



Digital Maturity of China Retail Industry

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Making another century of impact
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I. Digital maturity of China retail industry

Preface: The significance of digital maturity survey

Driven by technology and consumption upgrade, digital transformation has become a consensus for Chinese retailers. Many retailers already established their own end-to-end digital systems covering business development, customer, stores, marketing, procurement, supply chain and service in the past, but their efforts are far from desired. Leading retailers have not only achieved synergy among their internal systems, but also start to build digital cooperation platforms connecting upstream/downstream links and partners, and are able to provide consumers with distinctive digital commodities and services. It is imperative for Chinese retailers that are struggling to move forward amid the waves of digital transformation to understand the competitive situation they are in and the direction they need to focus on. In view of such, Deloitte Consulting works with China Chain Store & Franchise Association (CCFA) to conduct this digital maturity survey, with an aim to evaluate digital maturity of Chinese retail enterprises using Deloitte's digital maturity model and forecast future development objectives, serving to provide references for the digital transformation of retailers.

Preface: About Deloitte's digital maturity model

The digital maturity model assesses digital development status and objectives of enterprises from three aspects (the degree of digitalization, the management of digital transformation, and the capability to drive digital transformation) comprising a total of ten indicators. Enterprises are assessed and marked with scores from 1 to 5 for each indicator, with 1 stands for introduction stage, 2 for beginning stage, 3 for execution stage, 4 for optimization stage, and 5 for intelligence phase.

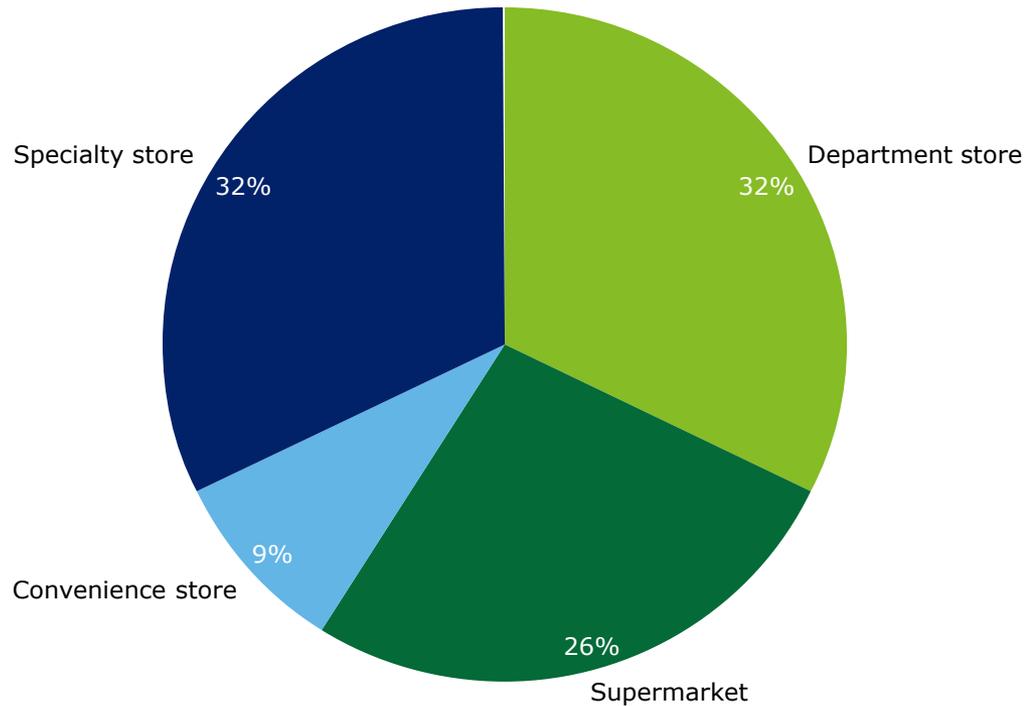
- Degree of digitalization: assess degree of digitalization in terms of end-to-end business/management process, staff and systems;
- Management of digital transformation: capability to maximize advance and sustainability of digital transformation;
- Ability to drive digital transformation: underlying capability and external resource environment to advance transformation

Preface: About Deloitte’s digital maturity model

	Competence indicator	Objective
Degree of digitalization	Digitalization of core process	Use digital technology to transform and upgrade business development, customer, store, display, price, marketing, commodity, procurement, service and back-office finance, HR and risk and other processes to achieve information integration and enhance operation efficiency
	Digital and well-targeted customer experience	Based on the single view of cross-touchpoint individual customer behaviors and demand, integrate advantages of all touchpoints in omni-channel, proactively identify single customer demand by socialized and Internet of things (IoT) driven means in customer end-to-end experience links of marketing, experiencing, shopping, evaluation, etc., and design, create and convey consistent experience on enterprise brand, products, services, etc.
	Omni-channel touchpoints and contents	Create, ally, integrate and optimize customer omni-channel touchpoints based on life scenes, including websites, machines, BYOD, mobile terminals, digital stores, digital products & services, alliance services, etc., and develop, authorize, and manage from in-house digital content assets of touchpoints like entity, mobility, video, product and service from the perspective of content lifecycle management
	Digital commodities and services	Based on digital management of commodities and services, equip existing commodities and services with digital features and collaborate to develop innovative digital products and services to form sustained connection with customers in each link of omni-channel touchpoints. Conduct display, real-time analysis and continuous real-time improvement & optimization on commodity selection, putaway and structure optimization with digital technology
	Digital supply chain	Build digital supply chain network based on digital platforms; with the help of digital technology, record and analyze end-to-end data information from commodity procurement to delivery, continuously optimize joint design, new product testing, inventory optimization, logistics transparency and quality tracing, improve internal and external warehouse and logistics network, optimize and innovate supply structure and ecological relations to ensure rapid and effective supply
Management of digital transformation	Digital transformation strategy	Explore the impact of business-technology integration on business model innovation; identify digital technology’s push for the innovation of business model and operation model; define objective, input, plan, organization, change management and performance indicators; keep business model iteration in pace with digital technology evolution; carry out cycle monitoring by means of planning in advance and iteration so as to form scale ultimately
	Leadership and change management	Identify and explore digital transformation drivers across different levels/departments within the company; form unified digital leadership at company level to organize and promote ongoing and future internal transformation
Ability to drive digital transformation	Digital platform operation	Use digital technologies like IoT to collect and integrate internal and external data from aspects of touchpoints and interaction activities; carry out various analysis with tools of digging and labelling to support and continuously optimize digital processes such as interaction, experience, commodity and supply; make deployment via emerging technology lines such as cloud and take reasonable information security measures
	Cultivation of employee’s digital gene	Establish a data-driven organization that is self-adaptive to changes and capable of fast interaction to cultivate iterative learning ability; establish a ecosystem of internal and external personnel abilities and skills for quick positioning and acquisition of necessary skills and knowledge for transformation based on demands by different means
	Ecosystem building	Build innovation ecosystem for internal employees and establish complete and appropriate ecological relations of external capital, technologies and skills to support business model innovation and operation improvement; have external multilateral partnerships which would improve joint development of business and shared benefits; drive for continuous innovation from insights and feedbacks on the eco-environment

