

PUSHING THE FINAL FRONTIER

CHINA RETAIL DIGITAL TRANSFORMATION WHITEPAPER



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EXECUTIVE SUMMARY

As the world continues to rapidly undergo digitalization, brands and retailers are pushing ahead with digital innovations to meet evolving consumer needs. The strides being made in the world of e-commerce are highly evident and indicate the opportunities that are being unlocked when digital capabilities do meet ever-changing consumer behaviors. There is however one “blind spot” in this world of digitalization. It exists in retail, and specifically in the traditional off-trade sector.

Traditional off-trade largely consists of independently run mom-and-pop stores that are still very much a dominant channel in developing countries, including China. The complexities that are built into this value chain – lots of individual retail storefronts, poor infrastructure, and served by a highly traditional multi-level distribution system that is hard to decipher – inherently make it incredibly difficult to digitalize.

Nevertheless, it is in this particular arena where there have been very interesting developments in China. Armed with one of the leading digital ecosystems in the world and a very digital-savvy population, China is well-positioned to be the first country in the world to provide digital solutions for traditional trade at scale.

These electronic Route-to-Market (eRTM) solutions in China are about to enter a Golden Decade and reach an estimated worth of RMB 1.1 trillion by 2028, where about 80% of the market will be covered by the leading players Alibaba LingShouTong (LST) and JD.com XinTongLu (XTL).

eRTM could very well become the “New Normal” for the traditional trade sector in China. Brands will cooperate with eRTM to improve their ability to serve distributors and retailers. Mom-and-pop stores will evolve into modern convenience stores that shoulder community responsibilities and serve community needs. Distributors will maintain their core function and transform into being partners offering eRTM solutions.

In this joint report from Oliver Wyman and AliResearch, we would like to share our views on the latest trends and developments in this area.

THE FINAL FRONTIER OF RETAIL DIGITALIZATION

The world of retail has been rapidly digitized

The world around us is rapidly digitizing – advancements in technology, including e-commerce solutions, cloud computing, and mobile payments, have changed how consumers behave, interact, shop, and share. In many ways, the retail sector has been at the forefront of this digital revolution – the traditional brick & mortar business model has been disrupted with the rise of e-commerce. As the notion

of offline versus online disappears and becomes more integrated, the ability to harness data and provide a better proposition to consumers is becoming increasingly invaluable.

Digitalization is a broad term – some may consider going from a paper-based medium to a digital medium for a single process as “going digital”. However, when taking the position of creating value differentiation to a business model, there are three core elements. (See Exhibit 1.)

Exhibit 1: The three I’s of digitalization



Information

Digitalization starts from digitizing the information flow as the first step. The key is to convert all available records of data, ranging from sales data to inventory data to consumer data into a digital format as the underlying foundation.

+



Integration

Digital data from various parties then needs to be integrated to form a closed data loop, which allows synchronicity across the entire value chain with a single view of the situation and so a clearer understanding of what actions need to be taken.

+



Intelligence

If an integrated digital information warehouse is the bedrock of digitalization, advanced analytics and big data (e.g. machine learning, AI) are the enablers that provide insight and inform better business decision-making to each of the actors along the value chain.

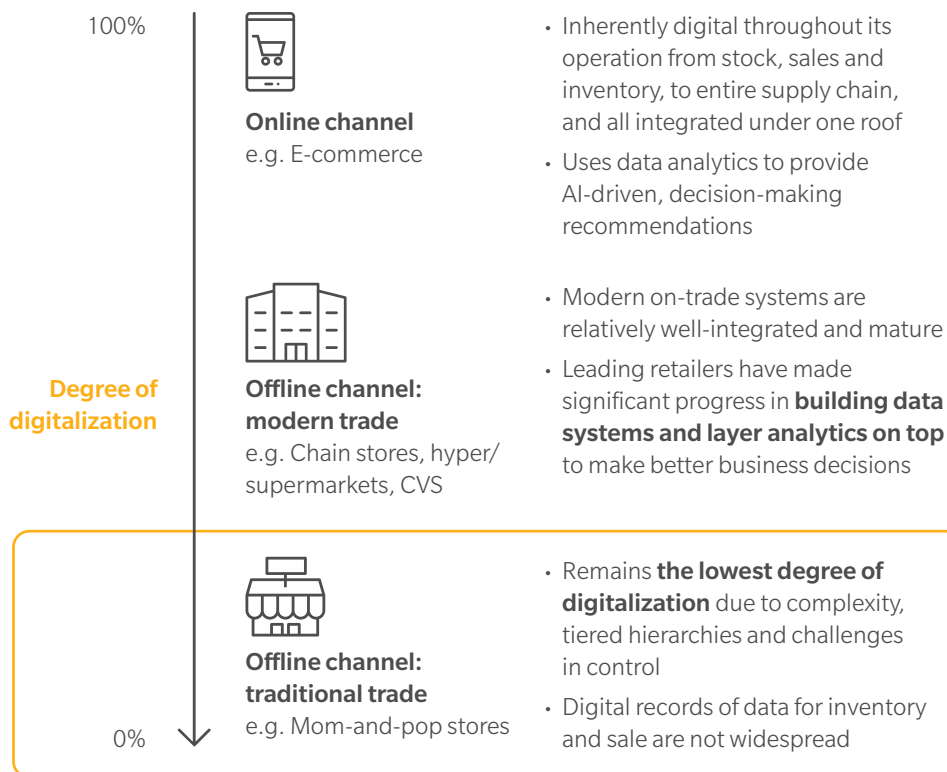
Source Oliver Wyman analysis

Traditional off-trade is the final frontier to be digitized

Digging beneath the surface, the pace at which digitalization has occurred in the retail sector has differed widely. Naturally, with online retail models the fundamental proposition is digitally based, and leading platforms have made massive strides in harnessing data, analyzing it, and making more intelligent decisions for their lines of business.

Going from the online channel to the offline channels, it is clear that the modern off-trade channel is progressing well on its digitalization journey. The channel's chain stores, hypermarkets and supermarkets, and convenience stores are supported by a mature and integrated value chain. Moreover, with the value chain exhibiting a willingness to invest in upgrading its digital capabilities in areas such as logistics, warehouse management and customer transaction analysis, there is a clear roadmap ahead.

Exhibit 2: The degrees of digitalization by channel



Source Oliver Wyman analysis

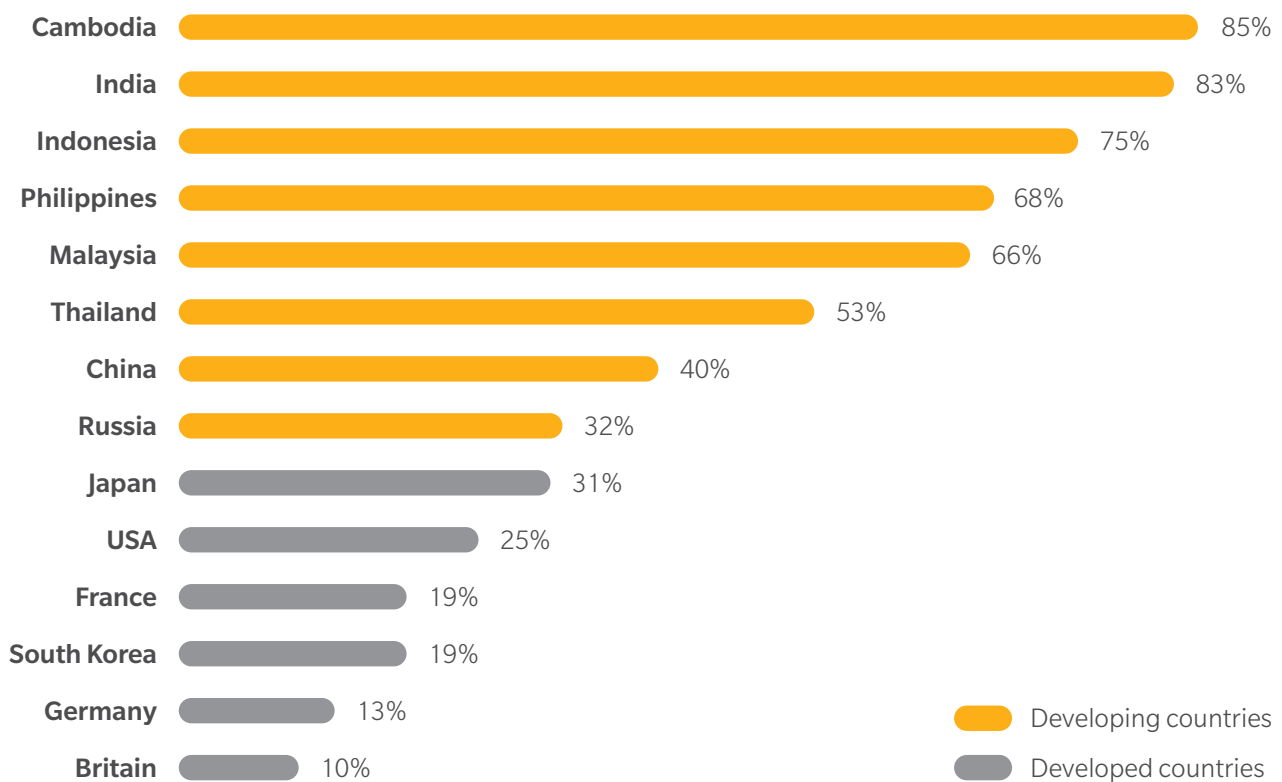
As a matter of fact, many of the top grocers in China have sought to accelerate their position on this curve through strategic partnerships with leading digital players over the past several years.

