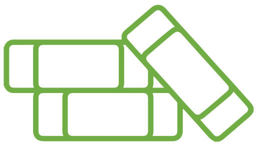
Part 2: **Reshaping Markets: How is Value Configured?**



Shape

4 Marketplaces: Better, Faster, Stronger? Removing Frictions in E-commerce

It is evident for us to begin this second part with commerce and how digital reshaped configurations for business. Digital technologies enhanced the potentialities of trading and interconnecting in different ways with respect to both buyers and sellers. With that being said, we observe the emergence of a dominating model for e-commerce: marketplaces progressively replacing the traditional retailer model. What may be the reason behind this, and what are the characteristics of a business model in underlying marketplaces? Paraphrasing Daft Punk, are they better, faster and stronger?

4.1 The Rise of Digital Merchants

Modern e-commerce was kick-started with the emergence of Amazon and eBay. In 1995, Jeff Bezos launched Amazon as an e-commerce platform for books. In the same year, Pierre Omidyar launched an auction platform that would later become eBay. Four years later, Jack Ma founded Alibaba in 1999. Alibaba became profitable in 2002, with Amazon following suit the very next year.

These companies heralded an e-commerce revolution that encouraged other players to enter the fray. While online sales stood at around 5% of overall retail sales in the US in 2007, they reached 16% by the year 2019, with US consumers spending more than $600 billion online. At the global level, Grand View Research[1] (2020) estimates that the global e-commerce market stood at around $9.09 trillion in 2019, with estimated growth at a compound annual growth rate of 14.7% from 2020 to 2027.

So, What Propels the Rise of E-commerce?

At the 2011 *Fórum E-Commerce in Brazil*, eBay's Vice President of Corporate Strategy at the time, Jean-Francois Van Kerckhove, identified five key trends eBay believed would shape the future of e-commerce, namely mobile, local, global, social and digital.

While those five trends are still relevant, it is mobile technologies that have fundamentally changed the way consumers shop online. Mobile technology is an essential consideration during the creation and evolution of any e-commerce business.

1 Grand View Research Report, May 2020, "E-commerce Market Size, Share & Trends Analysis Report By Model Type (B2B, B2C), By Region (North America, Europe, APAC, Latin America, Middle East & Africa), And Segment Forecasts, 2020–2027".

https://doi.org/10.1515/9783110762556-004

French e-commerce company Vente-Privee (Veepee), for example, increased sales by 20% just by developing an app for smartphones and tablets that offered a mobile-friendly user experience.

Mobile technology significantly influences e-commerce globally, often in countries that have historically experienced slower technological growth due to limitations in infrastructure and technology. In Africa and parts of Asia, for example, smartphones are popular since they overcome some of the infrastructure limitations, such as the lack of fibre optics. Mobile payment technologies have also enabled businesses to benefit by developing mobile sites that may quickly become profitable.

Mobile also connects the other factors identified by Van Kerckhove. Hence, in digital terms, it enables in-context payments. For instance, in order to continue playing a mobile phone game such as Candy Crush, consumers must make an in-app payment using a touch ID or by credit card, the details of which are stored on the device. With the launch of smartphone wallets including Apply Pay, Google Pay and AliPay, the mobile payment market is destined to grow across the world. The global mobile payment market *was* estimated[2] to be at around $1.14 trillion in 2019 and is expected to grow to about $4.7 trillion by 2025, registering a compound annual growth rate of more than 26%.

The ergonomics of mobile technology are especially important with respect to user experience, as the small size of phone screens limits the number of images that can be displayed on a single page. This means that image dimensions and resolutions must be changed to optimise them for the mobile viewer.

Mobile devices provide digital merchants with the ability to identify the location of their customers, leading to geo-targeted real-time ads. However, not everyone wishes to be tracked physically. Hence, if marketers don't want to alienate their consumers, they must keep in mind the cultural sensitivities relating to certain types of marketing. In Europe, for instance, using geolocation technologies for tracking is often considered invasive.

