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About the Retail Digital Services 2022–2023 RadarView

1 The retail industry is bouncing back. With both online commerce gaining momentum and offline commerce making a comeback, retailers have started to bet big on omnichannel retailing. New touchpoints for online sales, new format of brick-and-mortar stores, and digitally-led experiential retailing have led to the generation of new revenue streams and enhanced customer experience.

2 Avasant's ongoing interactions with industry leaders indicate that convergence of digital technologies is crucial for business growth and retention of existing customers. As retailers rapidly digitalize to align with industry dynamics, there is an increasing need for them to partner with the right service provider to assess and realign their digital strategy for the future.

3 The *Retail Digital Services 2022–2023 RadarView* assists retailers in charting out their action plan to gain competitive advantage. It also identifies essential global service providers and system integrators that can help enterprises transform their business.

4 Avasant evaluated 36 providers using a rigorous methodology across three key dimensions: practice maturity, investments and innovations, and partner ecosystem. Twenty of the 36 providers were recognized as having brought the most value to the market over the past 12 months.

5 This report also highlights key trends in the market and Avasant's viewpoint on the direction of the industry over the next 18–24 months.

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Scope of the report

This report focuses on digital services delivered to enterprises in the retail industry.

Key definitions

Retail	▪ The sale of goods from a point of purchase directly to the end customer who intends to use the product. ▪ The point of purchase can be a physical retail store, a shopping website, or a mobile application.
Digital services	▪ Digital services accelerating digital transformation using emerging technologies such as artificial intelligence (AI) and analytics, blockchain, cloud, cybersecurity, intelligent automation (IA), immersive reality, and the Internet of Things (IoT) across the retail value chain. ▪ Service provider offerings including advisory and consulting, proof of concept (POC) development, build and test, implementation, system integration, and development and maintenance.

Enterprise examples

Walmart · COSTCO · TESCO · Kroger · Walgreens · SCHWARZ · THE HOME DEPOT · TARGET · IKEA · amazon · Alibaba.com

We assess the offerings of service providers across six service line components of the retail value chain.

Sourcing and procurement	Inventory management and warehouse operations	Marketing	Online and in-store commerce	Fulfilment	Customer experience
Sourcing of finished goods from manufacturers, distributers, or wholesalers	Managing inventory, replenishment planning, and warehouse operations	Promotion of brand and goods for sale	Execution of sale purchase transaction—online, mobile, in-store, and curbside	Managing distribution network and delivery and return of goods to and from end consumers	Customer engagement (online and in-store) and customer support (before and after sale)

Out of scope: Does not include manufacturing, distribution, and supply chain management of raw materials
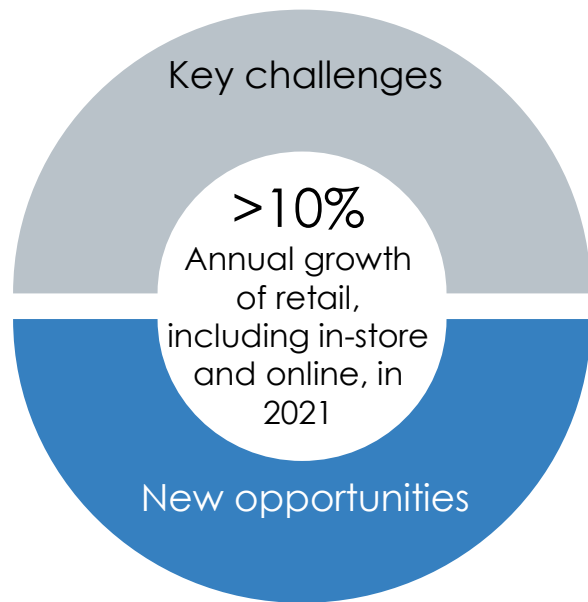
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Avasant has recognized 20 top-tier service providers supporting retailers in digital transformation
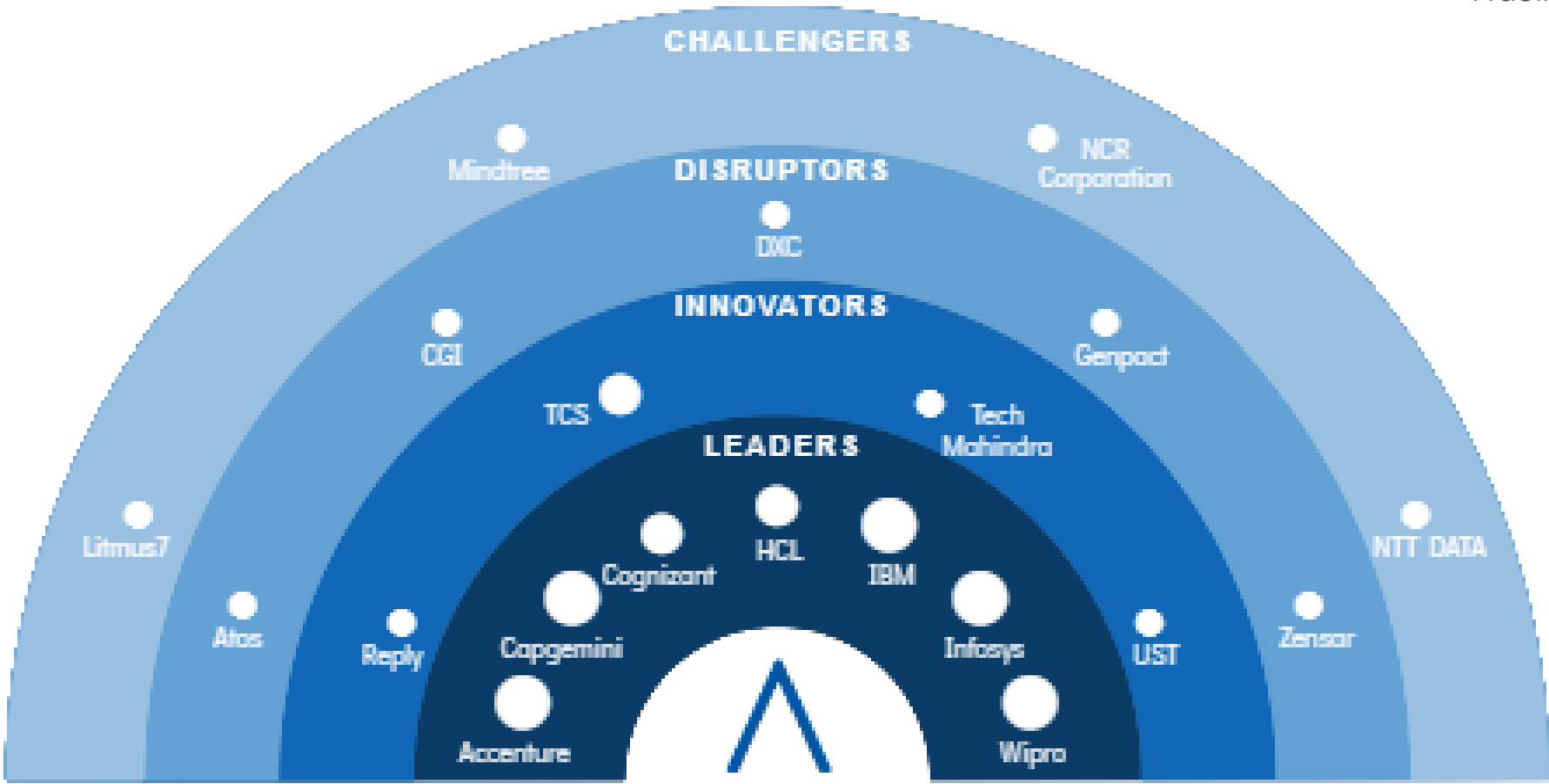
The retail industry faces ongoing challenges, but there are also new opportunities