This leads us to the remaining traditional off-trade channel, which is still massively behind the digitalization curve. With many highly fragmented and independent mom-and-pop stores operating without POS in a primarily “cash based” business, and ordering

products from a vast multi-layered network of distributors, the existing complexities have made this arena the last frontier in the retail sector for digitalization.

However, it is often forgotten how important traditional trade channels are, especially in developing countries. In China, offline traditional trade still accounts for about 40% of the country’s total retail sales value, and in India it still accounts for over 80%.

Exhibit 3: Traditional trade’s share of total retail sales value, by country, 2018



Source Euromonitor, Oliver Wyman analysis

With the rise of the digital wave in China, China is now standing on the verge of a unique opportunity to break through in this sector. This is because it has all the right building blocks to drive this change and truly separate itself from other markets.

- **Everyone is a mobile-first consumer with a digital wallet:** The number of mobile Internet users in China has exceeded 800 million by the end 2018. Furthermore, users of a similar scale have adopted Tenpay (WeChat Pay and QQ wallet), while more than 700 million users have actively used Alipay in daily life. One can easily top the digital wallet up or withdraw money from it, and with simple clicks and QR-code scans on a smartphone, complete a transaction within seconds.¹
- **Strong digital ecosystems:** Almost every aspect of a consumer's daily life in China is linked to the digital platforms that have been incubated by the country's Internet giants, facilitating shopping, dining, transportation, entertainment, and socializing. Under such a unique scenario, brands and retailers are proactively establishing connection

and touch points with consumers and enhancing their capability to quickly scale up their business through digital initiatives.

- **Highly efficient logistics network:** Established by market leaders such as SF Express, JD and Cainiao, an extensive logistics network in China has been well-established over the past decade via the growth of e-commerce. The network effectively covers the entire country down to lower-tier cities and the countryside, at a world-leading delivery efficiency level.

As a matter of fact, many players in China have been actively experimenting on a range of digital solutions to modernize and digitalize the traditional trade channel over the past few years. Among which, we believe eRTM (electronic Route-To-Market) is the one that has shown the most promise in its ability to address all stakeholders in the value chain and create a truly integrated digital footprint across the whole chain to build a sustainable business model.

¹ CINIC (2019), The 44th China Statistical Report on Internet Development; Ipsos (2018), Third-party Payment User Study Report; Alibaba Group (2018), Financial Statement 2019Q2

THE GOLDEN DECADE OF eRTM IN CHINA

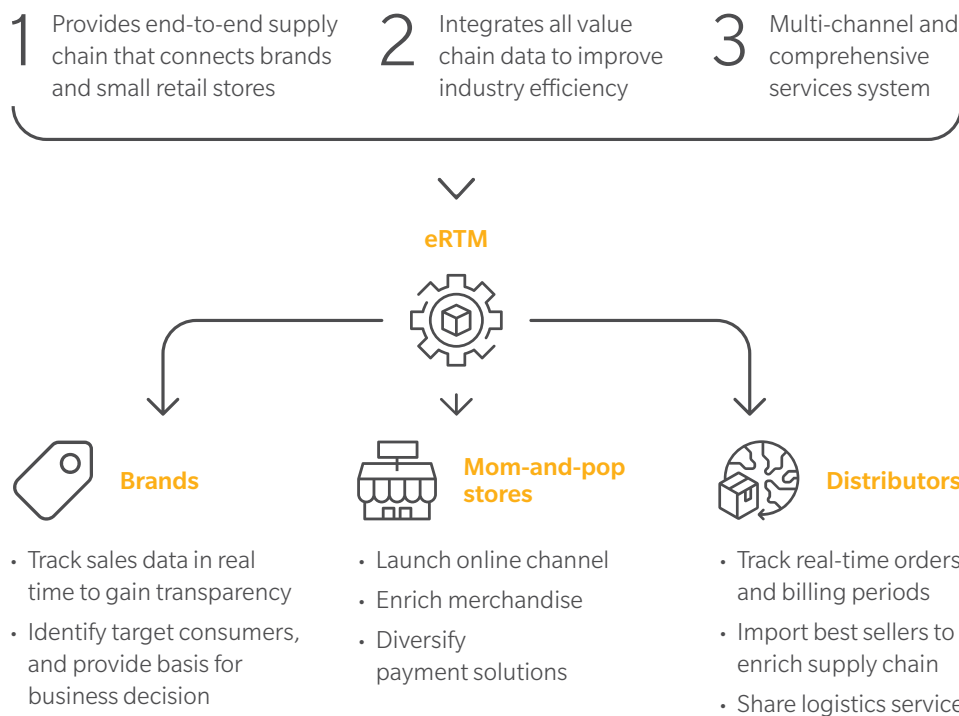
eRTM holds the key to digitizing traditional trade in China

The eRTM model operates by providing a digital platform that links up the three key parties in the value chain: brands, distributors, and owners of mom-and-pop stores. It aims to provide better flow and clarity to everyone by digitizing the relevant processes and information so that they are more readily accessible.

If required, the platform can also provide a warehousing and distribution network to enhance and complement the value chain, as well as store operation management to improve efficiency along the chain and further boost sales.

Such a scenario allows each stakeholder to make better decisions, allocate resources more effectively, and ultimately serve the customer better.

Exhibit 4: Illustration of the eRTM mechanism



Source Oliver Wyman analysis

- Brands:** Brands today have poor visibility of what happens after products are sold to their Tier-1 distributors. Through the multiple layers, each brand usually needs to rely on third-party databases and sample monitoring to ensure that their products are properly distributed and sold in an effective manner in terms of inventory and turnaround time. With eRTM, brands can monitor their products' real-time sales performance, even by SKU, down to both distributor and retailer level. The consistent and perpetual "black hole" within the traditional trade channel will no longer exist for brands. eRTM will allow them to make more effective business decisions, and be more agile and flexible for their supply chain and service.
- Distributors:** Distributors have played a critical role in ensuring that physical products flow through the system. However, the multi-layered distribution network system and its large fragmentation in terms of the number of distributors have caused a certain level of inefficiency and fogginess in terms of coverage. With the help of eRTM and its many tools, distributors can not only increase the transparency and efficiency of their daily operation, but also enhance their capabilities to serve their retailers.
- Retailers (mom-and-pop stores):** For the independent small stores that are the heart of the traditional trade sector, eRTM will become an important source of information to make better buying decisions and optimize the overall business. It will provide clarity with regard to pricing, as well as the availability of products by distributors that are serving in the region. eRTM will also help optimize product assortment as there will be a clearer understanding of the target consumers nearby, and improve store operation (e.g. digitalized payment methods, guidance about shelf management) to better satisfy China's increasingly digitalized consumers. eRTM may even bring additional revenue streams for mom-and-pop stores if they are able to integrate successfully with the online channels behind the eRTM ecosystem.

Exhibit 5: Painpoints and eRTM solutions by stakeholder

	Major pain points	eRTM solutions
Brand	<ul style="list-style-type: none"> Low sales efficiency with high trade expenses Low effectiveness in reaching target consumers Lack of transparency on the sales performance and operation of end-retailers 	<ul style="list-style-type: none"> Direct distribution to end-retailers Identify target consumers with integrated data, and provide basis for business decision Track sales data in real time to gain transparency down to store level by SKU
Distributor	<ul style="list-style-type: none"> Difficulty in increasing scale of supply chain Lack of transparency and tracking of inventory movement Inevitable channel conflicts and failure to breakthrough channel boundaries 	<ul style="list-style-type: none"> Sharing logistics service between alliance of distributors on the platform Track real-time orders and billing periods Import best sellers to enrich merchandise and manage pricing, provide value-added services
Retailer (mom-and-pop store)	<ul style="list-style-type: none"> Stagnant sales and gross margin High sell-in price due to limited bargaining power as small-sized business Poor store operation without guidance 	<ul style="list-style-type: none"> Launch online channel as additional source Minimize price by making more suppliers available and by optimizing assortment Improve store operation with guidance and support from distributors and the platform