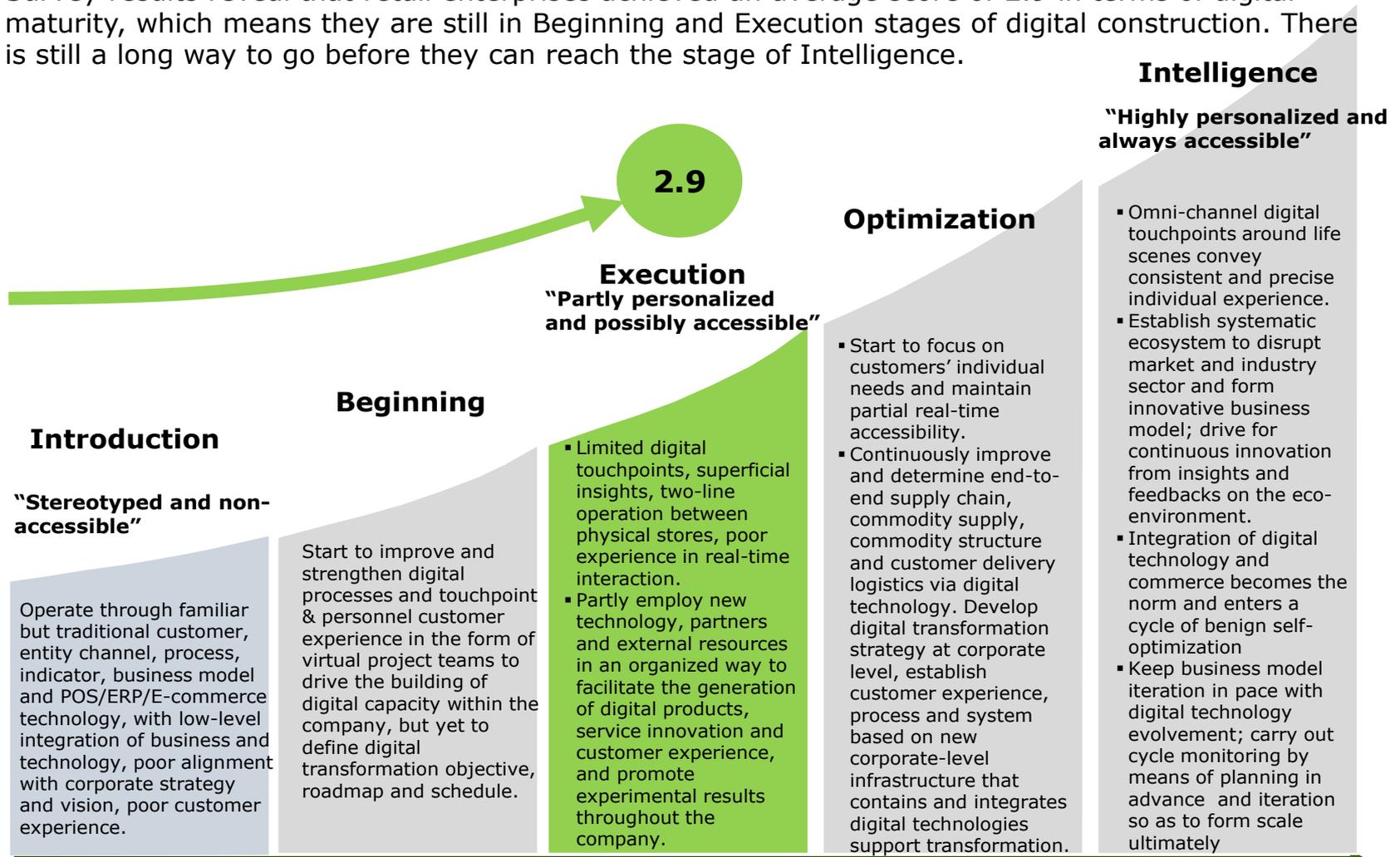
Preface: About survey samples

- Samples of this digital maturity survey include 34 CCFA retail enterprises in China, covering four different retail store types — supermarket, department store, convenience store and specialty store.