Amazon Go – a cashless and cashier-less retail store – epitomises the mobile and e-commerce revolution. Shoppers download an app on their smartphones that identifies them when they enter such a store. Cameras then track their movements and check the items they put in their baskets. When done, the customer simply walks out of the shop, receiving a receipt for their items through the app. This payment system is even more invisible than a one-click system.

2 See Mordor Intelligence Report 2021 on "mobile payments market – growth, trends, covid-19 impact, and forecasts (2022–2027)".

The Long Tail and Digital Merchants

In *Wired* (2004), and then in his book, *The Long Tail: Why the Future of Business Is Selling Less of More* (2006), journalist Chris Anderson coined one of the most important economic concepts behind e-commerce. The Long Tail concept is against the traditional retail strategy of "selling more of a small selection" of inventory. It considers that the future of business lies in selling low-popularity items *(*Figure 4-A). As indicated by Investopedia:[3]

> The head and long tail graph depicted by Anderson in his research represents this complete buying pattern. The concept overall suggests the U.S. economy is likely to shift from one of mass-market buying to an economy of niche buying all through the 21st century.

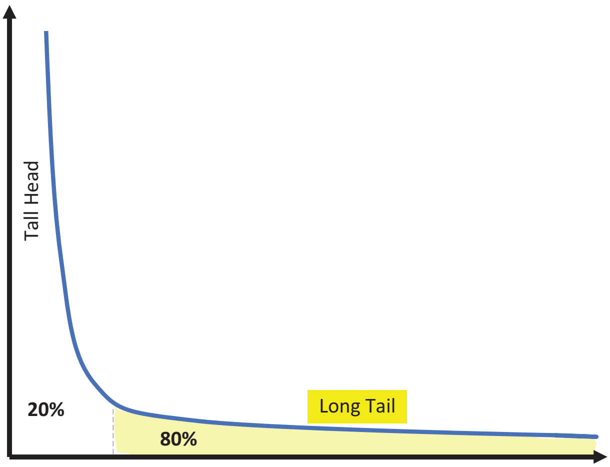


Figure 4-A: The Long Tail Economics.

In other words, "the long tail is a business strategy that allows companies to realise significant profits by selling low volumes of hard-to-find items to many customers, instead of only selling large volumes of a reduced number of popular items" (Investopedia). In order to achieve this, digital must remove the barriers and frictions for marketing and distribution costs, pushing retailers to focus on blockbusters.

As traditional physical retailers possess a limited space to display products, they are restricted in the amount of inventory they can carry in shops. This forces them to carefully select a restricted range of products that they think will sell best to local customers. Typically, this includes "blockbusters" – the most popular products at the time – such as the top 10 books on bestseller lists.

3 See Investopedia dedicated entry on Long Tail, consulted on May 2022.

The rationale for this is that in traditional retail shops, the Pareto principle implies that 20% of the inventory generally generates 80% of sales. Therefore, in a bookstore, J K Rowling's latest novel will entice several customers, but a niche book regarding French rugby players will not. Having fewer, low turnover non-blockbusters is also more efficient in terms of inventory management.

This is where the digital business model enters the picture. Digital merchants, such as Amazon, do not face the same limitations as physical retailers. Hence, by aggregating smaller sellers who manage the inventory for them, they can offer products that physical retailers cannot. This gives them the advantages of both long-tail and traditional retail strategies.

Pure digital retailers are at the extreme end of this continuum, and therefore, can offer a much greater array of inventory than those selling physical products. For example, a physical music shop might not be able to stock a rare recording of a 1991 Nirvana concert. However, for a pure digital retailer, it is not a problem as the inventory cost of stocking this is minimal, meaning that they can offer it alongside mainstream products, such as Lady Gaga's latest album. For pure digital retailers, the cost of offering a bestseller or a rare article is the same.

Despite such benefits, this does not imply that digital retailers do not face challenges. For instance, digital retailers have difficulties with digital rights management and contracts with record companies. Exclusivity agreements between artists, record companies and digital music providers, such as iTunes or Spotify, can become obstacles for digital retailers. Hence, a trade-off for digital merchants is always observed.