Key challenges

>10%
Annual growth of retail, including in-store and online, in 2021

New opportunities

Store closures and installation of safety protocols
Retailers must close some of their stores and redesign others to improve profitability and accommodate safety protocols such as thermal screening, social distancing, and temperature checking.

Shift in consumer spending
Lockdowns shifted consumer choices toward essentials and comfort products. As economy strengthens, luxury goods are more connected to consumer's digital lives including NFTs and smart products.

Operations and supply chain disruptions
Retailers are facing issues of stock unavailability and delay in delivering products due to disruptions in fulfilments centers, unorganized last mile delivery, and inability to predict demand.

Staffing issues
Staff migration to other industries during the lockdown and difficulty in recruiting skilled staff specializing in showrooming and providing personalized services to customers have led to major staffing issues.

Growth in omnichannel retail
Omnichannel retail is experiencing exponential growth as digital native retailers launch stores, the role of social media influencers becomes critical, and penetration of smart devices increases.

Increased traction in different business and operating models
There is increased adoption of varied business and operating models such as BOPIS (buy online pick in store) and curbside pick up to align with the shift in customer expectations.

High focus on customer experience
Retailers are increasingly investing in digital technologies to provide personalized and differentiated experiences to customers during online and offline sales.

Sources: Avasant Research, NRF (National Retail Federation)

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Key trends shaping the retail industry

1. Continued focus on elevating digital shopping experiences

2. Emergence of new types of brick-and-mortar stores

3. Big investments on building the digital supply chain

4. Exploration of new business models

5. Accretive mergers and acquisitions within the retail ecosystem

Sources: Avasant Research

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Retailers are improving the digital shopping experience by catering to customer needs

With 11%–13% expected growth in online sales in 2022, the global retail market is forecasted to cross USD 1.17 trillion. Initiatives to elevate the digital shopping experience include:

Customer experience

Amplify customer experience in web portals through virtual tours and voice-enabled shopping.

Launched a 3D virtual tour of its showroom to give the feeling of a walk-through vintage collection.

Empathy selling

Sell empathy with the products to provide contextual cues and personalized services by creating empathy maps.

LUSH FRESH HANDMADE COSMETICS

Developed 'how it's made' videos that describe the product sourcing to demonstrate care.