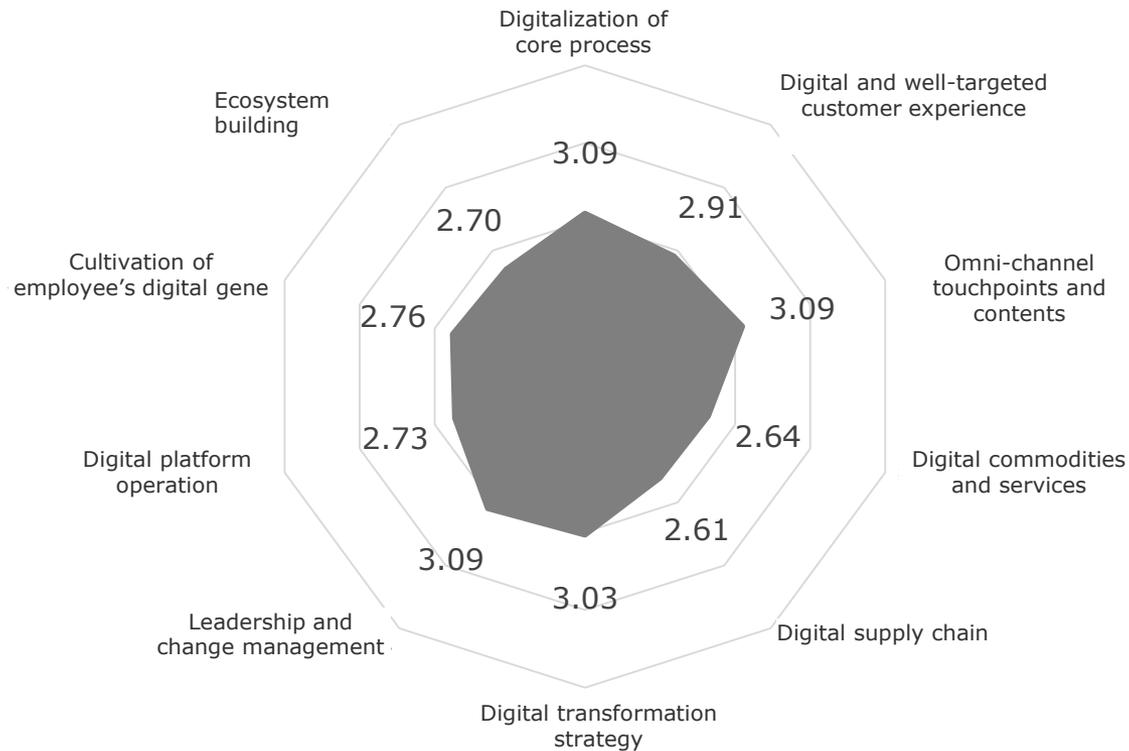
1. Overall level of digital maturity of Chinese retail enterprises

- Survey results reveal that retail enterprises achieved an average score of 2.9 in terms of digital maturity, which means they are still in Beginning and Execution stages of digital construction. There is still a long way to go before they can reach the stage of Intelligence.



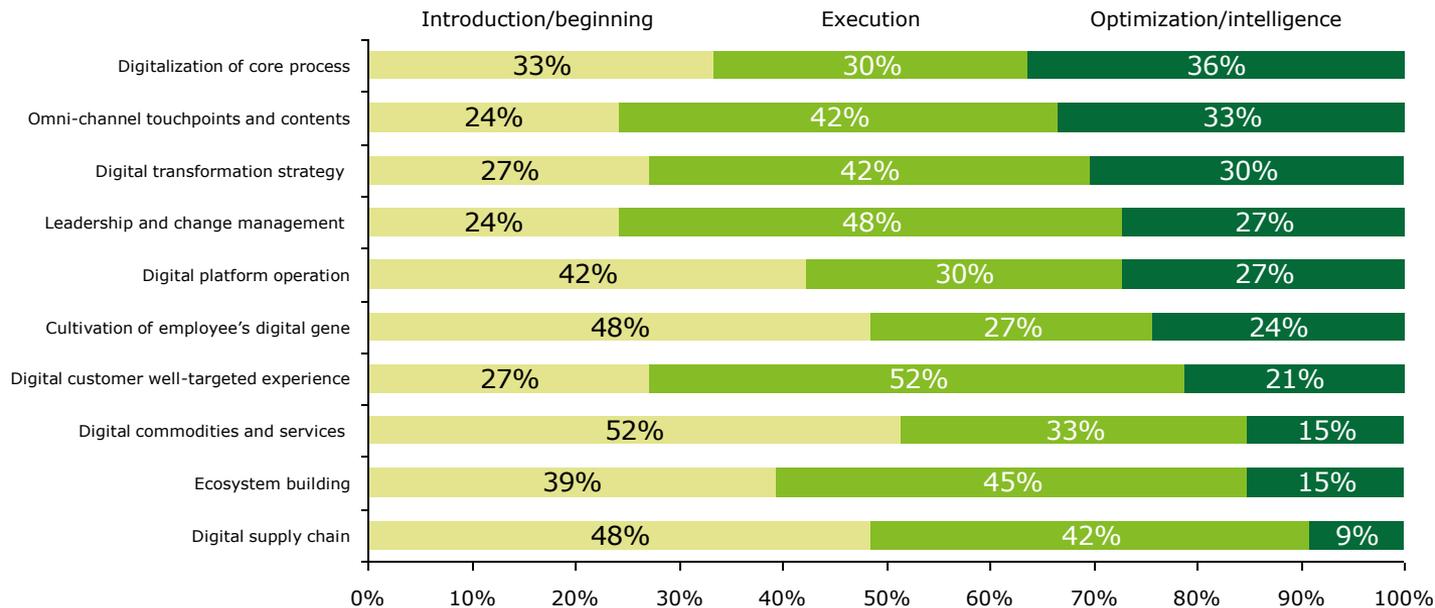
1. Overall digital maturity of retail enterprises in China

- Retail enterprises in China perform quite evenly on average in the ten competence indicators, with an average of two to three scores each.



