

# How omni-channel can be the future of retailing

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**Abstract** We discuss how omni-channel retailing should be structured to create a supply chain that is both cost effective and responsive to customer needs. Given the complementary strengths of the physical and online channels, hybrid structures should be designed to use both channels. The physical channel should be used to serve frequent and predictable needs and the online channel should be used to provide variety and serve sporadic needs. The physical channel can also serve as a showroom and pickup location for the online channel. This hybrid structure can be particularly effective in emerging markets where new online players can partner with existing local retailers to benefit both parties and the consumer.

**Keywords** Supply chain management · Omni-channel retailing

## Introduction

The twenty-first century has seen a major transformation in retail in developed economies such as the United States. Successful models from the late twentieth century such as Borders for selling books,

Blockbuster for renting videos, and Circuit City for selling consumer electronics have gone out of business. While it may seem at first that changing technology and the growth in online retail is responsible for this transformation, a more careful analysis shows that each of the companies cited above was squeezed by a combination of an online and a physical channel. Whereas a decade ago, customers primarily visited stores like Blockbuster to rent movies, today they are likely to segment the channel they use based on the type of movie they watch. Most customers visit Redbox kiosks to rent recent releases while watching a variety of other movies from Netflix. Whereas a decade ago, customers primarily went to an electronics mega store like Circuit City to fulfill all their electronics needs, today they are likely to segment the channel they use based on their electronics needs. They are likely to purchase their basic needs from a brick-and-mortar retailer such as Costco while also shopping online for a wide variety of consumer electronics. In each of these examples, a hybrid combination of a physical channel and an online channel serves customer needs more effectively than using a single channel.

Omni-channel retailing refers to the use of a variety of channels to interact with customers and fulfill their orders. The interaction between a customer and a retailer is primarily in terms of three flows—information, product, and funds. The retailer provides product and pricing information to the customer who then places an order. The order information is used by the

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retailer to move the product to the customer. Finally, payment is transferred from the customer to the retailer. The use of different channels for each flow helps us categorize the components of omni-channel retailing. We argue that a well-structured omni-channel supply chain can be both cost effective and responsive to customer needs by exploiting the complementary strengths that online and brick-and-mortar retailers bring to the supply chain. A combination of the two is more effective than either channel by itself. Whereas Blockbuster found it quite challenging to provide a wide variety of movies to its customers from its stores, Netflix has no difficulty supplying customers with a wide variety of movies. Between shipping DVDs and streaming, the company offers over a hundred thousand titles. Whereas Netflix is very good at providing a wide variety of movies at low cost, Redbox is much better at making a few new releases available close to customers at low cost. The combination of Redbox and Netflix provides customers with an omni-channel experience that is simultaneously cheaper and more responsive to customer needs than the Blockbuster supply chain. The important observation is that the combination of channels is more effective because the decentralized Redbox channel focuses on providing only the new releases whereas the centralized Netflix channel focuses on providing the wide variety of other movies.

Omni-channel retailing may be particularly effective in emerging economies like India. Whereas people have feared that the growth of online retailing will hurt small local retailers, we argue that small local retailers are the missing link that can help online retail be profitable in emerging economies. Similarly, the backing of online retail can significantly increase the value that small local retailers provide their local customers. A partnership between the two channels can create a win–win hybrid structure where local retailers help lower distribution costs and increase access for online retailers while online retail in turn helps strengthen small retailers by providing a wide variety of products. Online players and small local retailers bring complementary strengths that together can create an omni-channel supply chain that is both cost effective and responsive to customer needs. For the hybrid to be successful, however, products and responsibilities must be appropriately allocated to the two channels. In this paper, we build on the

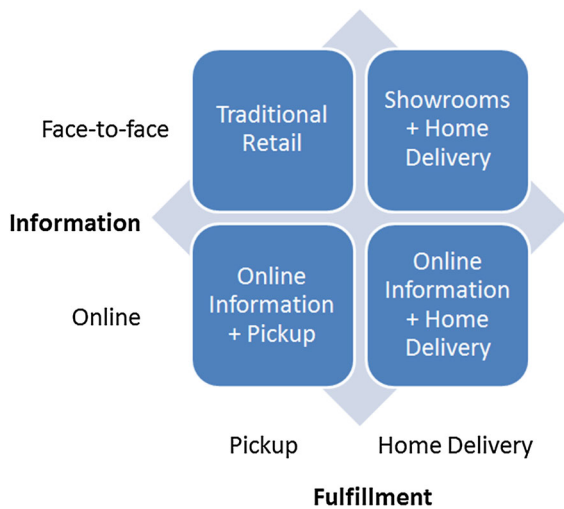
recent work of Bell et al. (2014) and Brynjolfsson et al. (2013) to provide an omni-channel retail framework that can be used to suitably allocate products and responsibilities across channels.