Source Oliver Wyman analysis

eRTM will enter its “Golden Decade” in China, led by two leading players

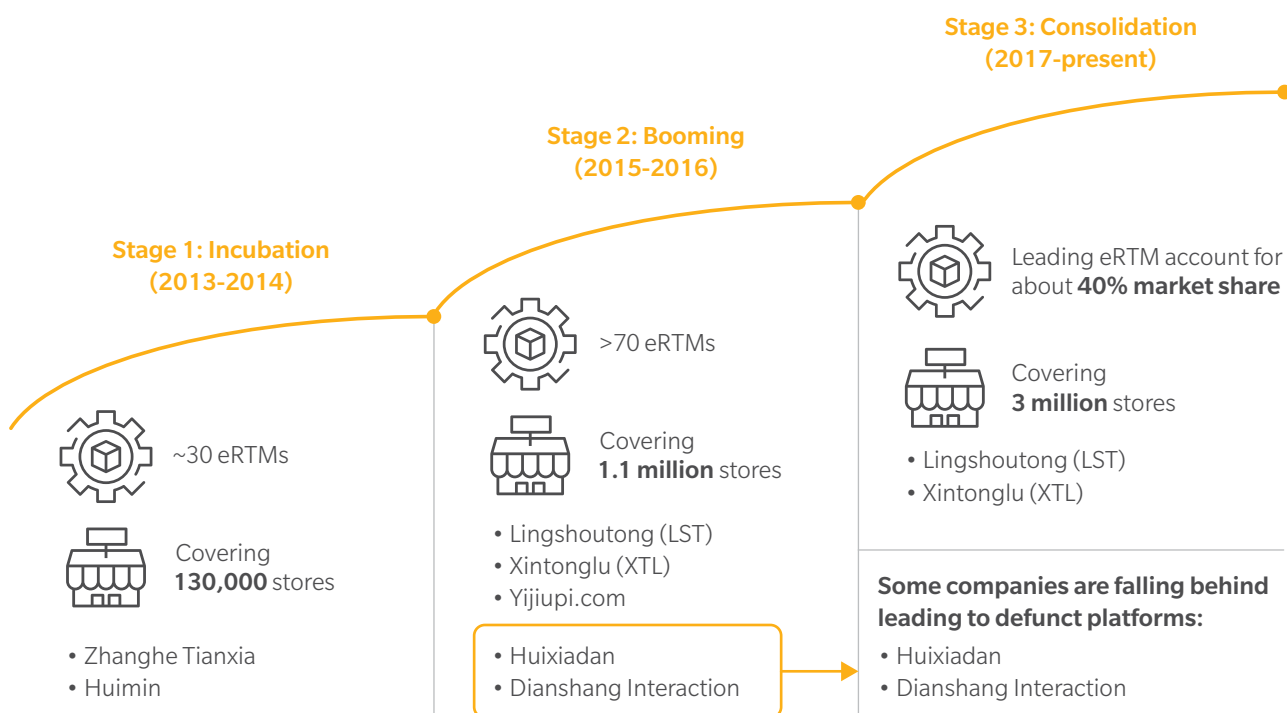
Despite being a relatively young business model, eRTM has already undergone several stages of development since its genesis in 2013. (See Exhibit 6.)

- Stage 1 – Incubation (2013-2014):**
 The first generation of eRTM was launched to ride the wave upon which C2C and B2C e-commerce opportunities were quickly emerging. The market was sub-scale with about 30 platforms covering 130,000 mom-and-pop stores. Notable examples include Huimin and Zhanghe tianxia.
- Stage 2 – Booming (2015-2016):**
 The eRTM market began growing exponentially in number with

intensifying competition. The Internet giants also began entering the market with their respective offerings, such as LST from Alibaba and XTL from JD. The market rapidly grew to over 70 platforms covering 1.1 million mom-and-pop stores.

- Stage 3 – Consolidation (2017-present):** After intense competition over the past two years, some smaller players, such as Huixiadan and Dianshang Interaction, have already exited the market. Now two dominant players, namely LST and XTL, are consolidating their market share. Coverage has also further increased, with over half of the six million mom-and-pop stores across China having already adopted eRTM to varying extents.

Exhibit 6: Trajectory of eRTM platforms



Source Literature research, Oliver Wyman analysis

Since 2013, the eRTM players have primarily adopted three variations in terms of their approach. (See Exhibit 7.)

- Integrated platform:** The integrated platform as a model does not purchase products from distributors or brands outright. Instead, it relies on value-added services, such as commissions and advertisements, as its main sources of income. Such a model allows for no inventory within the platform and a much lower liquidity requirement. However, if required, such platforms can hold inventory for brands or distributors in their central warehousing facilities to get it to mom-and-pop stores more effectively. In addition, an integrated platform can leverage its own team to directly improve store management and master integrated data along the value chain. Under this situation, distributors join and work together with the platform instead of competing against it. Notable examples of integrated platforms include Ali LST and Zhanghe tianxia.
- Integrated self-operation:** The integrated self-operation purchases products from brands outright and holds stock. Its revenue model therefore mimics those of distributors, profiting from the price difference between the end-retail price and the sell-in price. It also controls the inventory in its own warehouse and makes deliveries through its own logistics team. If required, it can also provide store operation guidance (e.g. by helping with the in-store marketing for brands) and influence brands' control in terms of store coverage. Notable examples of integrated self-operations include JD XTL and Eternal Asia.
- Vertical niche eRTM:** Focusing on their own specialized industries and depending on their own needs, vertical niche eRTMs work as either one of the two models mentioned above. These players provide a one-stop, industry-specific solution that caters to all retailers' needs, e.g. customized products, supply chain financing, after-sales support, product knowledge training, etc. Notable examples of vertical niche eRTMs include ule.com and yijiupi.com.

Exhibit 7: The three eRTM business models

Type of platform	Mainstream models		
	Integrated platform	Integrated self-operation	Vertical niche eRTM
Operation model	Doesn't purchase products, and only offers a platform for brands/distributors to join and sell to retailers	Purchases products outright, and unifies storage and delivery	Focuses on specialized industries, either as an integrated platform or integrated self-operation
Notable examples	<ul style="list-style-type: none"> Lingshoutong (LST) Zhanghe Tianxia 	<ul style="list-style-type: none"> Xintonglu (XTL) Eternal Asia 	<ul style="list-style-type: none"> ule.com yijiupi.com

Source Industry interview, Oliver Wyman analysis

Through market consolidation, essentially Ali LST's integrated platform and JD XTL's integrated self-operation have pulled ahead of the pack.

Ali LST and JD XTL have both evolved from digital ordering systems that storeowners can operate on their smartphones to comprehensive digital

solution providers, which are further enabled by strong operation capabilities. Specifically, LST and XTL can both provide logistics, warehousing and distribution services. Moreover, each one has its own advantages to stand out, but both will need to tackle some key challenges as they continue to grow. (See Exhibit 8.)

Exhibit 8: The competitive advantages and key challenges to future growth for Ali LST and JD XTL

	LingShouTong (LST)	XinTongLu (XTL)
Competitive advantages	<ul style="list-style-type: none"> • Efficient digital operation reaching end-retailers <ul style="list-style-type: none"> – Provides various marketing tools to improve operational efficiency – Entrusts the operation right back to brands • Cooperative support from distributors to operate and manage the terminal point of sales 	<ul style="list-style-type: none"> • Efficient self-operated logistics network <ul style="list-style-type: none"> – Fast delivery speed bred and endorsed by JD – Wide geographical coverage enabled by regional joint warehouse • Dynamic optimization enabled by closed data loop along the value chain
Challenges to tackle	<ul style="list-style-type: none"> • How to reduce cost in operating its own logistics services? • How to improve geographical coverage down to town/village level? • How to enable brands to manage distributors and avoid channel conflict? 	<ul style="list-style-type: none"> • How to enhance control of brands over pricing? • How to provide brands with more control over the terminal point of sales with less dependency on the platform's openness? • How to alleviate the inevitable competition with the Tier-1 or mid-tier distributors of brands?

Source Oliver Wyman analysis

We believe that as LST and XTL further strengthen their capabilities and gradually turn challenges into potential opportunities, the eRTM market in China will enter a “Golden Decade” of robust growth. Quantitatively, we foresee that the total sales value contributed by eRTM in China will reach RMB 1.1 trillion by 2028, representing a CAGR of 27%, with Ali LST and JD XTL occupying more than 80% of the market share.

This estimate further indicates that eRTM will represent about 12% of the entire China retail sector. With offline traditional trade estimated to represent

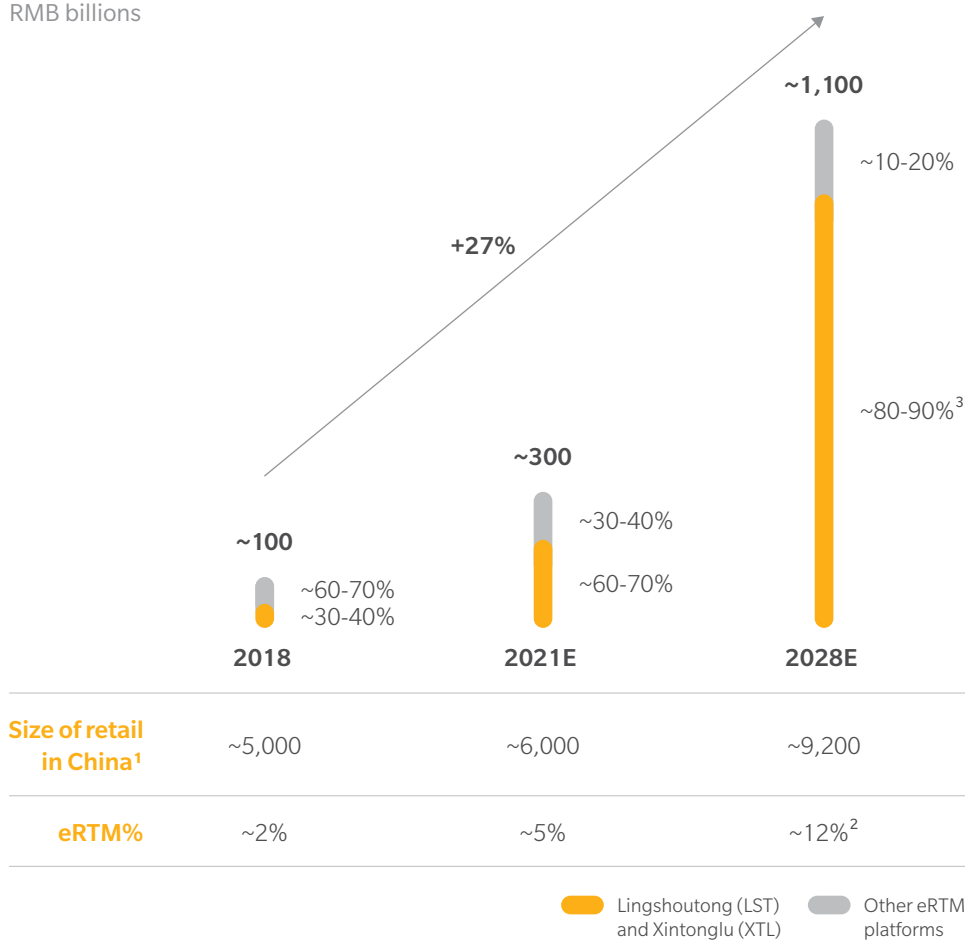
about 24% of China’s total retail market by 2028, eRTM could grow to represent about half of the entire traditional trade channel.