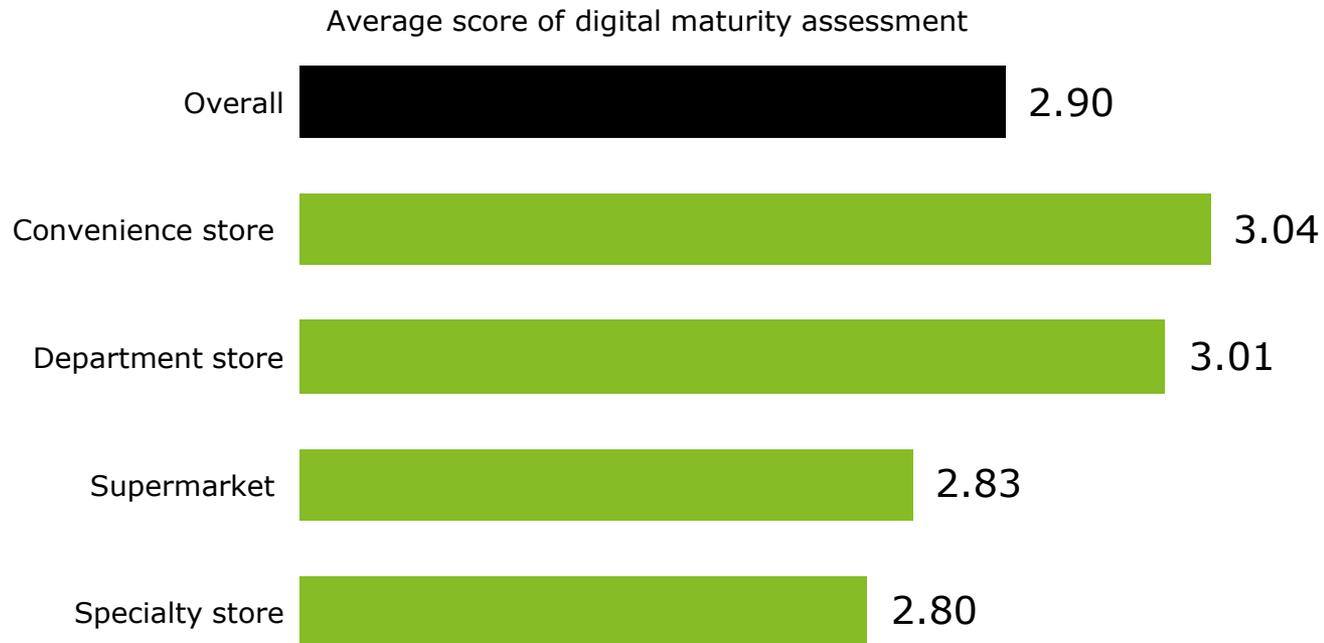
1. Overall digital maturity of retail enterprises in China

- However, performance varies among different enterprises:
 - In terms of digitalization of core process and omni-channel touchpoints, 36% and 33% of enterprises reach the optimization/intelligence stage respectively, higher than those of other indicators. It implies that Chinese retailers mainly focus on construction of internal front-/middle-/back-end IT system and improvement of online/offline sales capability in digital transformation.
 - While in terms of digital supply chain construction, ecosystem building, identifiable and traceable digital commodities and services, as well as other aspects requiring more collaboration with external parties, most enterprises are still at the beginning stage. Among which, the construction of digital supply chain falls far behind compared with that of other capabilities, with only 9% of enterprises reaching the optimization/intelligence stage.
 - In addition, incompetency of personnel also stands out, with 48% of enterprises in the introduction stage of cultivation of employee's digital gene. There have been inadequate investment and attention put in place by enterprises in this regard, without effective digital talent development systems.

