prioritise completing the manufacturing process and ensure adequate supply.

### Digital collaboration between customers goods and loyal retailers- A royal case study



Source: Collaborate 4.0: Optimising the consumer value chain



### Challenges to effective collaboration

- 01. Lack of data:** Inaccurate data capture; inconsistent formats; absence of transparency, centralised databases, and omnichannel integration; and irregular frequency result in lack of sufficient data on parameters such as product, pricing, and competitors. As a result, the retailer and suppliers are unable to adequately analyse data and derive insights.
- 02. Divergent agendas:** Although cooperation between retailers and manufacturers has existed in areas such as promotional schemes, advertisements, and merchandising, long-term strategic collaborations are largely absent from the retail space. Manufacturers' focus remains on brand building and retailers' channelise their capabilities to maximise store profitability. A synergy between goals is not that frequently witnessed.
- 03. Inadequate knowledge of customer behaviour:** Most retailers have limited understanding of factors influencing customer behaviour. On the contrary, online competitors tend to know their customers much better. Even in-store customers are known better to online competitors in terms of buying preferences and behaviour (as most customers browse through products and prices online before visiting a store).
- 04. Flawed evaluation metrics:** Retailers often do not have clear internal metrics to measure the success of their digital collaboration initiatives. Their KPIs have been over reliant on sales and volume. Consumer centricity is not measured adequately, and each channel has its own set of KPIs that do not integrate the effect of other channels.

### Overcoming obstacles and ensuring effective collaboration

- 01. Aligned strategic objectives:** Synergy between goals of the manufacturer and the retailer, and prioritising initiatives in line with customer, category, and brand value drivers
- 02. Information exchange:** Investing in business processes that lays emphasis on data accuracy, technology systems with seamless interlinkages, and adopting common metrics and intelligent analytics, retailers and manufacturers can use data and insights for mutual benefit.
- 03. Understanding consumer behaviour:** While new customer acquisition remains at the focus, channelising energies on existing customers is also essential to build a sustainable growth trajectory without excessive spending on promotions. With loyalty programmes, the adoption of initiatives (such as "click and collect"), in-store digital technologies (such as digital mirrors and fitting rooms), and self-service scanning and payment methods, retailers are better able to understand consumer behaviour.
- 04. Time bound and balanced KPIs:** The KPIs decided for digital initiatives should balance short-and medium-term goals with long-term strategic intents. These KPIs should be agreed to in advance among the relevant stakeholders.



## People

While success in retail has always been centred on attracting new and retaining existing customers, it has gradually begun to encompass the employee aspect.

Several retailers have started implementing the digitisation process for store-level employees to increase efficiency.

The following are three fundamental aspects of digital transformation at the retail workspace:

### 01. Simplification through digital

**intervention:** Replacing manual processes with flexible, automated processes have empowered store-level employees to take faster decisions and reduce turnaround time. Retailers are increasingly using technology to help their employees save time on mundane and repetitive tasks.

**02. Skill development:** Organisational capabilities necessary for retail success are fast evolving. Hence, there is a need to improve skills at an employee and leadership level. Several online training courses that are easily accessible have helped organisations foster a learning environment.

**03. People analytics:** Retail organisations recognise that people analytics is an effective tool to get optimal performance from their employees. People analytics technologies are being used in providing valuable data in regard to optimising workforce, enabling effective facility management and determining conversion rates.

Customer expectations have increased significantly over the years in terms of retail experience. Retailers have to be responsive to customer needs and continuously reinvent themselves by offering innovative services that make shopping easier and more convenient. These services also create new challenges by requiring greater integration across more channels and establishing systems. Staying relevant in the digital era by building advanced (and evolving) omnichannel propositions is one of the main challenges retailers and brands face. Exploring and fostering collaboration opportunities across key business areas are fundamental drivers and accelerators of change and innovation. Technology-enabled collaboration among stakeholders in the retail value chain has become a necessity for players to adapt and survive in the modern retailing age.



# Way forward

Technology has led to a paradigm shift in the way retailers operate and transformed the entire shopping journey of consumers. Traditional sequential supply chains have transformed into a digital supply network with interdependent and multi-functional linkages. Advanced technologies, such as cloud computing, IoT, blockchain, robotics, automation, 3D printing, predictive analysis, ML, and AI, are expected to automate various backend and front-end processes. Thus, retailers need to invest in these technologies to remain competent and thrive in the rapidly evolving and disruptive consumer environment.

Similarly, a large-scale confluence of online and offline channels is imminent in the country. Therefore, retailers prioritising one over the other may risk losing a major segment of consumers who are more aware and conscious than ever. Retailers are expected to keep their consumers engaged across every channel of shopping. Globalisation, internet accessibility, product availability, etc., have led to the emergence of new

norms of loyalty for retailers where personalisation, enhanced shopping experience, custom-loyalty programmes, storyboarding, transparency, etc., have taken a front stage. Data has become the new oil. Brands are making significant efforts to mine and analyse consumers' shopping and behavioural data and generate insights to make consumers' shopping cycles more convenient, and convert footfall and clicks into revenue.

Data has become highly relevant and crucial in this age of digital transformation and technology, however it can also be misused. The biggest threat to a developing nation with vast consumer data is data leakage or pilferage that could undermine the country's digitisation efforts. Considering the criticality of protecting data, the Indian government has proposed 'Data Protection Bill', which is under discussion before being enacted into a law. At the same time, retailers and brands should consider enhancing their data security measures and ensuring zero leakage to gain consumers' trusts and loyalty.



# Endnotes

01. Company websites, company annual reports, Investor presentations
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