Live shopping experience

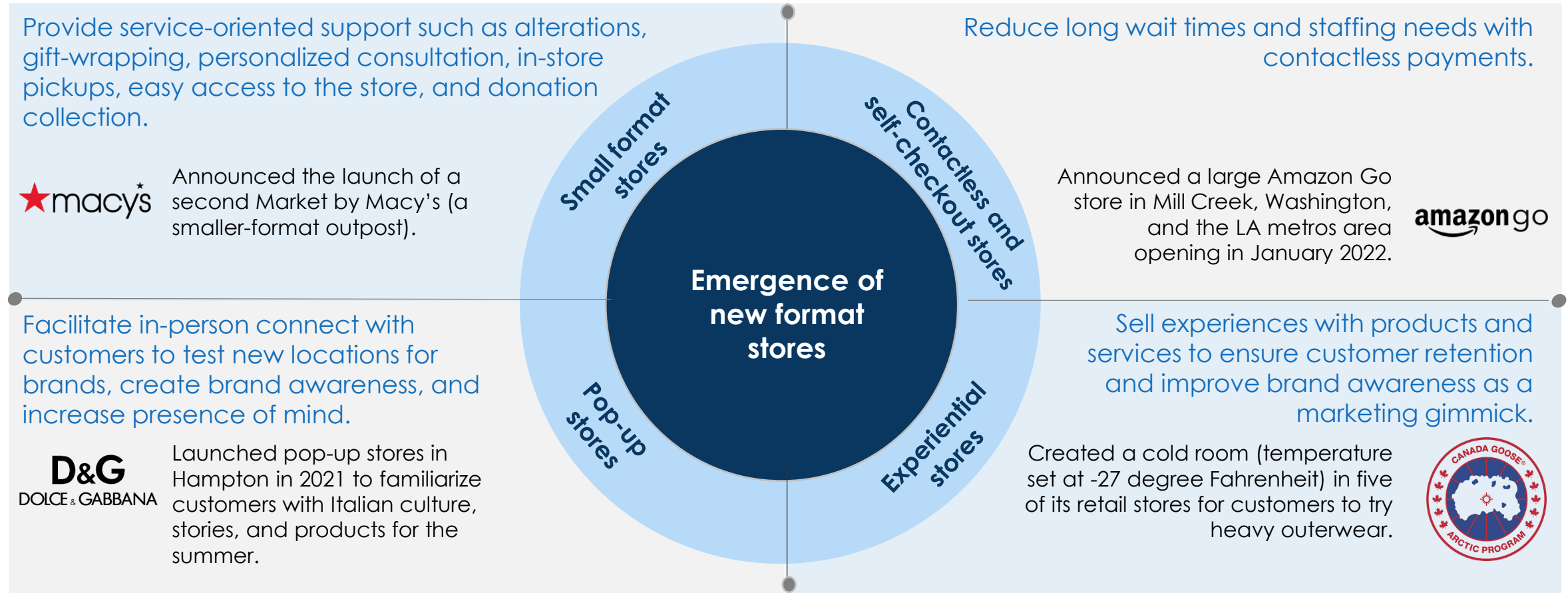Create live shopping experiences to highlight product benefits and usage through events, product demonstrations, and surveys.

Douglas

Reported conversion rates up to 40% by streaming several shows a week and workshops with experts and influencers.

Customer loyalty

Provide personalized after-sales services and support based on feedback and requirements.

EPIC

Converted a bad experience by replacing one bad protein bar with six new bars and a handwritten note.

Transparency promotion

Promote transparency by providing real-time updates on the end-to-end delivery schedule, sales return, and stock availability.

Etsy

Increased customer retention by providing notifications on delivery schedule and stock.

Investment in customer-centric initiatives can generate additional revenue by increasing customer conversion rates and reselling opportunities with existing customers.

Sources: Avasant Research, NRF (National Retail Federation)

Retailers are introducing new concept brick-and-mortar stores to reduce costs and enhance customer convenience

Provide service-oriented support such as alterations, gift-wrapping, personalized consultation, in-store pickups, easy access to the store, and donation collection.

macy's Announced the launch of a second Market by Macy's (a smaller-format outpost).

Reduce long wait times and staffing needs with contactless payments.

Announced a large Amazon Go store in Mill Creek, Washington, and the LA metros area opening in January 2022. **amazon go**

Small format stores

Contactless and self-checkout stores

Emergence of new format stores

Pop-up stores

Experiential stores

Facilitate in-person connect with customers to test new locations for brands, create brand awareness, and increase presence of mind.

D&G DOLCE & GABBANA Launched pop-up stores in Hampton in 2021 to familiarize customers with Italian culture, stories, and products for the summer.

Sell experiences with products and services to ensure customer retention and improve brand awareness as a marketing gimmick.

Created a cold room (temperature set at -27 degree Fahrenheit) in five of its retail stores for customers to try heavy outerwear. **CANADA GOOSE ARCTIC PROGRAM**

New format stores will play a critical role in driving revenue growth by reducing costs, improving proximity to customers, and providing after-sales support.