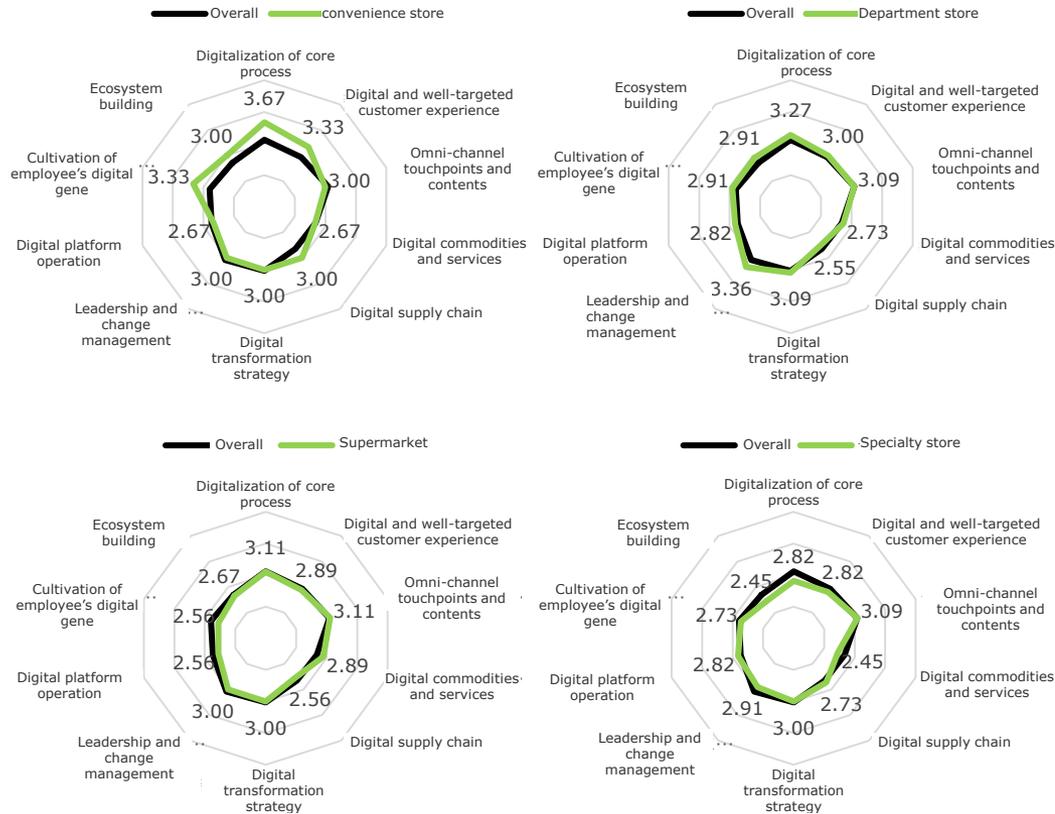


2. Digital maturity of different retail store types

- Different retail store types does not differ much in terms of digital maturity, with convenience store ranking relatively higher and specialty store ranking comparatively lower.



2. Digital maturity of different store types



• The disparity of each store type in different competence indicators is mainly reflected as follows:

- **Convenience store:** basically all of its digital capabilities exceed average levels, among which, cultivation of employee's digital gene and digitalization of core process are 19% higher than the average level.
- **Department store:** its scores in overall are close to average levels, among which, its leadership and change management achieves the highest score.
- **Supermarket:** its scores in digital commodities and services and omni-channel touchpoints and contents are higher than those of other retail store types, which results from its enhanced management on commodity, active trail in online business, and connecting online and offline channels, etc., and its weakness lies on the digital capacity of its personnel.
- **Specialty store:** all its scores are lower than those of other retail store types, falling far behind even in the basic competence indicator—digitalization of core process.

3. Execution of digital transformation by retail enterprises in China

Execution of digital transformation by retail enterprises is mainly reflected in the following five works of end-to-end business and management process and the building of personnel digital capability and system.

Digitalization of core process

- Chinese retail enterprises achieve the highest maturity level in digitalization of core process, which is evidenced by that they have built their own end-to-end digital system covering exhibition industry, customer, store, display, price, marketing, commodity, procurement, supply chain and service.
 - One clothing chain store: "We have integrated business flow, logistics and finance. Considering we have more than 8,000 of self-owned stores and ten brands, there is much retail data which results in the slow running of the system. Thus, we specially optimized SAP system last year mainly to solve the problem."
 - One clothing chain store: "We have an APP called Super Shopping Guide which is used by shopping guides to learn related knowledge and information sent from the headquarter; we also provide micro-report for store managers to conduct daily operation management, get access to analysis of store performance data and learn about so-called hot products."
 - One chain supermarket: "Our system will automatically assign information on price and procurement, etc. to stores, then send them to suppliers and distribution centers and make updates in the headquarter inventory."

Digital and well-targeted customer experience

- It refers to obtaining customer information by digital means and conducting deep insight into customers, based on which proactively connect customers in each touchpoints to improve their experience. Faced with increasingly changing customer demand and fierce competition, retailers have launched loyalty program and established CRM system, aiming to improve customer stickiness via insights into customers and precision marketing.
 - One clothing chain store: "We deployed CRM system in the cloud in the second half of past year, now we have millions of members. Meanwhile, we are improving fitting rooms by installing a touch screen with lots of touchpoints. The screen will sense the clothes which customers bring into the room, then it will display how the clothes look on a model and how to match other clothes. Customers can touch the screen to get more information."
 - One chain supermarket: "We start to build CRM system not long ago, now attract more than 400 million members. The system could analyze members' shopping habits to send them specific commodity coupons, which could lead sales promotion; it can also analyze and push coupons via WeChat. Besides, we have allied with banks, Mobile and Wanda so that their member points can be used for shopping in our supermarket."
 - One chain convenience store: "Omni-channel membership program is a hard question for us. We are working on building loyal customer base for brand/single store and attracting more customers. Now, we have built a digital membership program, with which, we could carry out precision marketing for specific customer groups."

3. Digital transformation practice of Chinese retail enterprises

Digital transformation practice of Chinese retail enterprises mainly shows in the following five works of end-to-end business and management process and digital capacity building of personnel and system.

Omni-channel touchpoints and contents

- The facts that traditional offline retail enterprises conduct online retail and e-commerce enterprises set up offline physical stores indicate that retail enterprises are trying to deploy touchpoints based on living scenes, integrating and optimizing existing online and offline advantageous touchpoints and innovating digital touchpoints of products, so as to connect omni-channel touchpoints.
 - One chain supermarket: "We have opened an online shopping mall for both PC users and mobile users and we are building WeChat mall which serves as supplementary channel instead of an independent unit. Besides, we also have imported goods mall where customer can make purchase on the spot or scan QR to make an order and choose home delivery."

Digital commodities and services

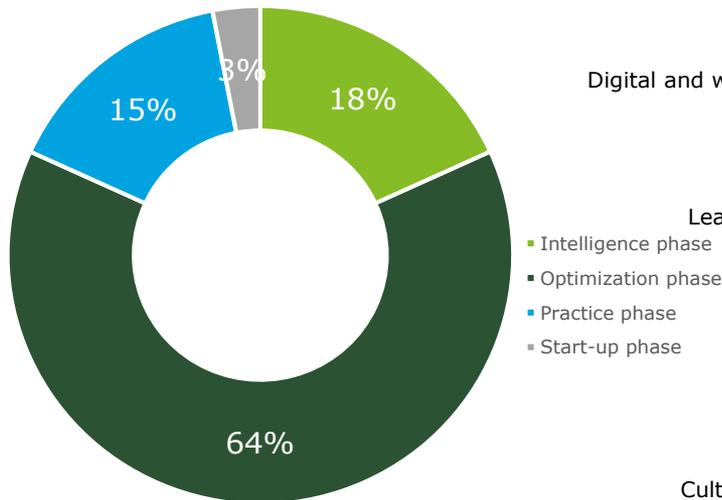
- It refers to managing current commodities and services via digital technologies, empowering them with digital label, digital marketing and digital experience, facilitating deep integration between commodities and key operation links such as procurement, sales, and external cooperation, etc. Though retailers somehow fall behind in this regard, some of them are already racing ahead. "
 - One clothing china store: "We began to implement end-to-end RFID system covering from plant to store last year. We sew a chip on every clothes to track it and collect and analyze related data in the whole course."