Our framework on omni-channel retailing builds on the framework for distribution networks articulated by Chopra (2003) that discusses how different distribution networks have different performance characteristics in terms of their cost and ability to meet customer needs. Chopra and Van Mieghem (2000) highlight the fact that the costs and benefits of moving information, product, and funds across the supply chain for different industries and product categories can be quite different for the online channel when compared to the brick-and-mortar channel. Several other researchers have focused on specific aspects of this cost and benefit comparison. For example, Brynjolfsson and Smith (2000) discuss how online retailers can reduce search frictions for customers while Brynjolfsson et al. (2009) show why online retailers can be more convenient or offer more product variety. Brynjolfsson et al. (2011) show that the increased variety available online results in customers being more likely to purchase products in the so-called long tail. Forman et al. (2009) discuss how the physical distance that customers must travel to brick-and-mortar stores affects the tradeoff between online and offline purchases. Anderson and Hansen (2009) discuss the issue of product return options and how having such options can create value for customers. Avery et al. (2012) discuss the impact of brick-and-mortar store introductions on online demand. Neslin and Shankar (2009) provide an overview of customer management issues across multiple channels.

### The alternatives in omni-channel retail

A retail channel and customer must exchange information and product. Information may be exchanged face-to-face as in a retail store or online when shopping at Flipkart. Product fulfillment can be through a customer pickup or home delivery. As a result, we can categorize four alternatives for omni-channel retail as shown in Fig. 1 (see Bell et al. (2014)).

We describe each of the four channels in greater detail.



**Fig. 1** Alternatives in omni-channel retail

### Traditional retail

Supermarkets, jewelry stores, department stores, and book stores are all examples of traditional retail where a customer has a face-to-face interaction with the product and sales people and leaves the store with the product once a purchase has been made. Traditional retail tends to have many facilities to support the face-to-face information exchange and product pick up. These facilities tend to carry a high level of overall inventory because product must be stocked at each retail store. As a result, investment in facilities and inventory tends to be high for the traditional retail channel.

### Showrooms + home delivery

An excellent example of this channel structure is Bonobos, an apparel retailer, whose stores (Bonobos Guideshop) “basically don’t sell anything.” These stores serve as showrooms where customers can try different styles, get advice from sales people, and also get fitted. These showrooms facilitate a face-to-face information exchange but do not carry inventory for customers to purchase. If a customer decides to make a purchase, the product is ordered online from the Bonobos website (or at the store) to be delivered at home. The showrooms carry no inventory for sale, thus significantly reducing inventory and the size of the store required. Relative to traditional retail, this channel saves on inventory and facilities infrastructure but requires a greater investment in transportation and

information infrastructure, especially with home delivery.

For high value products and products with a significant amount of customization that people want to “touch, feel, and see,” this channel is likely to gain market share in the future because of the lower level of inventories required. A product category where this channel has started to gain significant market share in the United States is men’s suits. A traditional retailer must carry a wide variety of suits so that customers can find an appropriate fabric, size, and style. This significantly increases the amount of inventory that retailers need to carry and the amount of space they need to dedicate to this product. In contrast, Indochino, a provider of suits has small showrooms that only carry enough inventories so that customers can select fabrics and styles. Customers are fitted and suits are made off-site in low cost locations. Indochino carries its inventory at production locations in the form of fabric that is customized for each specific customer only after an order has been placed. As a result, it has no surplus inventory that must be discounted at the end of the season and is never short of a style or size that a specific customer needs. Indochino, thus, incurs much lower inventory and facility costs relative to a department store trying to sell suits. As a result, Indochino and other players with the showroom model are able to sell men’s suits at a lower price than traditional retailers while providing customers with a more customized fit. In India, Raymond stores also use a similar model where a customer can be fitted and purchase fabric for a custom suit that is made off-site.