Sources: Avasant Research, executive interviews

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Progressive retailers are pursuing M&A to increase revenue, optimize operations, and enhance customer experience

Strategic initiatives triggering M&A activities:

Illustrative examples:

Enterprise	Acquired company	Summary
Create new revenue streams by venturing into adjacent spaces	BEST BUY. / current health	Acquired Current Health for USD 400 million to gain access to its remote monitoring platform for creating a scalable care ecosystem for its customers.
Increase market share by expanding geographical presence	Etsy / elo7	Acquired Elo7 to strengthen its foothold in the Latin American market through its vast e-marketplace ecosystem of 1.9 million active buyers and 56,000 active sellers.
Elevate customer experiences by acquiring digital capabilities	Walmart / ZEEKIT	Acquired Zeekit, a startup specializing in digital fitting rooms, to help customers shop garments on walmart.com by uploading a photo or choosing a model that best represents them.
Optimize cost by integrating with supplier networks	amazon / SpartanNash	Acquired a 15% stake (2.5% in company stock and another 12.5% if Amazon buys groceries of USD 8 billion over seven years) in SpartanNash, its leading grocery supplier.
Align with customers' expectation of expedited delivery	TARGET / deliv	Acquired the technology assets and expertise of Deliv, a startup specializing in last mile delivery transportation services, to facilitate same day delivery for customers.

Accretive acquisitions combined with in-house investments is providing a differentiating edge to progressive retailers, as they are evaluating horizontal, vertical, and digital integration.

Source: Avasant Research

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Develop customer-centric strategies across critical touchpoints to prioritize convenience and experience

Deployment of emerging digital technologies will act as a catalyst to better understand, analyze, and approach customers.

Hyperpersonalization
Develop personalized and curated shopping lists based on buying and usage patterns.

In-store experience
Use IoT and Bluetooth for tracking items, analyzing customer traffic data, and sending targeted deals.

Social selling
Facilitate live streaming of events, bulk buying discounts, and selling through influencers on social media.

Immersive experience
Enable virtual product trials, indoor navigation, and product guides using immersive reality.

Voice commerce
Ensure seamless transfer to relevant pages for online searches and launch the same in physical stores.

Values-based branding
Promote empathy by stressing ESG initiatives and narrating the culture and stories behind the brand.

Customer expectations are revolving around convenience for fast moving products/ services and experiences for luxury shopping. Retailers must find the right balance for both online and offline commerce.
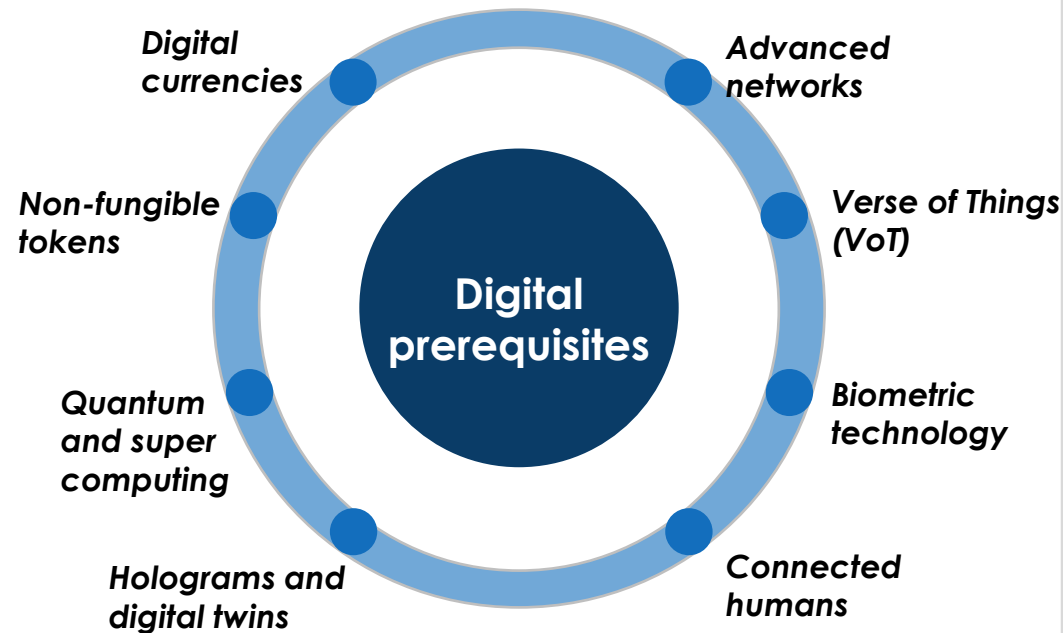
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Deploy digital technologies to achieve business objectives

Use IoT and analytical solutions to test food quality in restaurants and track temperatures in stores.

Monitor activities in the store by installing AI surveillance cameras to track the behavior of customers.

Reduce human dependency for last mile deliveries by investing in autonomous driving.

Leverage computer vision to track and analyze the movement, preferences, and demands of customers in stores.

Leverage immersive reality in stores and online to enable visualization of products through virtual tours or virtual fitting rooms.

Enhance quality testing process

Prevent theft and frauds

Improve last mile delivery

Design store layout

Elevate customer journey

Enable digital token exchange for rewards in smart contracts to boost loyalty programs.

Facilitate smart contracts

Use cases for digital acceleration

ESG in supply chain planning

Build smarter warehouses with green energy systems and temperature-controlled units.

To align with evolving customer expectations, financial challenges, and staffing issues, investing in multiple digital projects is imperative.

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Prioritize investment areas in the Omniverse to monetize opportunities in the near future

The Omniverse is the convergence of human experiences across the physical, virtual, and augmented worlds.