Completion of the digital data loop in traditional off-trade

As eRTM players seek to proactively digitize the traditional trade channel, we believe the end game will turn out to be full digitalization along the value chain, which in turn will be enabled by a closed data loop.

Exhibit 9: Market size of eRTM in China

2018-2028
RMB billions



1 Excluding cigarette and fresh food

2 Accounts for ~50% of the offline traditional trade market

3 LST and XTL or 2~3 platforms will account for ~80-90% of the market share

Source Industry interview, The National Bureau of Statistics, analyst reports, Oliver Wyman analysis

Taking Alibaba's LST, for example, LST will continue to build its B2B ecosystem and equip itself with a full suite of capabilities, such as cloud-driven warehousing, to provide a series of comprehensive digital solutions for traditional trade. (See Exhibit 10.)

LST will provide mom-and-pop storeowners with apps and a Smart POS that will track not only the ordering of products but also the sales and depletion at store level. Combined with the information provided by brands and distributors in terms of pricing, stock availability, and estimated delivery times, all aspects of the category's management and supply can be synchronized and improved.

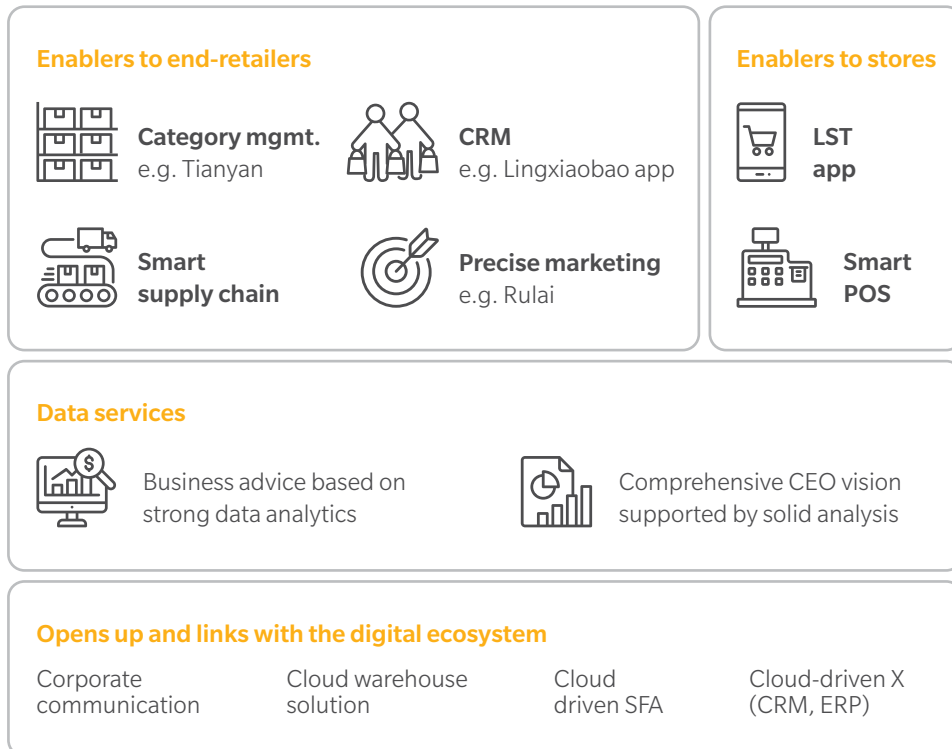
Brands will be able to leverage this data as well to drive more precise marketing and business decisions via reporting dashboards and data analytics provided by LST. No longer will the traditional trade channel be a "black hole".

Distributors will have a better understanding of who and where their existing and potential customers are, and consequently be able to provide more tailored offerings and packages on the platform and so enable a smarter supply chain that caters better to market needs.

Exhibit 10: The comprehensive digital solution of eRTM (using LST as an example)

DIGITALIZATION

Products > Sales workforce > Marketing > Supply chain > Retail stores



Source LST

THE “NEW NORMAL” OF TRADITIONAL TRADE

Catering to the eRTM model alongside the traditional model in the value chain will become the “New Normal” of traditional trade. Each of the stakeholders will need to understand their positioning in the market, and how they can best leverage the advantages of eRTM for their own benefit and to complement their overall strategy and business.

- Brands will need to choose from multiple cooperation models with eRTM based on their capabilities.
- Mom-and-pop stores will need to take advantage of new eRTM capabilities to modernize their operations and so remain competitive.
- Distributors will need to adapt the range of services they provide to retailers to complement eRTM offerings and grow.

Brands will need to choose from multiple cooperation models with eRTM based on their capabilities

Although declining in market share, traditional trade will continue to remain a key channel for retail in China over the next decade.

However, brands historically have not been well-equipped to win in this space as they face a multitude of pain points:

- **Retailer coverage:** China is vast and due to the complex distribution system, most brands only have access to about 500,000 mom-and-pop stores out of the 6.3 million such stores in China. This represents a significant blind spot in terms of both distribution and information flow.
- **Distribution cost:** To penetrate deeply into the traditional space would require working with a network of distributors that may have overlapping coverage and costs.
- **End-retailer control:** End-retailers usually lack resources for promotions and marketing, so brands would need to invest in a sales team to provide these resources at a significant cost. The lack of visibility also means that counterfeit product regulation, quality control, and pricing control are less than ideal.

The ways and capabilities that brands have built up to tackle these pain points today vary greatly depending on the sector and price point in which they operate. Depending on these considerations, for each brand, one of the eRTM cooperation models would likely be more suitable than the others.

We believe the primary axis and deciding factor of the most beneficial cooperation model is the extent of distribution and entrenchment that the brand has today in the traditional trade channel. (See Exhibit 11.)


We have categorized this into three types of brands based on its distribution capabilities:

- Brands with in-depth distribution:** Such brands have a long-established distribution network in China. They have a large distributor network allowing them to penetrate deeply for a physical product perspective, but still face difficulties in really optimizing the merchandizing and store operations. Typically, these brands have built up their own sales force to partially cover these areas, as it is still not possible to cover them all.
- Brands with Low-Medium degree of penetration:** These brands have already built their own distribution network in China to a smaller extent, penetrating and entering key regions and/or city tiers, but not fully nationwide. More likely than not they have decided against building their own sales force on top as the ROI is poor, and have chosen instead to rely solely on distributors.
- Online brands:** The root and origin of online brands has been via e-commerce. The idea of building recognition and seeking further growth in offline channels would be a completely new and different experience for them. Having no existing capabilities in traditional trade, eRTM would offer them by far the best option for entering this space.

Exhibit 11: Evaluation on brands' offline distribution capabilities

Distribution depth and relevant categories	Logistics	Distribution <ul style="list-style-type: none"> Cash flow Distribution 	Merchandise and pricing <ul style="list-style-type: none"> Product Pricing 	Store operation <ul style="list-style-type: none"> Display Marketing CER¹ 	
In-depth distribution Dairy, general food, instant food	✓	✓	✗	✗	Has enormous and deep distribution network and sales teams, and control of certain stores
Low-medium level of distribution Confectionary and healthy snack, personal care, home hygiene	✗	✗	✗	✗	Has set up partial distribution network but with limited depth; Differs across regions, and lacks competitiveness
Online brands	✗	✗	✗	✗	Has emerged from online channel with negligible offline channel presence