### Online information + home delivery

Amazon and Flipkart are excellent examples of this channel where customers browse for products and order online to have the purchases, then delivered at home. Aggregation of inventories in a few locations allows the online channel to have a much lower investment in facilities and inventory compared to traditional retail. Transportation cost, however, tends to be high for home delivery.

### Online information + pickup

The high cost of home delivery for the online channel has led several players to offer the option of a pickup location at a lower price. The presence of a pickup

location significantly reduces the outbound transportation cost incurred by the online retailer. It does require the customer to travel to the pickup location but a suitable choice of pickup location can lower this travel cost if customers can combine order pickup with other activities they naturally perform at the location. For example, Walmart allows a “free instore pickup” option where people can shop online and pick up the order at the store. This option clearly reduces Walmart’s transportation cost because online orders can be shipped to the store along with other products being shipped there. Such an option may also not add much to the transportation cost for a customer if he or she is planning to shop at the Walmart store in any case.

Pickup locations are likely to grow for retailers selling relatively low value goods online. In the grocery industry in U.K., for example, pickup locations now dominate as the mode for online grocery shopping. Grocery retailers such as Tesco and ASDA offer a low cost “click and collect” service where customers place their orders online and collect them at a pickup location.

### **The strengths and weaknesses of each channel for information and fund flows**

A successful supply chain must manage the flow of information, funds, and products to create value for customers while generating profits. Customer value may be enhanced by increasing customer convenience, providing access to a greater variety of products, improving the responsiveness to customer orders, or reducing the price that customers have to pay. A retail channel can be successful only if the value created by the channel exceeds the cost incurred in serving the customer. The difference between the value created and the cost incurred by the entire supply chain is referred to as the supply chain surplus (see Chopra (2016) for a more detailed discussion of these ideas). To identify the strengths and weaknesses of each channel we focus on how they affect the supply chain surplus.

Retailers in developed markets have put in significant effort to improve information access for customers using a variety of information channels. Several retailers allow customers to have a relatively seamless shopping experience across multiple devices

and browsers. Customers can access research as well as shopping carts across multiple devices. For example, Tesco’s South Korean affiliate Homeplus allows customers to shop at Seoul subway stations using their smartphone and then continue shopping with an app if their train arrives before they are done. Whereas the ability to access information across multiple devices adds value in developed markets, the potential value added in emerging markets is even greater if information can be accessed across multiple channels. Although an online retailer in an emerging market can help customers that have online access search through a wide variety of products, it cannot reach customers who are not online. Even though India had over two hundred million internet users in 2014, this number represents a small fraction of the overall population. A retailer with an online presence does not have access to many people without internet access. For the people that are on the internet, an online retailer cannot provide sensory information that is only available when a product is seen, touched, and felt. This factor is particularly important in emerging economies where customers may never have used or even seen many of the products available online.

An omni-channel structure that partners local retailers with online retail has the potential to increase the overall value created by combining the strengths of the two channels in managing information. If local retailers carry a few popular variants of a product, while their online partner carries all other variants, customers can physically experience a popular version of the product at the local retailers. If the local partners are linked to the internet through a simple store computer, customers at the store can also be exposed to the entire product variety available online. The partnership is able to provide sensory information at the store to customers that already have internet access, and access to the entire online variety (through the store computer) to customers that do not have internet access—something neither channel can do on its own.

A major challenge for online retailers in emerging markets has been the inability or unwillingness of customers to use credit cards for shopping online. A small minority of customers has credit cards and even they are reluctant to put financial information online. As a result, online retailers have been forced to offer cash on delivery (COD), in which consumers pay the courier upon delivery of the product. Not only is this option expensive to execute, it also creates a delay as

courier companies hold the money for some time. This is where a partnership with local retailers can help an online player reduce the cost of handling cash payments. Any growth in cell phone payments that are accepted at local retailers will make fund flows even more effective.

### The strengths and weaknesses of each channel for product flows

The biggest gains in supply chain surplus, however, are likely to accrue from the more effective flow of products using a combination of the centralized online and decentralized local retail channels. It is through improved product flows that the complementary strengths of online and local retailers can come together to create a supply chain that provides all types of products at low cost to the consumer.