When considering e-commerce, digital merchants such as Amazon, eBay or Alibaba usually first come to mind. However, these are just part of a "digital continuum" that stretches from resellers who purchase inventory and have margins based on sales and profits at one end to pure multi-sided or two-sided platforms facilitating interactions between buyers and sellers at the other. Following are some of the main categories of such digital merchants in increasing order of their digital nature.

Business Models Behind E-retailing

As specified in Figure 4-B, we can range e-retailing business practices according to the digital nature of products and services distributed.

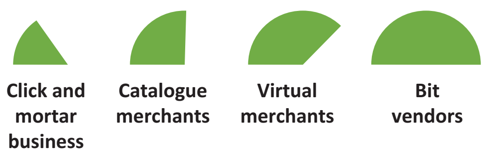


Figure 4-B: Continuum of eRetailing Practices Regarding the Digital Nature of Products/Services.

Click-and-mortar businesses – These are physical businesses that have become hybrid by extending their product showrooms online. Their customers either order items online for home delivery or collection at a nearby store. Such businesses often face inventory tracking and supply chain challenges due to the separation between their physical and online systems. Barnes and Noble is a classic example of such challenges.

Starting as a bricks-and-mortar business, the bookstore chain Barnes and Noble began selling through a website that was completely disconnected from its physical shops. However, salespeople had difficulty explaining to customers wanting to return an item they had purchased online why they could not do so in-store. To remove this source of frustration, Barnes and Noble merged their supply chain so customers could return online purchases in-store. This required the resolution of complicated internal issues to synchronise accounting systems between online and physical retail outlets. Following this initiative, customer service improved greatly.

Catalogue merchants – These are the businesses that began by mailing paper catalogues to customers who ordered goods by mail or phone. Such businesses were required to reinvent themselves to stay competitive in the digital age by moving into the e-commerce arena, where they used the internet to reach a wide customer base and automate their ordering processes. Argos in the UK and Ireland is a prominent example of a catalogue merchant.

Virtual merchants – These companies are born digital, such as Amazon, Alibaba and eBay, and do not own any physical shops and operate only over the web. Virtual merchants may or may not hold inventory. For instance, while eBay and Alibaba do not hold inventory, Amazon allows its suppliers to use its inventory management system.

Bit vendors – These are digital merchants that deal only in digital goods, such as music, movies, games, or design templates. Key examples of such vendors are Spotify, iTunes and Netflix. The key difference between these vendors and other digital merchants is the cost of inventory. For merchants dealing in physical goods, the cost of maintaining inventory may be quite high, depending on the type of goods. For bit vendors, the variable cost of inventory (once the fixed cost is taken care of) is quite low or even close to zero, since it depends only on the number of bytes of storage required. This implies that they can carry a large range of items for delivery over the internet. However, they also have a demand side limitation in the form of the number of customers owning devices to watch videos or listen to music.

It is possible for a merchant to fit into more than one category. Amazon, for instance, is both a virtual merchant and a bit vendor (e.g., Amazon prime videos, Amazon Web Services). Such cases provide advantages in the form of a captive customer base. Amazon's strategy is to invisibly integrate relationships between merchant types enabling consumers to buy physical products via Amazon retail, view movies on Prime Videos, listen to digital music on Prime Music and download e-books seamlessly on their Kindle device. Amazon has adjusted its value proposition for sellers, rather than buyers, by offering a multitude of services and adapting the distribution process. This allows Amazon to reach customers in a wide range of ways, while simultaneously glueing the customers to their platform.

Brokering: Business Models Behind Marketplaces

However, e-commerce does not only involve selling. Digital brokers are e-commerce matchmaking platforms that bring buyers and sellers together and benefit via a fee or commission from each transaction. Based on their operations, digital brokers may be classified into seven categories.

Marketplace exchanges create business value through their actions, website functionality and platform business model. By acting as brokers who offer a service for trade in the form of intermediation between the buyers and sellers, they facilitate connections between the two. In effect, the marketplace is the product since the goods sold at the marketplace are not part of the business inventory. Orbitz is an example of such a marketplace exchange where consumers are able to search for and book flights, hotels, car rentals, cruises and vacation packages. On such brokerage sites, there are three potential factors to manage – content, reviews and other posted information and the payment system – although not every business will wish to manage them all. Some companies might prefer buyers and sellers to exchange funds directly with each other rather than put their payment system in place.