Digital currencies

Advanced networks

Non-fungible tokens

Verse of Things (VoT)

Digital prerequisites

Quantum and super computing

Biometric technology

Holograms and digital twins

Connected humans

Digital technology prerequisites that will enable the Omniverse ecosystem

Disruptive Omniverse investments and opportunities

Investments

Infrastructure
Establish presence in Web 3.0, invest in low-code and no-code platforms, and acquire required digital technologies such as immersive reality and 5G.

Virtual stores
Plan, design, and launch virtual stores to sell digital products. Create aggressive, targeted, and innovative marketing campaigns for improving brand awareness.

Opportunities

New revenue streams
Target customers wanting hyperpersonalized avatars using AI for targeted marketing.

Immersive experiences
Explore new experiential retail options such as gamification of shopping experiences during virtual visits and participation in live streaming events.

The retail industry will be impacted by the Omniverse, as it is leading to many opportunities. Though it is still in its nascent stage, progressive retailers must consider exploring, assessing, and planning the transformation plan.

Source: Avasant Research

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Research methodology and coverage

Avasant based its analysis on several sources:

Public disclosures
Publicly available information such as Securities and Exchange Commission (SEC) filings, annual reports, quarterly earnings calls, and executive interviews and statements

Market interactions
Discussions with retail service providers leading digital initiatives and influencing retail provider selection and engagement

Provider inputs
Inputs collected through their capability decks and structured briefings during September–December 2021

Of the over 36 retail service providers assessed, the final 20 featured in RadarView are:

accenture

Atos

Capgemini

Cognizant

CGI

DXC TECHNOLOGY

genpact

HCL

IBM

Infosys

LITMUS7

Mindtree
A Larsen & Toubro Group Company

NCR

NTT DATA

REPLY

tcs | TATA CONSULTANCY SERVICES

Tech Mahindra

U•S•T

wipro

zensar

Note: Assessments for Accenture, CGI, DXC Technology, IBM, NTT DATA, Reply, TCS, and UST were conducted based on public disclosures and market interactions only.

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Accenture: RadarView profile

Accenture

AVASANT RADARVIEW™ LEADER
Retail Digital Services 2022-2023

Practice maturity ★★★★★

Investments and innovation ★★★★★

Partner ecosystem ★★★★

Elevates customer experience and drives operational efficiencies with its intelligent platforms and scalable solutions.

Practice overview

- Practice size: NA
- Active clients: NA
- Delivery highlights: 120 delivery centers worldwide

| 14% Retail, CPG & travel revenue share, Aug. 2021 | 10% Practice growth, Aug. 2021 |

Industry-specific solutions/offerings

ai.RETAIL	A scalable data and AI solution for marketing, merchandising, and supply chain
Accenture Cloud Retail Execution	A cloud platform to optimize visits and improve sales and collaboration for marketing and sales operations
Accenture Retail Clienteling	A preconfigured platform with accelerators to personalize in-store CX and follow-up requests
Total Vision for Retail	A scalable solution to collect data, giving a single view of the customer

Sample clients

- Tim Hortons
- Intermarche
- H&M
- Council of Fashion Designers of America
- Central Group of Companies
- Shopper's Stop
- Body Shop
- Coop

Partnerships/alliances

salesforce	Provided end-to-end services for its products and codeveloped cloud-based solutions
Adobe	Leveraged its open and flexible platforms for personalized e-commerce experiences
Microsoft	Developed and delivered industry solutions through their joint venture, Avanade
Ideoclick	Improved customer interaction using cloud-based e-commerce optimization
SAP	Codeveloped cloud-based customer experience solutions
UPSKILL A TEAMVIEWER COMPANY	Provided AR wearable solutions such as smart glasses for order picking in retail stores
hp	Codeveloped hybrid cloud automation platforms and DaaS solutions for retail clients
P97	Provided cloud-based mobile commerce and a digital marketing platform

Value chain coverage

Customer engagement

Fulfillment

In-store commerce

Inventory management and warehouse operations

Marketing

Online commerce

Sourcing and procurement

Darker color indicates higher value chain coverage: ●●●●

Accenture: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A China-based home furnishing chain	• Analytics • Artificial intelligence (AI) • Cloud	• The client wanted to unify its siloed systems to provide a smooth experience to customers online and offline. • Accenture implemented an omnichannel solution using Alibaba's cloud platform with open architecture and strong expansibility for easy sharing of data and services. It integrated order management and customer loyalty system in the platform to improve marketing campaigns.	• Expanded from more than 200 stores to over 350 stores • Experienced 13.3% YOY growth in merchandise volume
A British cosmetics, skin care, and perfume retailer	• Automation • Cloud	• The client wanted to modernize its legacy IT systems to be more resilient and share data across systems. • Accenture implemented an order management portal and a cloud-based SAP S/4HANA enterprise resource planning system to help transform financial, supply chain, and e-commerce processes. It migrated its legacy data onto Microsoft Azure cloud, using myConcerto platform, to assess data conversion needs, develop testing, and measure cutover quality.	• Enabled accurate stock forecasts and sourcing efficiencies • Imparted seamless customer experience across stores and online • Created a centralized, agile cloud platform to enable business flexibility
A Canada-based fast-food chain	• AI • Analytics	• The client needed a new loyalty program and advanced digital capabilities to increase repeat customers. • Accenture redesigned and relaunched the client's mobile app with loyalty at its core. It created a cross-channel loyalty program, called Tims Rewards, which allowed the mobile app to provide personalized offers, promotions, interactive campaigns, and contests. It increased customer engagement and reduced customer churn.	• Accelerated guest registrations • Experienced a 3x increase in sales impact of loyalty adoption using smart offer allocation
A Thailand-based retail holding company	• AI • Analytics • Cloud	• The client wanted to provide a seamless and personalized omnichannel experience to members on its platform. • Accenture implemented a multilayered system with Adobe Experience Cloud, orchestrating data and content. It developed a data-driven loyalty program, expanding the client's partner ecosystem through advanced analytics and improving user experience and workforce transformation using adaptive intelligent solutions.	• Enhanced customer experience • Provided real-time data of customer across various digital touchpoints