Digital supply chain

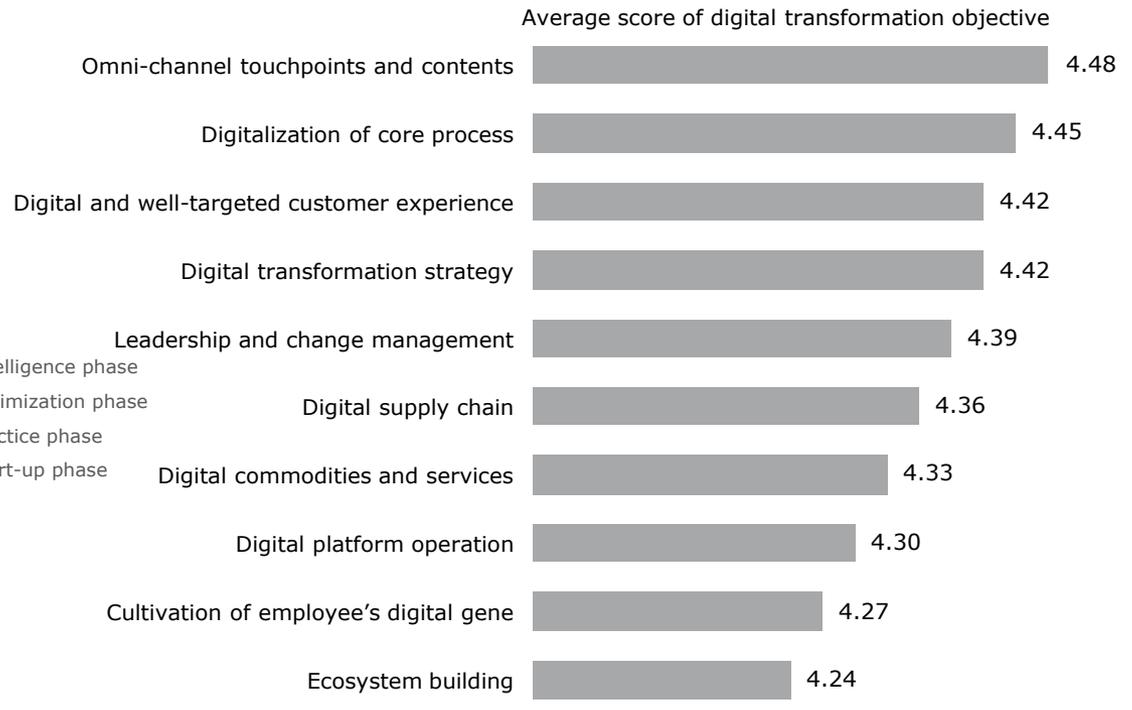
- Digital supply chain aims to build, keep and deepen connection and flexibility of end-to-end information in network, and facilitate deep engagement of customers and eco-partners to keep supply chain "always online". Chinese retailers relatively fall behind in this regard, but some of them are already racing ahead.
 - One clothing chain store: "Thanks to our RFID system, our inventory checking efficiency has improved a lot. With the handheld PAD, our employees could collect inventory information within 20 minutes when they walk around the store instead of opening the packing to check inventory manually."
 - One chain supermarket: "Our delivery can be scheduled to a specific hour; we can show our complete sales data and inventory data to suppliers and we have built seamless connection with P&G in terms of information flow; we are also responsible for the construction of comprehensive service platform of cold chain in Weihai City, the platform is capable of intelligent information push and matching vehicle to goods, goods to vehicle, goods to warehouse, warehouse to goods, like the model of Didi Taxi."

4. Digital construction objective of Chinese retail enterprises

- Retailers all have high expectations of their own digital construction objective, among which, 18% of retailers hope to reach "Intelligence phase", and 64% of them hope to reach "Optimization phase". Considering the "Start-up and practice phase" they are currently in, there is much room for improvement.



- Retailers' scores on digital construction goal reflect their development directions and focuses. The survey result shows that omni-channel touchpoints and digitalization of core process will be the top priority with average scores of 4.48 and 4.45 respectively. And 44% of retailers think the two indicators should be scored at 5.



5. Digitalization reconstructing Chinese retailers' business model

All retail innovators understand that technology and digitalization are no longer assistive tools for future retail but basic elements. Customers' engagement is driving retailers to design novel and convenience experience by proper digital means to improve customer loyalty. Some unreachable things in the past have become the competition leverage of today.

According to the survey, we learn that retailers have already knew about the significance of digitalization and have been eager to keep up with the digital transformation, however, they fail to develop strategic thinking and systematic transformation path planning. Meanwhile, although they possess much sales data, they are not aware of how to use these data to form insights to assist the construction of each digital competence.

Deloitte thinks current consumers have changed greatly, not only that, scientific progress and consumption upgrade have become two major forces driving the transformation of retail industry. Retailers should seize the opportunity of digital transformation and focus on growing fields created by new consumption habits and new business environment, upgrading from "sales platform" to "experience spreading". Retailers who can use data analysis flexibly to decision making and customer insight, who can deeply control upstream and downstream resources via digital supply chain platform, and who can connect online-to-offline omni-channel digitally will have more chances to win.