#### Strengths of the online channel for product flows

The biggest strength of the online channel is its ability to provide a wide variety of products while keeping all costs other than transportation quite low. A comparison of the 2013 financials of the online diamond retailer Blue Nile and the brick-and-mortar jewelry retailer Tiffany highlights the relative strengths of the online channel. Whereas Blue Nile offered over a hundred thousand diamonds from its site in 2013, a typical Tiffany store carried well below a thousand stones. Blue Nile was able to offer this wide variety while turning its inventory more than ten times per year (relative to the cost of revenue). In contrast

Tiffany turned its inventory less than once a year. Blue Nile's ability to aggregate its global inventory at two distribution centers allowed it to carry much less inventory than Tiffany which had to carry inventory at almost 300 stores. Blue Nile further lowered its inventory by obtaining many diamonds from suppliers only after the customer committed to a purchase.

Blue Nile's online model also allows it to have a much lower investment in physical infrastructure compared to Tiffany which has invested in hundreds of stores. In 2013, Blue Nile generated about \$44 of revenue per dollar invested in its property, plant, and equipment (PP&E). In contrast, Tiffany generated less than \$5 of revenue per dollar invested in PP&E. Blue Nile is also able to carry fewer employees per dollar of revenue than Tiffany because of its centralized operating model. Whereas, Blue Nile employees at its two warehouses are kept busy fulfilling a stable stream of orders, Tiffany employees are often idle because customer arrival at its stores is much more sporadic and unpredictable. This results in a much lower selling, general, and administrative (SG&A) expense for Blue Nile. In 2013, Tiffany had SG&A of over 50 % of revenue, whereas Blue Nile had SG&A of only about 15 % of revenue. The only cost where Blue Nile is likely to be worse than Tiffany is the cost of shipping. Whereas Tiffany only spends on transportation to replenish its stores, Blue Nile must deliver each package to individual customers at a much higher cost. The cost of outbound transportation is less significant for diamonds, however, given the high value of the product being shipped.

Figure 2 contains a rough estimate of the different costs for Blue Nile and Tiffany for a diamond that

**Fig. 2** Costs associated with selling a diamond that costs \$3,000 based on Blue Nile and Tiffany ratios from 2013 annual reports

	Online Channel (Blue Nile)	Brick-and-Mortar Channel (Tiffany)
Cost Price	\$3,000	\$3,000
Retail Price	\$3,685	\$7,151
Inventory Turns	10.61	0.73
Holding Cost (at 20%)	\$57	\$826
Required Investment in PP&E	\$68	\$1,517
SG&A Costs	\$568	\$3,612
Outbound transportation Cost (Included in SG&A)	About \$100	None

costs \$3000. The retail price, holding cost, PP&E, and SG&A in Fig. 2 are calculated based on the ratios for each firm from their 2013 annual reports. The outbound transportation cost for Blue Nile is based on a conversation with a FedEx store. A comparison of the numbers in Fig. 2 clearly shows that Blue Nile's online model has a much lower cost structure (both in terms of investment and operating cost) than Tiffany when it comes to selling diamonds and jewelry. What characteristics of diamond sales result in the online channel having lower cost?

The three key characteristics that result in lower costs for the online channel are the level of demand, its uncertainty, and the value of the product. A typical Tiffany store sells at most a few diamonds a week. This demand is also highly unpredictable with large fluctuations from one week to another. In contrast, each Blue Nile warehouse sells hundreds of diamonds each week and the overall demand is more predictable than at any Tiffany store. Finally, diamonds are a high value product where the cost of transportation is a small fraction of product value (see Fig. 2) while the cost of holding diamonds in inventory is large (because of the capital tied up). The slow moving, unpredictable nature of the demand increases the cost of serving a customer through the brick-and-mortar channel because of high inventory costs as well as the higher cost of infrastructure and employees.

Then what allows Tiffany to be profitable? The key success factor here is the customer willingness to pay a premium for shopping at Tiffany. In 2013, Tiffany achieved a high gross margin of about 58 percent from its customers, which allowed it to sell for \$7151 a stone that it purchased for \$3000 (see Fig. 2). This was significantly higher than the gross margin of any other jewelry retailer. Without this customer willingness to pay a premium, it would have been difficult for Tiffany to be as profitable. For a brick-and-mortar retailer to be profitable when selling slow moving, unpredictable, and high value products, the retailer must add value to customers in a way that they are willing to pay a premium for shopping at this channel. Without the additional customer willingness to pay, it is very hard to be profitable. This problem was evident during the economic downturn of 2008 when several jewelry retail chains such as Friedman's declared bankruptcy and others such as Zales endured several years of losses. Customers were unwilling to pay a premium for their brand and service but these retailers

were stuck with a relatively high cost structure given their brick-and-mortar supply chain structure.