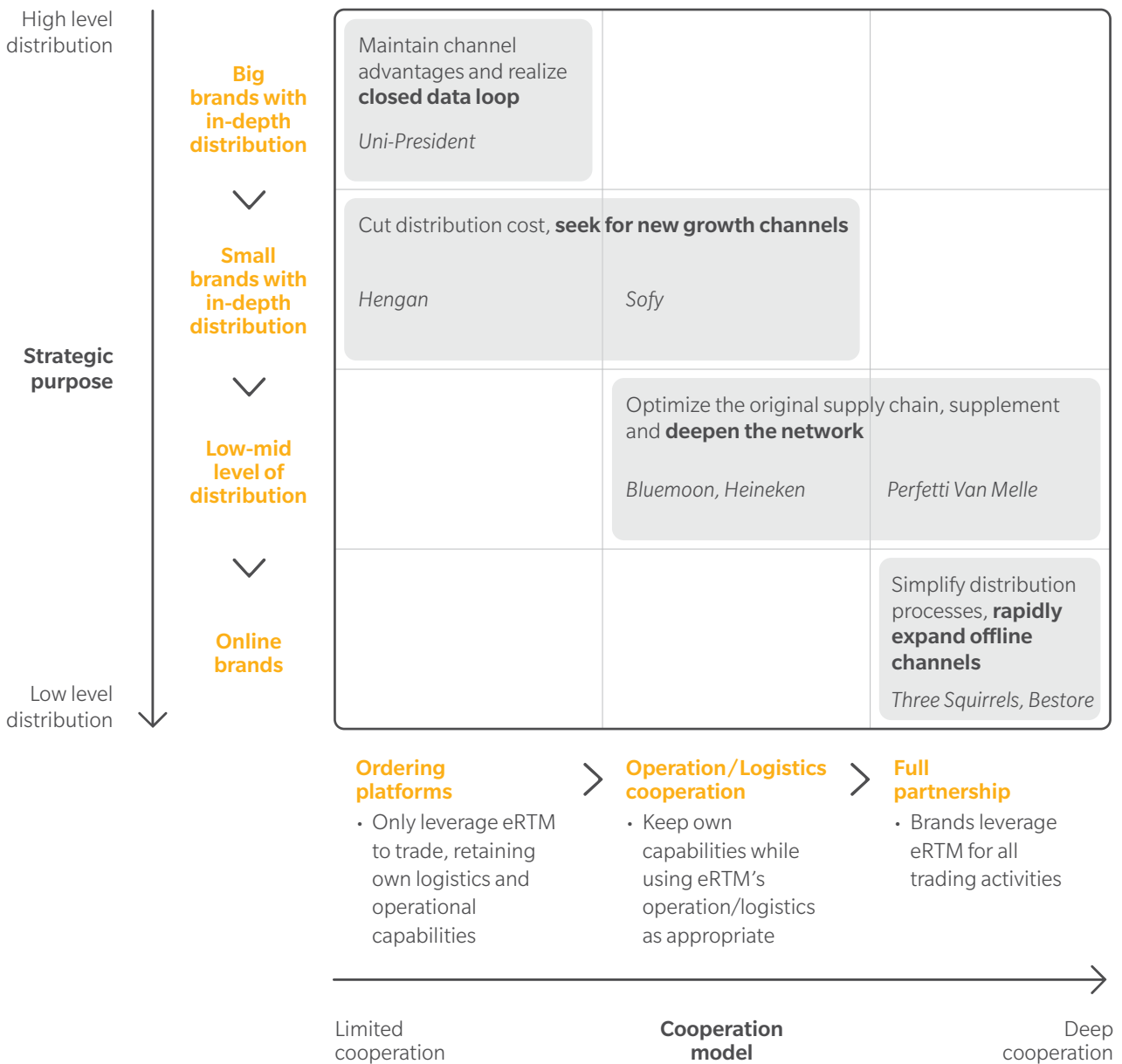
¹ CER: Consumer Emotional Relationship
 Source: Industry interview, Oliver Wyman analysis

 In place
  Partially in place
  Not yet in place

In many ways, the more time and energy that brands have spent to build up their traditional trade capabilities, the more concerns they would have with eRTM. For example, they would worry about damaging existing relationships, losing direct-channel control, and how to unwind their existing assets and resources.

From our observations, a brand's willingness to cooperate with LST or XTL and the route that they would want to adopt can be categorized into the following three models. (See Exhibit 12.)

Exhibit 12: Cooperation models between brands and eRTM



Source Industry interview, Oliver Wyman analysis

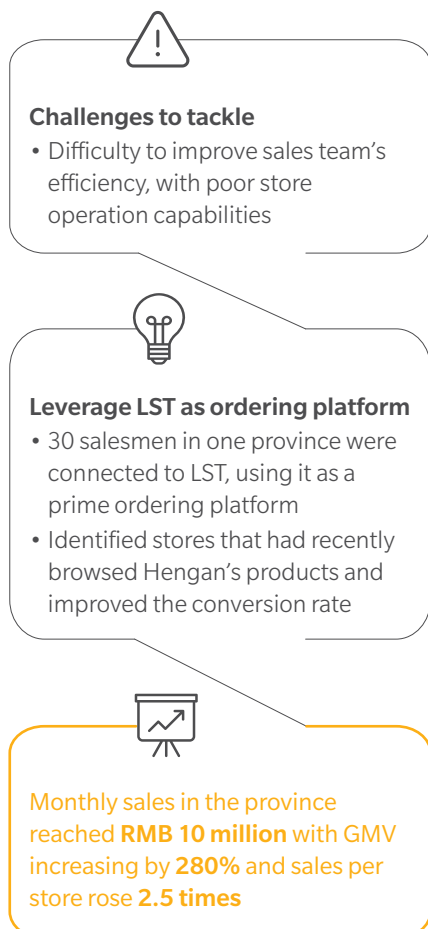
Model 1 – Ordering platform

Brands who have already invested into an extensive distribution network in China just want to leverage eRTM as a platform to take orders from retailers. Once a

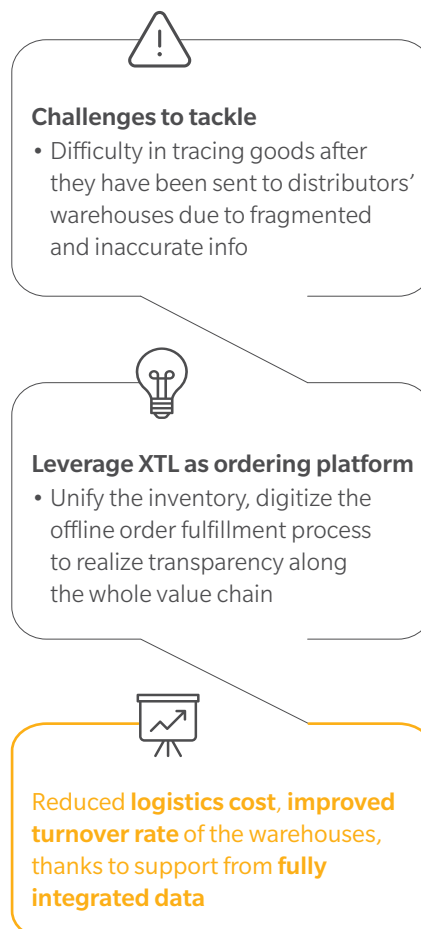
transaction is confirmed, they would continue to use their own established logistics and sales force to fulfill the order.

Exhibit 13: Case studies of ordering platform model

Case study 1: LingShouTong (LST) and Hengan



Case study 2: XinTongLu (XTL) and Uni-President



Source LST, Literature research, Oliver Wyman analysis

Model 2 – Operational and logistical cooperation

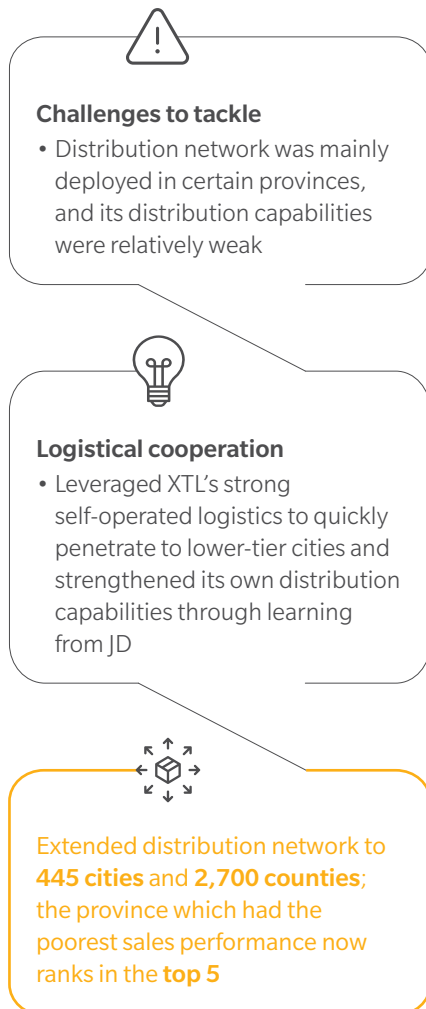
This is a more extensive partnership, where brands leverage not only the eRTM platform for order placements but also the eRTM provider’s distribution capabilities to cover either just new geographical regions or existing ones as well (if doing so proves to be more cost-effective and efficient). Through this partnership, brands can also strengthen their end-retailer management, optimize

their existing supply chain, and deepen their penetration into more mom-and-pop stores.

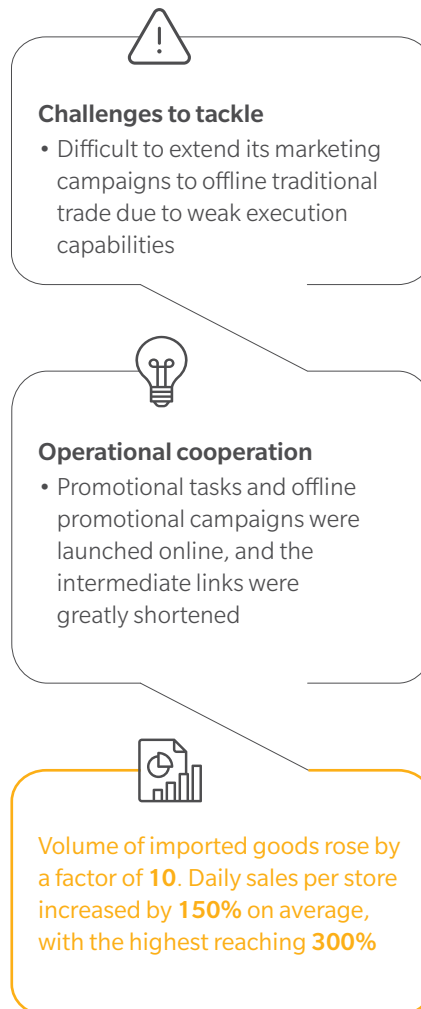
As a result, brands are able to quickly enhance their distribution network without the capital requirement and cost intensiveness that the traditional route-to-market approach otherwise needs.