Buy/sell fulfilment – Unlike marketplace exchanges that focus on the exchange of information, buy/sell fulfilment firms also assist the parties in buying and selling. CarsDirect is one such broker that allows consumers to research, finance, purchase and insure their cars online. Respond.com is another example that connects consumers with local businesses. Amazon also provides buy/sell fulfilment service; however, it is a small part of its e-commerce ecosystem.

Demand collection systems are an interesting strategy for digital brokers. This was pioneered by travel website Priceline.com (now owned by Orbitz) with their "Name Your Price" business model. Initially trademarked and patented to prevent others in the travel industry from using the same mechanism, the model has now been adopted by other digital brokers selling travel and other goods. Under Priceline.com's "Name Your Price" model, a shopper might bid €700 for a week's holiday in France, including accommodation and travel, which, if accepted by Priceline, would be fulfilled as the broker. With margins determined by their ability to form deals with accommodation and travel vendors and in encouraging bids higher than the threshold at which they make a profit from the sale, the success of this strategy relies on an asymmetry of information, as the site does not display the actual price of the accommodation or travel to the customer.

Auction brokers conduct auctions for individuals and businesses. Their business model relies on a listing fee and a commission proportional to the value of the transaction. Auction brokers benefit from information asymmetry since the prices are kept discrete. eBay, in its initial years, completely acted as an auction broker, transitioning to marketplace exchanges in the later years (i.e., facilitating transparent pricing). Auction brokers, such as procureport.com provide reverse auction services in the B2B space when several suppliers can target a single buyer.

Transaction brokers provide third-party payment services that help in completing the monetary exchange online. Companies, including PayPal or Stripe, receive funds from the buyer and verify and transfer them to the seller after charging a small fee. The role of transaction brokers has rapidly increased in the globalised world where the buyers and sellers may be at the opposite ends of the globe. Moreover, such brokers (and digital banks, such as Revolute and TransferWise) provide e-wallets that can be used across geographies without the need for a physical card. The global mobile wallet market has been estimated at $80 billion and is expected to reach $270 billion, registering a compound annual growth rate of 15%.

Search agents collect data from multiple websites and collate it for users to compare. Google Flights, for example, acts as a search agent by curating a single page of flight prices from multiple travel websites. These agents also provide a tool that lets users change their destination on a digital map and immediately receive updated prices. While Google Flights used to charge airlines for the referrals in case of a successful booking, it halted monetising the service in early 2020. While it does not directly provide monetary benefits, Google Flights is still a rich source of data for the company. Moreover, it may also feed into another product, Google Hotels, which is still monetised.

Virtual marketplaces are the online equivalent of a shopping mall. Online marketplaces, such as Amazon, help sellers in setting up their virtual shops, listing the products, providing marketing, completing the transaction, and if need be, delivering the product. A fee is involved at each step, so the company creates value from the entire e-commerce ecosystem. This is further discussed in the following section.

4.2 Key Challenges

Making the Choice of Acting as a Marketplace

Hagiu and Wright (2013) in their article[4] entitled *Do You Really Want to Be an eBay?* Published in the Harvard Business Review illustrated the continuum between resellers and multi-sided platforms and the businesses in between with the advantages of both. They outline four strategic dimensions (Figure 4-C) that businesses must consider when deciding whether to become either a reseller or a multi-sided platform.

Figure 4-C: Four Dimensions to Consider Behind Your E-commerce Business Model. (Adapted from Hagiu & Wright, 2013)

The first dimension is the **scale effect**. If products are high-demand "blockbusters" (toilet rolls, for example), it may be better to operate as a reseller, while low-demand niche products (e.g., organic foods) may be better suited to a multi-sided platform with sellers incurring the expense of stocking and managing inventory.

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4 Hagiu, A. & Wright, J. (2013). Do you Really Want to Be an eBay? Harvard Business Review, 91(3), 102–108.