#### Strengths of the brick-and-mortar channel for product flows

The biggest strength of the brick-and-mortar channel is its ability to provide a limited variety of fast moving products at low cost. In a 2011 article, Ron Lieber of the *New York Times*<sup>1</sup> compared Costco and the Amazon subscription service (which provided a fifteen percent discount off the regular price) in terms of the price of regularly used household products such as diapers, detergent, and paper towels. The comparison showed that "Costco was tied or cheaper (in terms of price) on every item, occasionally by a lot." Costco is able to price products like diapers lower than Amazon because for these products Costco's brick-and-mortar channel has lower cost than Amazon's online channel. A comparison of the 2013 financial statements for Costco and Amazon highlights the strengths of the brick-and-mortar channel.

In 2013, Costco turned its inventory 11.6 times a year whereas Amazon turned its inventory 7.3 times a year (Amazon's numbers would be worse if we excluded their cloud business and focused only on their business selling products) despite the fact that Costco had about eight times as many locations as Amazon. Despite more locations, Costco was able to generate \$7.6 in revenues per dollar invested in PP&E, while Amazon generated \$6.8 in revenue per dollar invested in PP&E. The biggest difference in costs, however, was in SG&A. Whereas Costco achieved SG&A of 9.6 percent of revenue in 2013, Amazon had SG&A of 26.2 percent in the same year.

Figure 3 contains a rough estimate of the different costs for Amazon and Costco for a box of diapers that costs \$30. The retail price, PP&E, and SG&A in Fig. 3 are calculated based on the ratios for each firm from their 2013 annual reports. Given that diapers are a fast moving product, we assume that Amazon is able to turn its diaper inventory twice as fast as its average inventory in 2013 (i.e., we assume that Amazon turns its diaper inventory 14.6 times a year as compared to its average of 7.3 inventory turns in 2013). The holding cost in Fig. 3 for Amazon reflects this

<sup>1</sup> R. Lieber, "Adding it up: Amazon Ship vs. Costco Shop," *New York Times*, March 4, 2011.

**Fig. 3** Costs associated with selling a box of diapers that costs \$30 based on Amazon and Costco ratios from 2013 annual reports

	Online Channel (Amazon)	Brick-and-Mortar Channel (Costco)
Cost Price	\$30	\$30
Retail Price	\$41.22	\$34.31
Inventory Turns	7.3	11.6
Holding Cost (at 20%)	\$0.41	\$0.42
Required Investment in PP&E	\$6.06	\$4.53
SG&A Costs	\$10.81	\$3.30
Outbound transportation Cost (Included in SG&A)	\$3.63	None

assumption. Our estimate of outbound transportation costs in Fig. 3 is from the ratios in Amazon's 2013 annual report. We assume that the outbound transportation costs (as a fraction of revenue) for diapers are about 8.8 percent, the same as the 2013 average for Amazon (though it can be argued that diapers are likely to have a higher outbound transportation cost as a fraction of revenue). A comparison of the numbers in Fig. 3 clearly shows that Costco's brick-and-mortar model has a much lower cost structure than Amazon when it comes to selling diapers and detergent. How does Costco achieve lower costs despite a brick-and-mortar infrastructure?

The key to its lower costs is that Costco sells a small variety of fast moving products that have low value relative to transportation cost. As Fig. 3 shows, Costco needs only a few weeks of diaper inventory to meet demand, despite having a decentralized brick-and-mortar model. For fast moving, predictable products like diapers, Amazon is unable to do much better than Costco in terms of the amount of inventory it needs to carry. Overall Amazon has a worse inventory performance than Costco because it carries a greater variety of slow moving items as well. Observe that for fast moving and predictable items like diapers, the comparative inventory performance between the two channels in Fig. 3 is very different than for slow moving and unpredictable products like diamonds in Fig. 2. Whereas the decentralized channel can match the inventory performance of the centralized channel for fast moving, predictable products, it cannot do so for slow moving, unpredictable products.