II. Digital development trends of different retail store types

1. Digital analysis of supermarket

Since the second half of 2016, the sales of large retail enterprises take a turn for the better with structural recovery in store retail, traditional retail enterprises (e.g. supermarket) take measures of model innovation, developing fresh food and driving digital transformation and others to keep competitive.

1

Fresh food is the priority

Fresh food could attract more customers, moreover, 60% of customers say they make additional purchase when buying fresh food. Besides, customers are more likely to buy fresh food in offline physical stores, which would help convenience stores to form differentiated competitive advantage.

2

Drive digital transformation and assist performance improvement

Traditional supermarkets should make full use of digitalization to transform towards digital commodities and services, digital supply chain and omni-channel touchpoints and contents.

3

Traditional supermarkets turn to new retail

New type of retail represented by Hema Fresh quickly opened up in 2016, meanwhile, traditional offline supermarkets also join in the development and research of new retail type, such as the Fresh Ideas of Better Life, RISO of Bailian, Jingxuan of Century Mart, Super Species of Yonghui Superstore. With Internet-enabled operation principle, online-to-offline omni-channel layout, cross-boarder integration of retail and catering, supply chain integration, such new retail type has become another development direction for supermarket operators.



A northern supermarket famous for fresh food operation



- ✓ In terms of digital commodities and services, realize “digital space management” for commodities, unified product display in stores, and unified and vivid product images;
- ✓ In terms of digital supply chain, achieve digital transparency from procurement to logistics distribution and keep supplier information tracking clearly visible; establish the comprehensive platform of cold chain in Weihai City, which is capable of intelligent information push and matching vehicle to goods, goods to vehicle, goods to warehouse, warehouse to goods, like the model of Didi Taxi; in terms of omni-channel touchpoints and contents, set up mobile APP mall, WeChat mall and shopping websites.

2. Digital analysis of department store and shopping center

In recent years, department stores face more and more difficulties, however, shopping centers continue to grow due to the irreplaceable experience they offer to customers.

1

Supply chain reintegration

The growth of online channels forces department stores to integrate supply chain, strengthen cooperation with upstream suppliers to improve cost control, and set buyer purchase store to target at segmented customers.

2

Customer experience re-update

Customer resources are important treasures for traditional department stores. If department stores manage the resources well and incorporate them into brand, department stores are sure to make more sales.



3

Due to rental nature of shopping center, its digitalization would be more applied to monitoring analysis and operation of merchants and each link of customer full lifecycle experience

Shopping center is a set of multiple business formats (catering, cinema, entertainment, education, department store, supermarket, etc.), it is also the place where more future experiential scenes will take place. When the cost for last mile decrease and customers change from "store delivery" to "home delivery", shopping centers will undertake more "customer + products + venue" scenes.



One famous international commercial real estate company

- ✓ Establish a digital war room to find merchants' problems in a timely manner by all-around sensing and insight into their operations, provide support to their operations including business performance, customer complaints, lease and public opinion, etc. so as to make timely adjustments to rent, resources, merchants, brand, business formants and even strategies.



One Hong Kong commercial real estate company

- ✓ Establish customer-centered full life-cycle experience to catch customer demand via multiple online touchpoints, assist merchants to reach precise service and provide convenience, all-around and premium customer experience. Functions include a closed-loop of intelligent parking, WIFI connectivity, face identification, shop positioning, dinging & shopping, and car pickup.

3. Digital analysis of convenience stores

The sales growth of convenience store industry maintained above 9% in the past seven years, among which, digitalization makes an all-around impact.

1

Omni-channel touchpoints & digital commodities:

In China's unique digital environment, customers have higher dependencies and requests on digital experience. To better reach and serve customers, convenience stores should move toward digitalized channel, commodity and service and seek for their mutual integration in digital transformation.



2

Digital supply chain:

For convenience stores, one of the cores is supply chain management, which not only concerns what kind of products they can provide to meet customers' specific needs but also makes an impact on core processes of daily operation, such as the establishment of distribution network and store management.



One famous chain convenience store

Centering on customers, it builds a unique OandO closed loop, that is online-to-offline closed loop and big data marketing closed loop.

- ✓ Online-to-offline closed loop, consisting of offline convenience stores and online membership supermarket, enables seamless connection with customers by means of omni-channel. In the loop, offline convenience stores would satisfy the temporary consumption of each individual, and online membership supermarket would cover the planned consumption of whole family.
- ✓ In the process of obtaining and processing consumer data, it launches Customer Loyalty Management (CRM), Fans Club (Fans) and Customer Life Value (CLV), which would record and mark consumer behavior to form a loop of data streaming, which provides the basis for big data-based precision marketing.



One famous foreign convenience store

Instead of building its own logistics center, it cooperates with existing wholesalers to distribute different types of products for multiple times with a small-scale. With the joint distribution (using one vehicle to distribute products of several manufacturers), the distribution times via vehicles reduces from about 70 to 9.

4. Digital analysis of shoes and clothing industry

Consumption evolving to be personalized, experience-oriented and digitalized provides opportunities and growth impetus for the transformation and upgrading of shoes and clothing industry on the one hand, but makes the transformation of traditional production mode more urgent and hard on the other hand.

1

From the perspective of consumers, with increasingly mature consumption concept, consumers pay more attention to cost performance, personalization, experience and consumption convenience.

2

From the perspective of market, shoes and clothing industry has developed into being buyer-dominated.

3

From the perspective of channel, single offline channel (physical store) or single online channel (e-commerce) fails to meet consumer demands so that omni-channel has become a new trend.