The **aggregation effect** is the second dimension. Digital merchants aggregate products by showing additional products others have bought alongside each item viewed, such as socks with shoes. With a large selection of inventory, digital merchants can identify and offer such complementary items easily. Since they can offer products from many sellers, multi-sided platforms can take advantage of the aggregation effect. Resellers have the cost of purchasing inventory, which limits the number of complementarities they can offer.

The third dimension is the **buyer/seller experience**. This includes things such as fast delivery, a favourable returns policy and product availability. Resellers acquire more opportunities to benefit from the buyer/seller experience since they own the inventory, which provides them with greater control over the customer relationship, the quantity and quality of goods in stock and after-sales service. As multi-sided platforms facilitate interaction between buyers and sellers, they must provide tools to match up both parties. The level of interaction varies from business-to-business. On Amazon, for instance, buyers do not interact directly with sellers. Although the seller is identified on the product page, all interactions occur through Amazon's user interface. Conversely, buyers on eBay can interact with sellers through a messaging system that lets them ask questions prior to purchase.

The fourth and final dimension is **market failure**. This refers to the uncertainty surrounding product quality and the reliability of buyers or sellers on a site. For example, with AliExpress, it is most probable that the buyer does not know the seller, and so they may be wary of them and the quality or authenticity of their product. In this case, resellers have an advantage as they can monitor product quality more easily.

However, it may be noted that the classification between resellers and multi-sided platforms is not straight-jacketed and a company may lie anywhere within the continuum. For instance, one of these "hybrid" retailers is Amazon, which is a reseller for some products and a pure marketplace for others. Amazon acts as a reseller for the most demanded product, whereas it acts as a purely digital merchant for less demanded products. As Amazon fulfilment services offer sellers the added benefit of using its warehouse and shipping facilities, it can enforce quality control on the buyer/seller experience via its Prime membership program.

Apart from the four factors discussed earlier, a company's maturity and its resources are also considered crucial factors. A start-up may wish to become a reseller but might not have the working capital to purchase initial inventory, which makes being a multi-sided platform more attractive. However, as previously stated, multi-sided platforms may face chicken-and-egg, ghost town and mutual baiting problems. Recruiting potential buyers and sellers also poses a serious challenge for multi-sided platforms. This makes them dependent on sellers who are offering quality goods that keep attracting buyers and on sufficient volumes of returning buyers to maintain the site's attractiveness to sellers. Consequently, multi-sided platforms must create a trust mechanism in order to secure the quality of the relationship if the business model is to be successful, which requires huge efforts.

Hence, Hagiu and Wright (2013) note that while the multi-sided platform business model may be seductive, entrepreneurs should not overestimate its attractiveness in comparison with a more traditional reseller business model. Zappos, an e-commerce shoe retailer now owned by Amazon, is a case in point. Zappos began as a multi-sided platform but faced deep-seated customer relationship and user experience issues caused by sellers that hit consumer trust in the business. This led to the company's decision to rebuild customer confidence by becoming a reseller so that it could better monitor and manage customer relationships and user experience.

Apart from the buyer/seller relationship, the volume of sales is a significant aspect, as this determines whether developing an e-commerce site is worthwhile. If the anticipated sales volume is low, the entrepreneur may simply take advantage of Amazon's shipping infrastructure and save on the cost of establishing a dedicated platform.

Moreover, the choice between being a digital merchant and physical retailer is not mutually exclusive. A manufacturer could, for instance, establish an online shop as an additional distribution channel that is not the primary channel for selling goods. Alternatively, if a business sells mostly online, it may add physical sales alongside.

E-commerce is Efficiency-Oriented: KPIs Matter

Several of the most established digital merchants – eBay, Amazon and Alibaba – have existed for over 20 years. They were among the first to use the internet to build their customer base. They also established a well-documented set of KPIs for assessing digital merchants' performance. Such metrics enable digital merchants to understand the way in which their revenue stream is generated and structured as well as evolving in terms of volume. Generally, these are similar from one business to the next, although many companies may use additional metrics, the most common of which are listed below. Since a plethora of literature is available on e-commerce KPIs, only the most important are discussed as follows.

1. **Website KPIs** – *Unique visitors, total visits, page views, new visitors, time on site per visit, page views per visit*.