Exhibit 14: Case studies of operation/logistics model

Case study 1: Xintonglu (XTL) and Heineken



Case study 2: Xintonglu (XTL) and Bluemoon



Source LST, Literature research, Oliver Wyman analysis

Model 3 – Full partnership

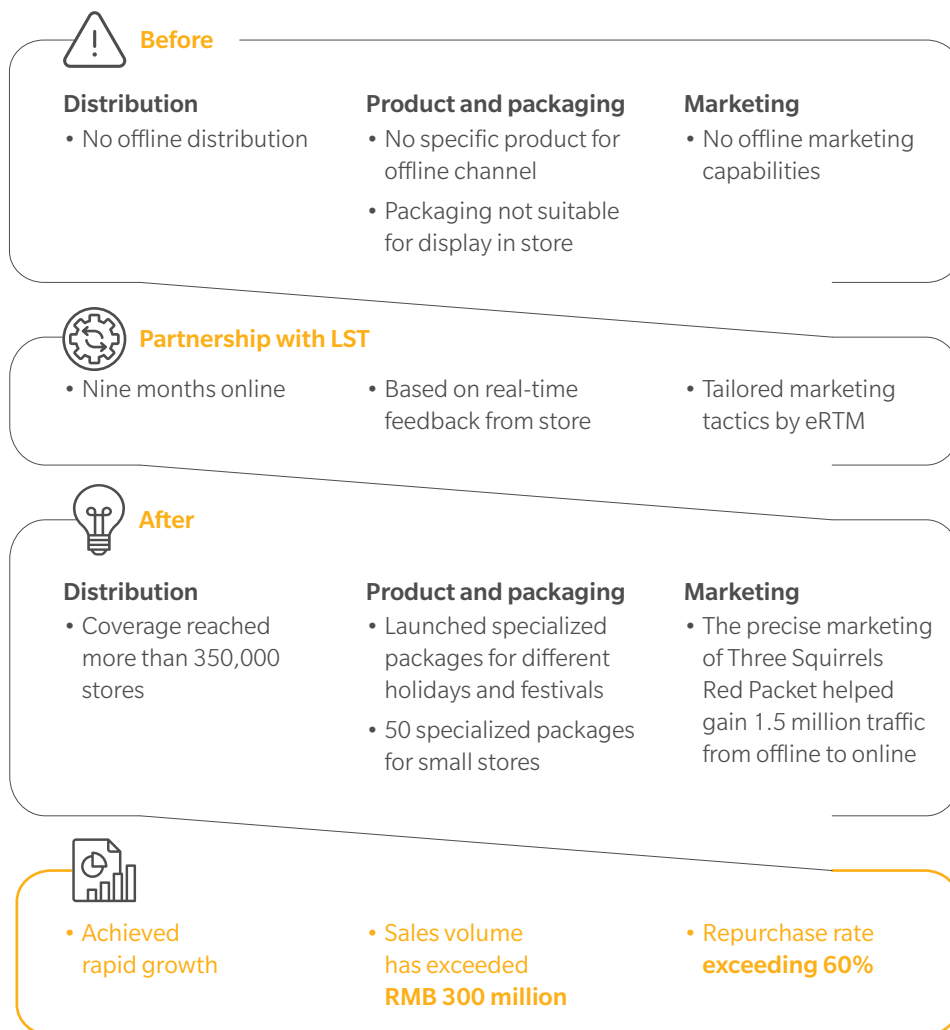
This model is most beneficial for those with no existing capabilities in traditional trade, such as online brands. These brands can essentially use eRTM as a one-stop shop to cover the entire channel’s requirements, e.g. transactions, distribution, logistics, store operations, etc. The model allows brands

that were previously unable to enter into this channel to gain a solid foothold in the market.

One such example is Three Squirrels, the first food brand in China to be sold purely online. It has since grown to be nationally recognized.

Exhibit 15: Case study of full partnership model

Case study: LingShouTong (LST) and Three Squirrels



Source LST, Oliver Wyman analysis

Mom-and-pop stores will need to take advantage of new eRTM capabilities to modernize their operations and so remain competitive

Today there are roughly 6.3 million mom-and-pop stores in China that form the traditional trade market, and over 75% of them are concentrated in Tier 3 cities or below.

The number of stores has declined from 6.8 million to 6.3 million from 2017 to 2019, as retail competition becomes even fiercer, and online and modern offline trade continue to slowly erode this channel's market share. (See Exhibit 16.)

Already operating under thin profit margins, these independent storeowners face four major hurdles going forward that will only increase the pressure on them to continue to succeed.

- **Rising operating costs:** Rental costs and staff salaries are continuing to rise year after year.
- **Intensifying competition:** E-commerce and convenience stores are eroding market share and taking away foot traffic.
- **Unattractive merchandise/poor store management:** These stores usually exhibit a lack of proper merchandise assortment leading to a confusing and visually unattractive product mix. Moreover, the poor store management often leads to a lack of new product availability in a timely manner to attract customers.
- **Outdated consumer proposition:** Consumers are demanding more from retailers than ever before. Successful modern convenience stores have fulfilled this gap by offering a range of services to make consumers' everyday lives easier. Following the convenience stores' lead will be a vital component for mom-and-pop stores to future-proof themselves as well.

Exhibit 16: The number of mom-and-pop stores in China



Source LST, Literature research, Oliver Wyman analysis

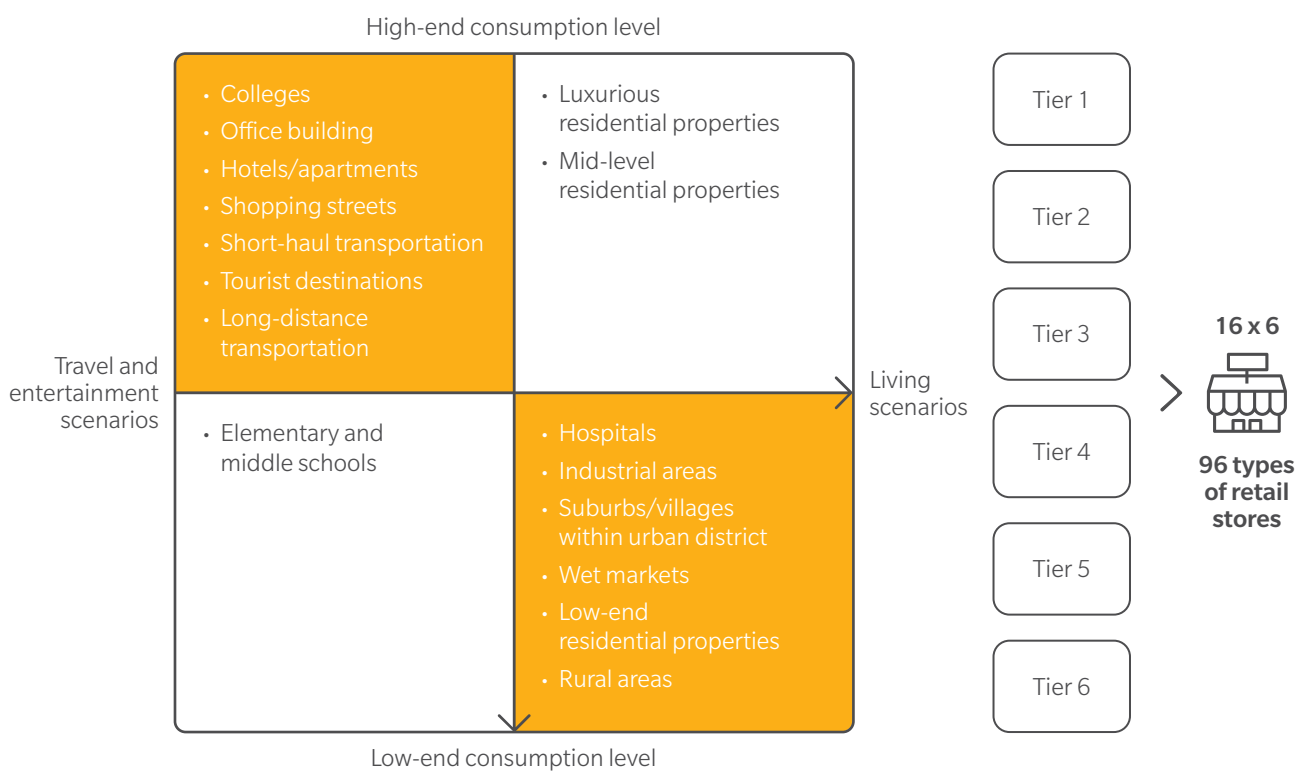
To improve their proposition, mom-and-pop stores need to start by understanding the customers within their retail sphere better and catering to their needs with the right assortment and offerings. With the growth of eRTM, LST and XTL finally have enough data from mom-and-pop stores to generate useful insights for success.