Accenture: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Accenture has strong capabilities in applied intelligence and digital experience across the retail value chain. Its retail, CPG, and travel practice contributes 14% to the company's total revenue of $50B.
- It differentiates itself by adopting a design thinking-led, innovative approach for developing customer-centric platforms. It provides data-driven, retail-specific platforms to offer retailers with innovative and personalized services for customers, such as ai.retail for getting a 360-degree view of customers with actionable insights and Cloud Retail Execution to execute sales and marketing operations with superior efficiency and intelligence.
- It has a strong focus on enhancing customer experience. It has a dedicated business group for customer experience services, called Accenture Interactive, that specializes in providing marketing transformation services, commerce expansion services, unified brand experience services, and channel enablement services.

Investments and innovation	★★★★★

- Accenture has been aggressively investing in niche technology players. In fiscal 2021, it invested $4.2B in 46 acquisitions across industries including retail. It has acquired multiple, retail-oriented organizations to grow its retail capabilities. In 2021, it acquired HRC Retail Advisory, a North America-based retail consulting firm and REPL, a UK-based technology consulting firm for supply chain and retail processes transformation.
- Accenture has been spending heavily on research and development to build cutting-edge technologies. The company has over 100 innovations hubs and invests in growth-stage companies that create innovative enterprise technologies. For instance, it has invested in Touchcast to provide metaverse as a service to its clients.

Partner ecosystem	★★★★

- Accenture is involved in developing software applications with end-to-end capabilities to address industry-specific opportunities through its dedicated practices for Google Cloud, Azure, and AWS. Its joint venture with Microsoft, called Avanade, has over 2,400 retail industry professionals and over 100 retail projects to build joint go-to-market (GTM) solutions such as blockchain for supply chain on Azure.
- It integrates its proprietary solutions with industry-leading technology providers to enable digital transformation for clients. For instance, its Retail Execution and Trade Promotion Planning platforms are built in collaboration with Salesforce. Its myConcerto platform includes all the latest solutions from its intelligent platform partners such as SAP, Oracle, Salesforce, Workday, Microsoft, and Adobe.

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Atos: RadarView profile

Practice maturity ★★★

Investments and innovation ★★★★

Partner ecosystem ★★★★

Strong focus on developing retail digital platform solutions that provide ecosystem management across the value chain.

Practice overview

- Practice size: 9,000+
- Active clients: 350+
- Delivery highlights: : Delivery centers across 71+ countries

7%	34%
Share of retail revenue Dec. 2021	Share of business & platform solutions Dec. 2021

Industry-specific solutions/offerings

Conversational Commerce	An AI-based voice platform for customers to seek information, assistance, and make purchases
Autonomous Stores	An IoT platform with integrated apps to fully automate store operations
Intelligent Supply Chain for retail	A suite of intelligent solutions for order fulfillment, last-mile delivery, and warehouse automation
Connected Cooler	Smart sensors and controllers to connect devices, sharing insights on usage and efficiency

Sample clients

- Coca-Cola Hellenic Bottling Company
- A nutrition products company
- A home improvement chain
- A US musical retail chain
- A specialty retailer

Partnerships/alliances

SAP	Built supply chain solutions in partnership with SAP
HARDIS GROUP	Utilized its intelligent supply chain solutions
ses imagotag	Made use of its smart electronic shelf labels and retail IoT solutions
PROVENRUN	Deployed its IoT security solutions for connected devices

salesforce	Implemented its ecommerce, sales, service, and marketing cloud for retail clients
woop	Leveraged its last-mile delivery platform for the delivery needs of retailers
BERKSHIRE GREY	Sourced its warehouse capabilities with AI-enabled robotic picking and mobility
kore.ai	Used its conversational AI and digital UX solutions

Value chain coverage

- Customer engagement
- Fulfillment
- In-store commerce
- Inventory management and warehouse operations
- Marketing
- Online commerce
- Sourcing and procurement