The numbers of unique visitors, total visits and page views in general indicate the attractiveness of a website's selection to customers. While new visitors may reflect the success of a new marketing campaign, returning visitors may be the results of a retargeting campaign. Time on site per visit informs the company on the level of customer engagement. Higher time on site and higher page views suggest that the visitor finds the offerings interesting and spends time on knowing more about the same.

2. **Sales KPIs** – *New customers, conversion rate, checkout abandonment, cart abandonment, checkout abandonment, total orders per day/week/month, average order value.*

The conversion rate is based on the number of new visitors versus new customers or visitors to the site who make a purchase. The number of customers depends on the conversion rate between the numbers of visits and baskets and orders created. It may be expressed as follows:

$$Conversion\ rate\ =\ (Number\ of\ Orders/Number\ of\ Visitors)^{*}100$$

For instance, if the number of visitors on the website is 2,000 and the number of orders is 100, the conversion rate would be (100/2,000)*100 = 5%

In practice, the conversion rate varies from 0.5% to 6%, with 2% or above considered healthy.

Checkout and cart abandonment are crucial for determining the number of visitors who do not follow through with their purchases. It is estimated that digital merchants lose around $18 billion in terms of yearly sales revenue, with a cart abandonment ratio of around 70%. High cart abandonment reflects possible issues with the shipping cost, delivery time, payment method or technical issues that must be sorted by companies.

Amazon's login system is one way of payment and shipping processes, enabling faster checkout by using saved customer details to remove the need to re-enter address and payment details. This can also help in avoiding cart abandonment – online shoppers frequently add items to their carts, see the total price and shipping time, and abandon the transaction, leaving the site without any purchase. By showing total shipped costs and delivery times on product information pages, Amazon helps prevent the notion of cart abandonment.

The total number of orders per day, week or month is important for business, along with the average order value. With average order value, companies can gain insight into their pricing and selling approaches. For instance, if a company sells a product at four different price points ($15, $25, $35 and $50), and the average order value is around $20, it may be said that most orders are in the lower range and of a single unit of product. In this case, the company may opt for cross-selling or upselling strategies.

3. **Operational KPIs** – *return rate, gross margin, order turnaround time, open cases.*

High return rates or numerous open customer service cases suggest problems with the products themselves or after-sales management. While the return rate for brick-and-mortar stores is estimated at around 10%, for e-commerce, the return is estimated to be double at 20%. This is a dual cost for the company, first being the forgone revenue due to the cancellation of sales, while second being logistic costs in acquiring the product back. Hence, the companies keep an eye on the return rate to ensure that they do not lose substantial amounts of money due to excessive returns.

Interestingly, many companies have used lenient return policies as a marketing tool. Zappos and Amazon have a lenient and simple return policy with virtually no onus on the customer to "prove" any problem with the product or the delivery. This results in a higher level of trust in the company, and the customer does not think twice before ordering with the company.

4. **Digital Marketing KPIs** – *Facebook* "talking about this" *and new likes, Twitter retweets and new followers, Amazon ratings, open rate, click rate, conversion rate, referral sources (percent from search, direct, e-mail, pay-per-click), pay-per-click cost per acquisition, pay-per-click total conversations*.

Since the beginning of digital marketing, online display advertising and search engine optimisation remain the top two choices for marketers. Measuring the pay-per -click cost, the cost-per-acquisition or the total conversion rate remain significant as they indicate the success of digital marketing campaigns. However, recently, social media have emerged as the next preferred channel for marketers since 2017. Consequently, social media marketing metrics, such as likes, mentions and follows have become useful KPIs for digital merchants. Nonetheless, businesses also employ techniques such as sentiment analysis to ensure positive word-of-mouth (WoM) as well as keeping eye on whether their brand is trending for wrong reasons. Apart from social media, WoM is also measured by traditional KPIs, including ratings, reviews and referral sources.

4.3 Key Takeaways and Further Considerations

1. A variety of business models for digital merchants, from pure resellers to multi-sided platforms, exist. A company may choose to confine itself within a specific business model (e.g., Zappos) or use a hybrid business model (e.g., Amazon).
2. Digital merchants often draw from the long tail of retail, i.e., selling a wide variety of low-popularity items to a lot of different people by covering all the niche markets.
3. KPI measurements play a key role in performance measurement and operations of digital merchants.