Amazon's biggest cost disadvantage relative to Costco is in the cost of fulfilling and shipping an order

to the customer home. As Fig. 3 and a careful review of Amazon's 2013 annual report reveals, fulfillment and outbound transportation cost is a significant factor. Outbound shipping costs of more than \$6.6 billion on revenues of \$74.45 billion (this includes revenues for cloud services and other non-product sales) represented over 8.8 percent of revenue for Amazon in 2013. The outbound transportation cost disadvantage is magnified for fast moving, low value products like diapers. Shipping a large pack of diapers can easily cost 20 percent of the revenue from the product (in Fig. 3 we have used the Amazon average. A check of the UPS web site indicated that this shipment would have cost more than twice our estimate). In contrast, shipping a four thousand dollar diamond (as Blue Nile does) costs around three percent of the revenue from the product. This comparison indicates that brick-and-mortar supply chains have lower costs when it comes to selling fast moving products that have high shipping costs relative to value.

Should the online channel sell any fast moving, predictable, low value products? The answer lies in Ron Lieber's conclusion "I happen to value 2 hours of my time (which is how long a trip to Costco takes) at a lot more than the \$43 I would have saved by shopping at Costco." Lieber is willing to pay a premium to buy products like diapers online because of the convenience. The value of the convenience of home delivery in emerging markets can vary significantly based on the buying power and location of the customer. An affluent customer in an urban area like Kolkata may place a significant value on home delivery because it saves time and is convenient. The convenience may be significant for heavy, hard to carry items such as large

**Fig. 4** Potentially profitable strategies for various product/channel combinations

	Online centralized model	Brick-and-mortar decentralized model
Fast moving, predictable, low value products	Compete for customers willing to pay premium for convenience by offering home delivery	Compete for customers willing to come to store based on low cost
Slow moving, unpredictable, high value products	Compete for customers willing to wait for delivery based on low cost	Compete for customers willing to pay premium for service or immediate availability

bags of rice. In contrast, a less affluent customer may be happy to visit a retail location if it results in a lower cost. In the absence of a customer willingness to pay this premium for convenience it will be difficult for online players to profitably sell products like diapers and detergent and have them delivered at home. The online channel will have great difficulty competing on cost with the brick-and-mortar channel for fast moving, predictable, low cost products.

The transportation cost disadvantage of the online channel is exacerbated in emerging economies where the transportation infrastructure is weaker and there are plenty of low value products. For example, a 75 g packet of biscuits in India costs as little as five rupees (about 8 cents). Shipping such a product is likely to cost an online retailer more than its retail price.

Handling product returns (reverse flows) is another area where the decentralized brick-and-mortar channel is much more effective than the online channel. Not only is the rate of return higher when customers shop online, but also the cost of returns is much higher when returns have to be shipped back to a centralized distribution center.

### Competing with an omni-channel supply chain

Our discussion in “[The Strengths and Weaknesses of Each Channel for Information and Fund Flows](#) and [The Strengths and Weaknesses of Each Channel for Product Flows](#)” has highlighted the relative strengths of the online and brick-and-mortar channels with regards to information and product flow. As we have observed, the two channels have complementary strengths with regards to information and product flows. Customers can also be divided into two

categories based on the extent to which they value the convenience of home delivery and the extent to which they are willing to put in some effort to get the product. This separation allows us to articulate effective omni-channel strategies based on product characteristics and customer preferences (Fig. 4).

For customers aiming for low price, the most popular products should be sold through the decentralized brick-and-mortar channel with more niche variants available online. Popular products can also be sold online, but this offering should be provided at a premium, targeting customers who value the convenience of not having to visit a store. Similarly, niche variants can be sold through the brick-and-mortar channel but only if there is a segment of customers willing to pay a premium for this service and product availability.

If customers are willing to put in some effort, the cost of both channels can be improved. The delivery cost for the online channel can be reduced with the use of pickup locations. The use of pickup locations could make the online channel more price competitive for standard products. The inventory and the facility costs for the brick-and-mortar channel can be reduced if it is used as a showroom. The brick-and-mortar channel can be more price competitive for a wide variety of niche variants when used as a showroom for these products. Showrooms and pickup locations can add further value for the customer as well as the online retailer by also serving as a collection point for any returns.

From an information perspective, a customer should have access to the entire product variety whether they are online or at the store. A quick scan of a product at a store should expose the customer to all variants even if they are only available online. A



customer can then purchase at a store not only those items that are stocked locally but also those that are stocked in a central location. Similarly, a customer shopping online should be able to see those products that are available at a local store and can be purchased immediately if desired. Such an omni-channel structure is likely to offer great value to the customer while reducing the cost of fulfillment.