Darker color indicates higher value chain coverage: ●●●●

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Atos: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A global beverage company	• Cloud • Internet of Things (IoT)	• The client wanted to implement smart coolers for its bottles to reduce unauthorized placement of its products and generate insights on sales. • In partnership with Microsoft and Ebest, Atos implemented a managed end-to-end solution for connecting over one million coolers to a cloud-based IoT platform.	• Improved productivity and enabled predictive maintenance • Reduced costs in field service • Improved incremental transactions by increasing on shelf availability (OSA)
A specialty retailer	• Cloud	• The client needed to modernize its technology operations, digitize the supply chain, and mobilize sales to meet customer expectations. • Atos facilitated cloud migration for the client, introduced mobile-based selling capability, and managed their digital supply chain. Furthermore, it developed an iPad-based app for faster sales quote generation and an automated health-check tool to improve the functioning of production systems.	• Increased revenue by five percent • Improved time-to-market by 30%
A home improvement chain	• Analytics	• The client wanted to bring together siloed customer data sources into a single, integrated master to access comprehensive customer information. • Atos standardized customer records and migrated the data to Hadoop Distributed File System (HDFS) system for real-time processing. With easy, pluggable services, the client could view all customer information in one place and drive insights on buying behavior.	• Increased customer association with the brand by 95% • Reduced time to market for campaigns • Increased visibility in customer behavior • Created effective marketing campaigns with customer segmentation
A US musical retail chain	• Automation • Cloud	• The client wanted to integrate its legacy merchandising system with its e-commerce portal and add multichannel delivery capabilities. • Atos implemented an omnichannel operation by integrating products from DAX, ATG, POS, HighJump, and Siperian, developing multichannel delivery capabilities on its e-commerce portal. It also integrated its product catalog systems with ATG eCommerce for online product publishing.	• Increased revenue by 20% • Provided multichannel delivery capabilities • Reduced manual effort required for product publishing

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Atos: RadarView profile

Analyst insights

Practice maturity ★★★

- Atos has taken a platform-driven approach to address opportunities in retail with a sizeable retail practice supporting over 350 clients globally. It offers end-to-end services that enable enterprises to leverage digital technologies across their value chain.
- It has developed a strong portfolio of digital offerings such as Digital Commerce Platform, Autonomous Stores, Phygital, retail in-store digitalization, Omnichannel CX for Retail, and warehouse automation. It brings together all the offerings under an overarching modular Retail Digital Hub that delivers ecosystem management with a SaaS model. It also has extensive capabilities in edge computing and IoT to optimize supply chain efficiency and transparency, along with blockchain to track and trace the authenticity of products and payments.
- It differentiates itself with the expert domain knowledge in food and grocery retail and connected retail devices solutions to enhance the in-store experience and product availability. For instance, it leveraged its connected cooler solutions to connect more than 500,000 coolers for The Coca-Cola Hellenic Bottling Company using IoT across 28 countries, providing a huge amount of point-of-sale data.

Investments and innovation ★★★★

- Atos has been very active in acquisitions in the past three years. It acquired 19 firms across AI, cloud, analytics, and automation, enhancing its capabilities across industries, including retail such as Cloudreach, a public cloud MSP with over 1,000 certifications in AWS, GCP, and Azure.
- Atos has opened nine business technology and innovation centers spread across the globe. It has developed a dedicated Retail Transformation Lab in partnership with Worldline. The lab is a model of a shopping environment with concepts that can create customer-centric and unified in-store and online offerings for retailers. It demonstrates AR to get personalized offers based on customer profile and purchasing habits, dynamic shopping lists that change depending on location, and live promotions using electronic shelf labels.

Partner ecosystem ★★★★

- Atos has partnered with all leading hypers-scalers and technology providers to offer digital transformation solutions in retail. It has partnered with Microsoft, Google, AWS, Cloudera, Pivotal, SAP, Salesforce, and Pega to provide GTM solutions such as in-store digitalization, retail merchandising intelligence, pricing and promotion analytics, and digital supply chain solutions.
- To augment its service offerings, it has partnered with niche players such as Woop for its one-stop-shop last-mile delivery platform, Kore.ai for its intelligent virtual assistant for personalized conversations, Hardis Group for its intelligent supply chain offerings, and Berkshire Grey for its automation solutions.

Organization Demographics: Insurance

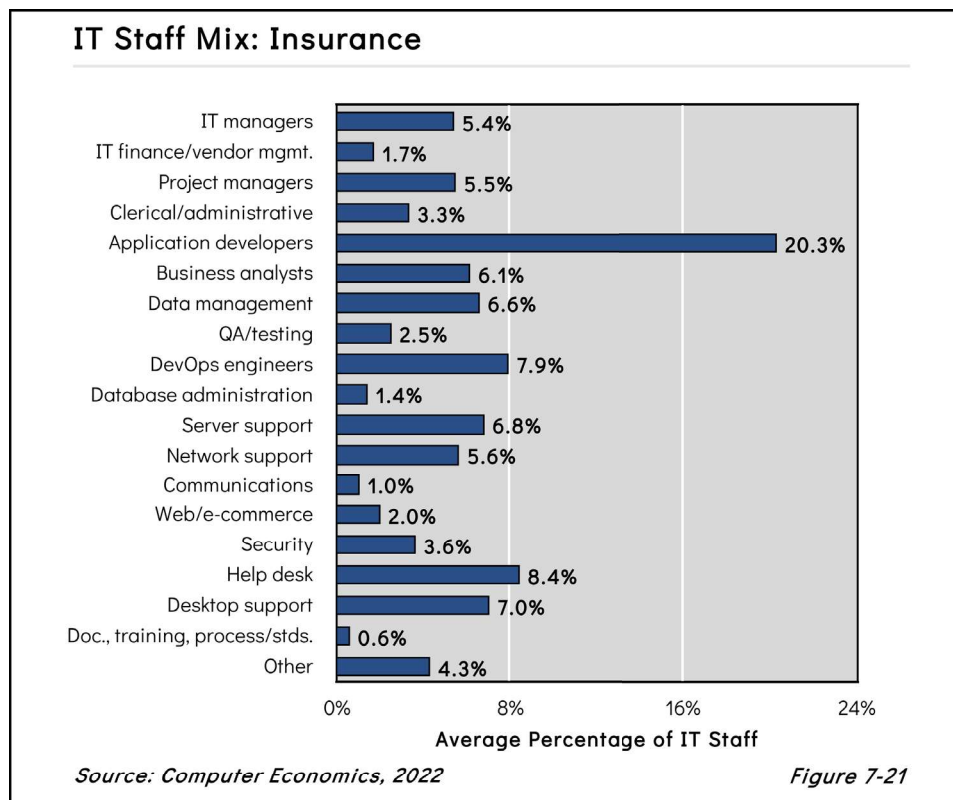| Metric	25th Percentile	Median	75th Percentile
Organization revenue	€185,160,000	€744,642,000	€2,301,000,000
Number of employees	400	1,112	2,737
Revenue per employee	€397,728	€520,914	€983,126
Revenue per user	€341,201	€465,956	€752,156