For example, based on its latest advanced analytics, LST is now able to separate the stores into 96 segments, based on shopping scenarios, levels of spending, and city tiers. More importantly, each of these segments has proven to serve a certain profile of customers and shopping missions. (See Exhibit 17.)

Exhibit 17: The 96 types of mom-and-pop stores, according to LST

Top 16 types of shopping scenarios

6 levels of cities



Source Oliver Wyman analysis

Understanding these distinctions will be vital for storeowners to achieve more refined management through stocking up their own particular store with the most suitable products and categories. Take mom-and-pop stores located in Tier-2 office versus Tier-3 school areas, for example:

- **Tier 2 office buildings:** A mom-and-pop store in this kind of location would mainly serve white-collar professionals aged around 25-35. Moreover, the professionals would likely have mid-to-high levels of income and would therefore be less sensitive to price. This group of consumers would also be willing to try out new, high-quality products if they found them to be attractive. Thus, stocking the store with new and premium products having attractive packaging would be key to the store's success.
- **Tier 3 elementary and middle schools:** A mom-and-pop store in this kind of location would mainly serve primary and secondary school students who are more likely to make purchases impulsively but who are also more conscious about value-for-money due to their limited purchasing power. Thus, having colorful products with relatively cheaper prices for sale would be key to the store standing out from the competition.

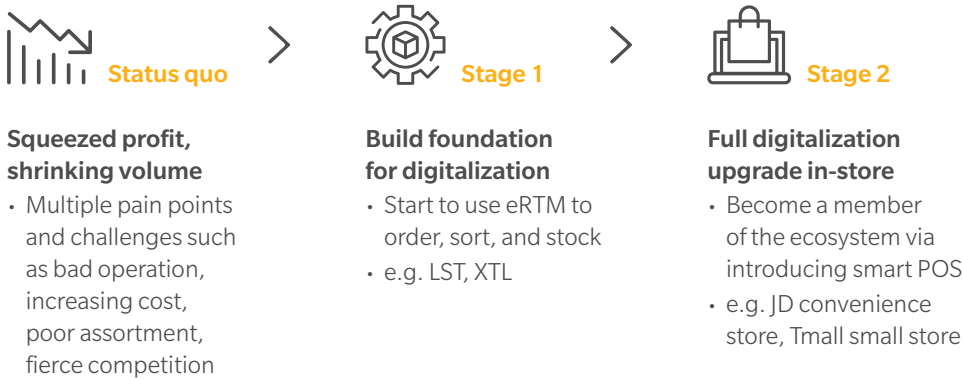
In effect, an eRTM provider's advanced and focused analytics can directly help mom-and-pop storeowners make better decisions for their stores. The analytics will drive recommended assortments, as well as help brands better identify target stores for their marketing and sales activities, all of which will connect well together in a virtual cycle that improves not only customer value but also the profitability of both brands and mom-and-pop storeowners.

The journey ahead, though, is still long with several barriers that need to be addressed. Also, eRTM providers need to keep adapting their business models to better serve their customers. For example, unlike traditional route-to-market distributors, eRTM solutions today do not offer credit to mom-and-pop stores. Rather, only upfront payments are currently accepted for products. However, under tight operating constraints, offering 60 to 90-day credit lines can often be critical to sustaining cash flow.

From the digitalization perspective, the roadmap is clear and significant progress has already been made on this front. It starts with building the proper digitalization foundation via an easy-to-use eRTM app. Such an app would offer storeowners immediate access to a platform that allows them to clearly track the flow of goods, product availability and pricing, and delivery times. The app could also provide recommendations regarding good promotion deals, really low prices, and hot-selling products to equip owners with better insight. (See Exhibit 18.)

An appropriate way to take this to the next level would be the introduction of a smart POS that would then also connect the actual data of sales being made at store-level to consumers. In essence, doing this would create an end-to-end data loop that would facilitate even better decision-making. The AI-driven solutions would be able to inform storeowners regarding inventory levels and customer behavior (by utilizing knowledge gained from the broader digital ecosystem), and also suggest detailed store-level decisions for better effectiveness and efficiency.

Exhibit 18: Digitalization roadmap for mom-and-pop stores



Development progress



Source Industry interview, Oliver Wyman analysis

Stage 1 – Building the foundation for digitalization by inviting storeowners to use an eRTM app to manage their stores

LST and XTL are actively reaching out to mom-and-pop storeowners throughout China and teaching them how to use eRTM to facilitate and improve their store management. The storeowners can easily make orders with simple clicks on their smartphones, and they can gain clear guidance on store operation from the platform or its staff. The app also tracks the store's data, which can inspire the owner to make more rational business decisions on when to import goods, etc. Presently, most stores are taking this first, important step towards full digitalization within the ecosystem.

From a sample of 4,000 mom-and-pop stores that have recently started using LST, its eRTM solutions have already helped each store generate an additional RMB 4,000 in sales per month on average.

Stage 2 – Achieving full digitalization by installing a smart POS in-store and linking it with the eRTM's overall digital system

eRTM players are now beginning to introduce a smart POS in each store as the next step in the evolutionary process towards full digitalization. The smart POS is a platform that automatically tracks the store's import, sales and inventory data, and is linked to the eRTM's overall digital system. Enabled by the smart POS, the storeowner can enjoy the following benefits.

- **One-stop ordering:** A storeowner can order replenishments through the eRTM system and monitor their real-time delivery status, just like when a consumer makes an order through Tmall or JD.
- **Real-time inventory management:** With the use of the smart POS, inventory can be updated right after a transaction has been logged. Therefore, the system can then provide recommendations for inventory management, e.g. letting the owner know about expiring or obsolete stock, or the need for replenishment orders.
- **Precise consumer profile:** Based on analyzing transactional and consumer behaviors, the AI-driven system is able to generate precise pictures of each store's main consumers. As such, storeowners are able to clearly understand the consumers' shopping preferences, sensitivity towards promotions and price changes, delivery-time needs, brand loyalty, purchasing power, etc.
- **Intelligent recommendations:** By consolidating sales data and interpreting consumer profiles, the eRTM system is able to provide intelligent recommendations on what products and other assortments the storeowner should prioritize, de-list or newly add during the next replenishment cycle.

As mom-and-pop stores rapidly improve the strength of their core offerings by tapping into these digital ecosystems, they will eventually be able to branch out and offer a fuller variety of services, and over time, become the neighborhood retail center that serves their nearby consumers' every need.

Distributors will need to adapt the range of services they provide to retailers to complement eRTM offerings and grow

As eRTM enters into its golden decade, we estimate that roughly 50% of China's traditional trade will be part of this ecosystem by 2028. With this dramatic shift towards a true mix of eRTM and traditional route-to-market, distributors will need to stay proactive and adapt their business accordingly, as the requirements for them to succeed and the services that they will be asked to provide changes over time. (See Exhibit 19.)

From the eRTM perspective, LST and XTL will offer a more cost-effective

and integrated solution for several key functions in the traditional trade value chain. For example, they will be able to better leverage their nationwide warehousing and distribution networks.

- **Customer sell-in/sell-out:** Taking and tracking orders can be done via the eRTM platform in a much more effective manner. No longer is there a need to place individual orders across the value chain, as all of these can now be synchronized.
- **Bulk logistics:** With customer orders in place on the digital platform, actions can be automated to direct the most optimal logistics and distribution of goods. Moreover, they can be executed directly from the warehouses of LST and XTL.

Exhibit 19: Functions of different level of distributors

Function/ level	Tier-1 distributors	Mid-tier distributors	Local distributors/ wholesalers
Logistics and warehouse			
Bulk logistics	✓	✓	✗
Last-mile delivery	✗	✗	✓
Distribution			
Account period settlement	✓	✓	✗
Inventory management	✓	✓	✗
Sell-in and sell-out	✓	✓	✓
Mom-and-pop store operation			
Customer relationship management/store operation	✗	✗	✓
In-store marketing guidance	✓	✓	✓
Brand			
Brand relationship management	✓	✗	✗

Source Oliver Wyman analysis



Keep major functions



Keep minor functions



Functions to be replaced



Not in the scope

As eRTM development matures and solves the pain points of both brands and millions of end-retailers, distributors can focus and invest more of their time and effort on providing more value-added services. At the same time, they should think about how to further adapt their business models so as to create unique value propositions for growth. In the future, three major eRTM distribution routes will likely emerge, giving distributors the choice of path that suits their own particular needs the most. (See Exhibit 20.)

- **Tier-1 distributors:** As a critical point of contact with brands, tier-1 distributors need to double down on brand relationship management to emphasize their proposition along the value chain. As demonstrated in route 1, they can focus more on expanding and deepening their connection with brands, and leverage the eRTM's logistical and operational capabilities to serve the brands. For example, tier-1 distributors can convey the main message from brand to eRTM and then leverage the eRTM to realize precise and effective in-store marketing. However, they need to make sure that they are fully invested in the route 1 option, so that the core functions that they carry out cannot be easily replaced.
- **Local distributors:** Local distributors can either choose route 2 or route 3. On the one hand, through partnership with the eRTM, they can spend more of their sales team's efforts to improve store level operations instead of taking orders. On the other, they can also join the eRTM platform to become a dedicated last-mile eRTM wholesaler, thereby both expanding their access to more under-served regions and maximizing their advantages.
- **Mid-tier distributors:** Mid-tier distributors will need to pivot more strongly than their counterparts because there will be less middle-man functionality. They will need to carve out a proper role within the ecosystem and adjust their business model accordingly by following either route 1 or route 3. On the one hand, they can evolve into a tier-1 distributor and grow in scale, as they help more effectively pool and integrate resources and expertise across local distribution networks. On the other, they can become integrated into the eRTM system and so become part of the digital ecosystem. By doing so, they can shift their focus to provide more value-added services in terms of training and managing local distributors, and providing proper coordination to drive in-store efforts.