### Structuring an omni-channel supply chain in emerging markets

In emerging economies such as India, local retailers and online players can come together to effectively serve all customer segments across all product categories. They can come together to execute on the strategies in Fig. 4. Consider an online Indian retailer like Flipkart. The company is able to offer a lot of product variety but spends a significant amount to distribute its products to customers who order online. Small local retailers, in contrast, are unable to offer variety but have the advantage of being close to the customer. An omni-channel structure that is formed by partnering Flipkart with local retailers can be effective in serving a wide set of customer needs at low cost. Consider a product like an iron for clothes. A cursory view of the Flipkart website (on June 14, 2015) showed well over 300 choices, with some selling at just over 400 rupees (about \$7). Whereas Flipkart can effectively provide the wide variety at low cost, it may be more effective if a few of the popular variants (say 2–5) were carried by local retailers in partnership with Flipkart. In fact, Flipkart could suggest the merchandise mix its local partners should carry based on the variants that are particularly popular in each neighborhood. Flipkart and its local partners together could offer a complete omni-channel experience and serve a wide variety of customers.

Local customers who wanted to pay by cash and did not have internet access could come to the local store and buy the popular models immediately but could also access the many variants that were not carried at the store but were available online. If they chose a variant not available at the store, they could have it delivered at home (if they valued convenience) or could pick it up at the store (if they preferred low price) once it was delivered from the Flipkart warehouse. Similarly, online customers could gain by

getting access to a popular variant quickly at a local store at low price if they picked it up themselves or with home delivery if they valued convenience. Rather than playing a zero sum game by competing against each other, a hybrid omni-channel structure allows both Flipkart and the local retailers to gain by complementing each other's strengths. In this hybrid approach, the local store serves as a showroom (to allow a customer to access greater variety) as well as a pickup location (to allow a reduction in delivery cost) for the online retailer while the centralized distribution centers of the online retailer serve as providers of variety for the local store. The omni-channel approach allows Flipkart to reduce its distribution costs while local retailers gain access to the wide variety of products offered by centralized storage. Ultimately, customers gain the most because the omni-channel supply chain provides them a wide variety of products at low cost. Such an omni-channel structure would allow emerging economies like India to use the strengths of existing local retailers and skip the unnecessary intermediate step of creating retail structures like Circuit City or Borders.

Our suggested combination of the online channel and local retailers for emerging markets is summarized in Fig. 5. The combination can serve both convenience seeking and price sensitive customers effectively.

An experiment closely aligned with the structure proposed by us has recently been proposed in India by Amazon.<sup>2</sup> The system, called Udaan, is planned initially for the state of Rajasthan where Amazon will use “neighborhood stores and small retailers to create thousands of points of sale, at which customers can come to place and collect orders.” Over time, such an omni-channel structure has the potential to serve all customer segments effectively in emerging markets.

### Conclusion

We argue that a successful omni-channel structure does not need to create all capabilities in every channel but instead assigns to each channel products and tasks

<sup>2</sup> J. Plucinska. “Amazon plans to distribute goods through thousands of brick-and-mortar stores in India.” *Time*. <http://time.com/4107649/amazon-udaan-stores-india/> (Nov 10, 2015). Accessed on November 20, 2015.

**Fig. 5** An omni-channel combination for emerging markets using both the online channel and local retailers

	Online Channel	Local Retailers
Convenience seeking customers	Compete on convenience with home delivery of standard products	Compete on cost & convenience with home delivery of standard products
	Compete on cost with home delivery of high value, high variety products	
Price sensitive customers	Compete on cost using local retailers as pickup locations for both standard as well as niche products	Compete on cost for standard products
		Be cost competitive for high value, high variety products as a showroom for the online channel

that the channel is effective at handling. Firms thus need to consider their entire inventory of information, fund, and product flows and assign responsibilities to channels in a way that is segmented to align with their strengths. This view can be particularly effective in emerging economies, where intermediate retailing models like Borders and Circuit City have not yet been built and governments are struggling with the likely impact of modern retailing on small mom-and-pop retailers. In these countries, omni-channel retailing offers a unique opportunity that combines the strengths of local retailers with those of online players to benefit both sides. These countries will have to do a lot of work both in terms of policy changes by the government and investment in improved information and fund flow infrastructure at small retailers. If successful, however, the potential economic and social benefits are significant.

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