Figure 7-1

IT Staffing Mix

One of the most important benchmarks in our annual study is the relative weighting of each job function in the IT staffing mix. For this analysis, we place the total IT staff into 18 categories based on job function. A definition for each category can be found in the Appendix. The head count includes contingency workers. We also adjust head count based on respondents' estimates of how many positions they would need if they brought all outsourced work back in-house. We calculate the head count in each job function as an average percentage of the total IT staff.

For insurers, application developers make up the largest share of the IT staff at 20.3%, as Figure 7-21 shows.

IT Staff Mix: Insurance

Category	Average Percentage of IT Staff
IT managers	5.4%
IT finance/vendor mgmt.	1.7%
Project managers	5.5%
Clerical/administrative	3.3%
Application developers	20.3%
Business analysts	6.1%
Data management	6.6%
QA/testing	2.5%
DevOps engineers	7.9%
Database administration	1.4%
Server support	6.8%
Network support	5.6%
Communications	1.0%
Web/e-commerce	2.0%
Security	3.6%
Help desk	8.4%
Desktop support	7.0%
Doc., training, process/stds.	0.6%
Other	4.3%

Source: Computer Economics, 2022   *Figure 7-21*

Definition and scope of banking process transformation

Key definitions

Banking process transformation:

This refers to the management of frontend and backend banking processes for retail and commercial entities, neobanks, fintechs, and financial service providers such as card issuers, mortgage servicers, and lending companies.

It includes process standardization, cost optimization, compliance and reporting, customer experience, and digital transformation.

To qualify for the assessment, a service provider must:

- Offer at least three out of five services among core banking, loans and mortgages, payments and cards, private banking, and risk and compliance services.
- Have clientele from at least two geographies among North America, Europe (including the UK), Asia-Pacific, Latin America, and the Middle East and Africa.

Scope of banking process transformation

Core banking
- Customer management
- Account servicing
- Cash and ATM management

Loans and mortgages
- Commercial lending and mortgages
- Asset financing
- Consumer loans and mortgages

Payments and cards
- Domestic and international payments
- Cards services
- Merchant and point of sale (POS) services

Private banking
- Integrated banking
- Advisory services
- Portfolio management
- Pension and life schemes

Risk and compliance
- Know your customer (KYC) and anti-money laundering (AML)
- Risk assessment
- Regulatory reporting
- Data privacy

Key transformation levers

- Digital banking and payments platforms
- AI, RPA, and analytics
- Blockchain
- Compliance and cybersecurity services

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To pivot toward digitally enabled operations, banks are outsourcing their core and noncore processes

Banks are outsourcing due to a lack of in-house operational support and the right skills, which hinder them from meeting their digital transformation needs.

Key processes and functions that face high digitalization

1
- Core banking processes such as customer onboarding, relationship management, and account maintenance are being digitalized.
- Customers expect a seamless onboarding and transaction experience from the banks.

2
- With digital channels coming into play, banks are taking service providers' help in risk assessment and managing AML and KYC processes.
- In 2022, risk and compliance services accounted for nearly a 2% increase in the banking process transformation revenue of service providers.

3
- With customers leveraging digital channels to access banking services, cybercrimes have sharply increased over the past several years, enhancing banks' focus on cybersecurity.
- Banks are taking external help for the timely detection of fraud attacks to reduce losses.

Illustrative examples of service providers helping banks

Financial company	Service provider	Illustrative case study
Santander	genpact	Transitioned core banking processes and enhanced key processes such as customer onboarding by leveraging RPA and AI. It improved corporate account closure speed by over 30%.
A global bank	wipro	Enhanced due diligence by automating the KYC process. It provided productivity gains of 35% due to improvement in turnaround time and error reduction.
A digital bank in the US	Cognizant	Identified potential frauds in deposit operations by monitoring fraud alerts in real time and finding fraudulent logins. This helped the client avoid a loss of $4M.

Sources: Avasant Banking Process Transformation RadarView Survey January–March 2023, Avasant Research

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