4

From the perspective of operation model, all enterprises start to invest in online platforms and conduct digital store transformation to build seamless experience platform for customers.



Brand A—RFID's application in whole supply chain



Brand A introduced RFID care label in its 2017 spring products. RFID technology enables Brand A to fast collect information of each link including production, ex-warehouse, logistics distribution, warehousing and store management, resulting in a more quick response of supply chain and shortened supply chain cycle.

- ✓ Standardize the production process of garments factory
- ✓ Make use of RFID pad to check its packing, so as to reduce the probability of over-shipment, short-shipment and misloading;
- ✓ In logistics center, use a specific machine to read product information, which would enhance receiving efficiency, prevent against code obfuscation and short of goods, etc. ensure shipping accuracy as well as improve shipping efficiency greatly.

Brand B—shared design platform



Brand B started to build "fashion design innovation platform" ecosphere in 2016, which features full fashion industry chain eco-platform model.

- ✓ Provide support on industry chain, capital and education training to excellent designers at home and abroad;
- ✓ Integrate participants of industry chain such as buyers, materials & fabrics suppliers, garment producers and consumers; form closed-loop model of "self-owned designers team + designer cloud platform + online/offline retail/wholesale channel + supply chain management of fashion industry + incubation of star designer + designer college"

III. Digital solutions

Deloitte's three-dimension model for digital transformation of retail industry

China owns a unique digital environment where the continuous deepening of digitalization has made a profound impact on many aspects of retail industry. Statistics shows mobile network data consumption, third-party mobile payment and logistics have grown a lot in past years; the proportion of e-retailing in overall retail reaches the highest level globally. Taken together, 57% of retail sales in China's retail market has been affected by digitalization. In such a trend, retail enterprises' capability in digitalization becomes a significant factor in winning future success. Based on changes in retail industry and the unique digital environment of China, Deloitte has summarized three core dimensions necessary for the success in new market environment—digital omni-channel, digital supply chain network and retail analysis, which would realize the optimization and collaboration of value chain by strengthening consumer touchpoints, integrating and optimizing supply chain digitally and adopting systematic retail analysis method.

01 >



Digital omni-channel experience

Retailers should focus on customers and enhance the ability of each customer touchpoint continuously, so as to gain growth impetus under the fast-evolving omni-channel background.

02 >



Digital supply chain network

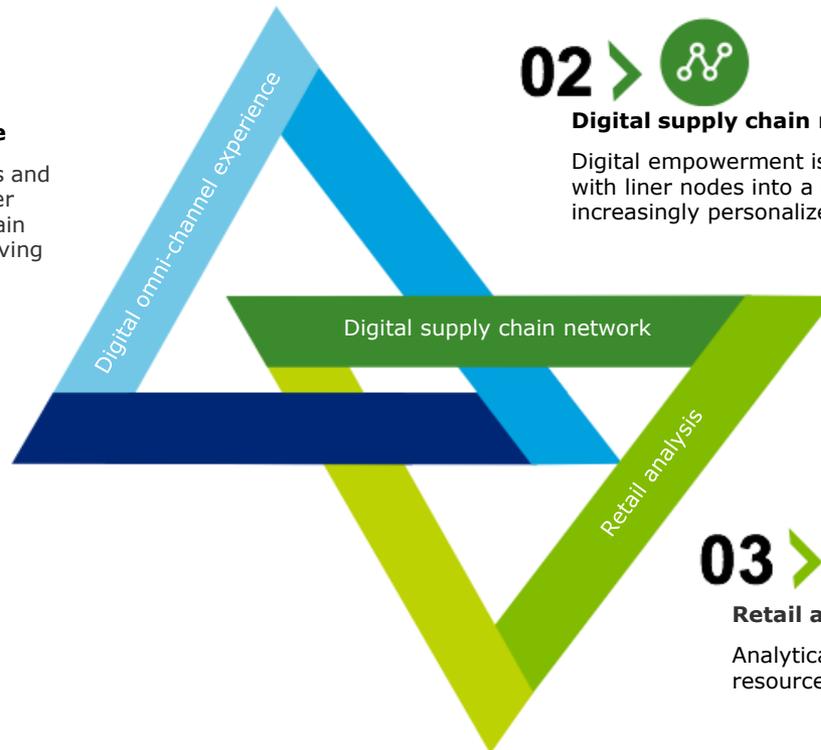
Digital empowerment is transforming traditional supply chain with liner nodes into a dynamic network to better respond to increasingly personalized demand.

03 >



Retail analysis

Analytical skills would breed better decisions and resource collaboration in retail value chain.



Description of three-dimension model

01 Digital omni-channel experience

Customers have become the center of new retail ecosystem, thus, retailers are required to build seamless and ceaseless connection with them and offer them optimal shopping experience via omniscient shopping scenes and interactive access, continuously improving capabilities in core retail issues.

02 Digital supply chain network

In the new ecosystem, scientific development will drive the transformation of whole supply chain system from traditional linear supply chain to a dynamic net-like supply system. Digital core would enable interconnectivity of each link within supply chain; seamless data connection and flow allows each link to make timely adjustment and feedback. Therefore, the whole supply chain system will have more explicit and clearer understanding of customer demand, based on which each link would operate more effectively, precisely and targetedly to better satisfy customer need while improving overall efficiency.

03 Retail analysis

The digital transformation in retail industry not only requires a combination of hardware, but also need mature theory and analysis method to optimize each link, so as to improve retailers' overall business performance and maximize customer value. Deloitte concludes a complete methodology based on previous customer service experience, making a deep analysis from main aspects like market insights, manufacturing and procurement distribution, sales and service. On the grounds of features and requests of different links, we further divide such aspects into multiple small focuses, such as store optimization, personalization and customer insight, etc. in order to improve retailers' business performance through targeted problem solving and optimization.

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