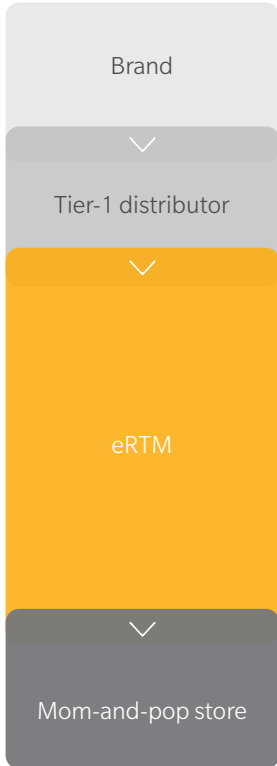
Exhibit 20: Development route for distributors with eRTM

After partnering with distributors, eRTMs will account for another 50% share



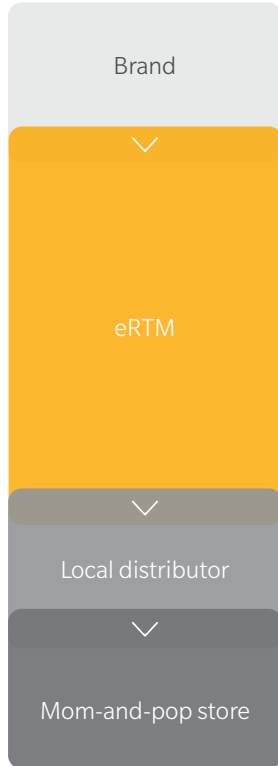
Route 1

Tier-1 distributors manage brand relationship, eRTM covers all the rest



Route 2

Local distributors cover store operation, eRTM covers all the rest



Route 3

All distributors become part of the eRTM ecosystem



Source Oliver Wyman analysis

4P DIGITAL TRANSFORMATION INDEX IN TRADITIONAL TRADE

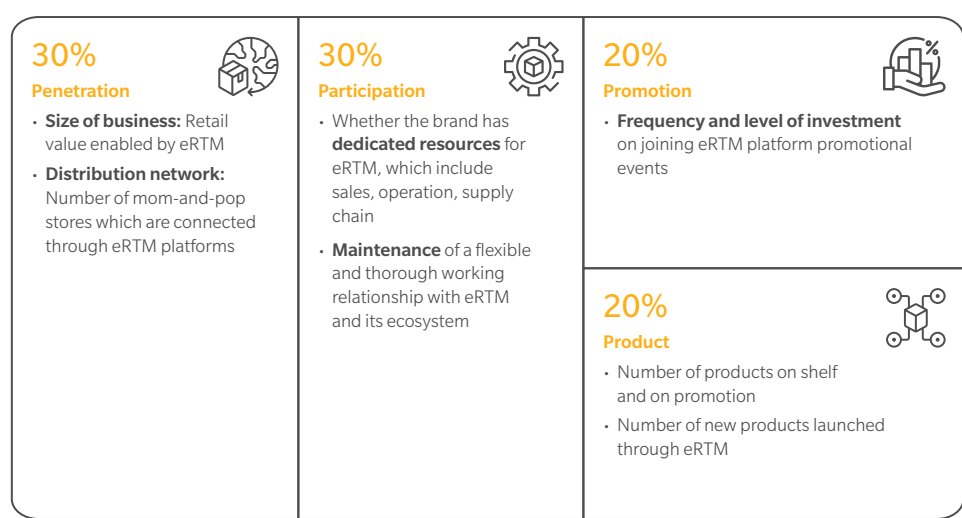
As part of this joint report with AliResearch, we have developed the 4P digital transformation index to assess how far brands have progressed in this area in traditional trade. Specifically, we assessed the degree of digitalization based on the following four dimensions. (See Exhibit 21.)

We carried out research on the Top 10 brands in five different categories, namely, dairy & beverage, confectionary and healthy snacks, general food, personal care, and home hygiene. We found that the confectionary and healthy snacks category is leading the way, while the general food and dairy & beverage categories are the main laggards. (See Exhibit 22.)

- The confectionary and healthy snacks brands are pioneers in the digital transformation, as they aggressively compete with each other to win the early move from wide coverage and well-known awareness. The high price elasticity of the category also pushes these brands to launch extensive promotion campaigns with substantial discount. Thus, the category has a relatively more penetrated distribution network and higher level of promotion involvement.
- While dairy and beverage lag behind as the nature of liquid products hinders these brands to distribute to a larger scope with higher efficiency, and the low price elasticity and low ceiling of business leads to the limited promotion degree.






The following case study highlights some notable examples of a few top performers. (See Exhibit 23.)

Exhibit 21: 4P digital transformation index






Source Oliver Wyman analysis

Exhibit 22: Average transformation index of the Top 10 brands by category

Category	Penetration	Product	Promotion	Participation	Total score
 Confectionary and healthy snacks	19.0	7.0	15.1	23.2	64.3
 Personal care	15.8	6.1	11.2	21.9	54.9
 Home hygiene	15.6	8.7	8.4	21.1	53.7
 General food	9.3	6.7	9.1	21.8	46.9
 Dairy & beverage	14.9	5.1	2.2	22.0	44.3

Source AliResearch

Exhibit 23: Case studies of the top brands in terms of digital transformation

Case study 1: Master Kong	Case study 2: Hengan	Case study 3: Mondelez
 Penetration <ul style="list-style-type: none"> The group's cloud warehouse goods covered nearly 15,000 streets and the number of mobile points of sale accumulated to more than 500,000 The GMV of instant noodles reached RMB 100 million, accounting for 8% of the total GMV of the Group Realized the same level of promotion for the same product portfolio in both virtual and real warehouse 	 Participation <ul style="list-style-type: none"> Digitalized work team: All internal salesmen in one province were connected to LST <ul style="list-style-type: none"> Salesmen screened out the not yet digitized stores with the market information offered by LST, and utilized LST to digitize these stores The sales value reached RMB 10 million, with GMV increasing by 280% and personnel cost dropping by 50% per month 	 Promotion and marketing <ul style="list-style-type: none"> Stride increased 4% in ND within single month and greatly improved its penetration in T2/T3 cities through digital marketing and promotional campaigns (i.e. rush to purchase of sampling) Oreo launched marketing campaigns, involving 440,000 mom-and-pop stores in more than 12,000 counties and cities

Source LST, Oliver Wyman analysis

CONCLUSION

As eRTM enters its golden decade, digitalization has brought and will continue to bring new opportunities for traditional trade players in this space: from brands, to distributors, to mom-and-pop stores. However, to truly succeed, each type of stakeholder will need to rethink and reimagine not only how this channel should be managed, but also how their capabilities will need to evolve to properly complement this emerging trend.

What aspects will each type of stakeholder need to consider?

Brands

Brands will need to reassess and likely overhaul their traditional trade route-to-market strategy, as the rise of eRTM is causing the historical tried-and-true approach to erode. With this in mind, brands should give serious consideration with regard to how to strike the right balance between the old and the new. For example, the value and advantage that brands gain from building a deep traditional distribution network in traditional trade will weaken. This is because both online and offline brands will be able to leverage the benefits of eRTM to gain distribution relatively quickly into spaces where it has been

difficult to enter in the past. Each brand will therefore need to evaluate its own strengths and capabilities to find a winning path forwards, part of which will require adjusting organizational structures and resource allocation.

Distributors

For distributors, although their traditional route-to-market business will continue to exist, the growth of eRTM will inevitably mean the value of basic services that the various levels of distributors currently provide will decline in importance over time. As distribution becomes more effective and transparent, it is the distributors' other areas of service that will become increasingly important, such as the ability to build long-term relationships with brands and to also act as their trusted conduit. On the other side, distributors can also work on providing better value-added services to shop owners to help them improve their inventory management and store performance. However, implementing such changes will not be straightforward. Distributors will need to either raise the skills of their business personnel or shift into and become entirely part of the eRTM ecosystem.

Mom-and-pop stores

Mom-and-pop stores have been facing increasing margin pressures over the years, so the introduction of eRTM will undoubtedly be a boon to their underlying business. eRTM brings greater transparency, efficiency, and better decision-making in the ability of mom-and-pop stores to source the right products at both the right prices and the right times. Moreover, the adoption of eRTM technologies and upgrades, such as smart POS systems, will further expand the stores' capabilities in providing additional services to their nearby communities, ultimately helping them become all-encompassing neighborhood stores.

In summary, the road ahead for eRTM will not be without obstacles. In fact, eRTM providers will need to work hard and continuously together with key stakeholders along the value chain to overcome pain points as they arise and so achieve mutual win-win scenarios. While the digital transformation of traditional trade in China might be quite a difficult undertaking, it is expected that there will soon be many more proven cases, which in turn will only build further momentum for eRTM.

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