Do You Have an Integrated Touchpoint Architecture?

In the long run, digital merchants must overcome two problems if they wish to remain successful. The first is how to differentiate themselves from other digital merchants. A digital merchant will not have the traction required to successfully launch without a unique selling point associated with a product, user experience or customer loyalty, thereby making it stand out from competitors. This is a continuous exercise since the uniqueness does not last forever. Etsy, for example, once stood out as a marketplace for handcrafted goods. It now has several competitors, including Amazon.

The second problem is commoditisation. How can businesses differentiate themselves if the product or service they offer is standardised? Platforms selling flight tickets encounter this issue. As the product remains the same everywhere, ease of the buying process (SEO & UX) and price are the only differentiators. Since price primarily influences buyers' decision-making, quality of user experience, post-sale support, shipping time and other factors have a minute effect on revenue generation. In this situation, the only way to maximise revenue is through volume of sales rather than holding a large inventory selection.

Provided the convergence of e-commerce and ever-expanding ecosystems of products and services, many businesses seek to answer the question of the possibility for a digital merchant to differentiate itself. Trust impacts consumer experience and the relationship between the business and the customers. Hence, entrepreneurs must decide whether to offer personal shopping services and post-sale contact or consumer support. While customer journey is not a new tool in marketing, it gains a new meaning in digital context as digital merchants need to design different touch points during a customer journey.

Originally proposed by Procter & Gamble in the early 2000s, "moment-of-truth" refers to key customer interaction with the product and service. Earlier versions of the customer journey focused on the moment of purchase (the first moment-of-truth) and the consumption (the second moment-of-truth) of the product or service. In a digital context, the first moment of truth leads to merchants being experts in digital design to maximise conversion. Amazon's "1-Click" button for ordering minimises customers' effort. The 1-Click button was key in providing Amazon with a competitive advantage. R. Polk Wagner, a professor at the University of Pennsylvania Law School and an expert on patent law, explains: "It allowed Amazon to show customers that there was a good reason to give them their data and the permission to charge them on an incremental basis. It opened other avenues for Amazon in e-commerce. That is the real legacy of the 1-Click patent."[5] Hence, the 1-Click button was exceptionally patented, as the entire process as opposed to a specific single invention gave Amazon two major competitive advantages. It provided Amazon with a database of customer payment and preference information that no other retailer or Internet website could compete with. Second, the 1-Click process helped to minimise shopping cart abandonment by making the purchase fast and frictionless, leading to a dramatic increase in the conversion rate.

5 https://knowledge.wharton.upenn.edu/article/amazons-1-click-goes-off-patent/ as accessed May 20, 2022.

The advent of digital technology added at least two other steps: one moment before and one moment after. The moment before the purchase, termed zero moment-of-truth by Google, refers to when customers search online regarding the product or service. This means that merchants must adeptly use Search Engine Optimisation (SEO) and Search Engine Advertisement (SEA) to become amongst the first on the Search Engine Results Page (SERP) on the path-to-purchase of the Internet user. There are about ten organics (non-paid) results on every SERP and between three and six advertised (paid) results. Several studies have analyzed how consumers engage with the SERPs based on different keywords. Those studies reveal that the first organic search result yields amazing results (Click-Through-Rate of 19% to 30% on average). Being on the first SERP, either via organic results or paid results, is the condition sine-qua-non for driving traffic to the website.

The moment following the consumption, termed third moment-of-truth, refers to when customers share their experience on social media. It's linked to the power of Peer-to-Peer (P2P), which is deemed to be one the most efficient ways of advertising products. According to a recent report from Kantar Media,[6] 93% of consumers trust friends and family as a source of information regarding brands. This is to be contrasted with advertising, which is the least trusted at only 28%. Retailers can leverage this using referral programs wherein they credit existing customers points, cash, or discount for each invited friend who makes a purchase. A good example of P2P marketing. It is these moments of truth that digital merchants must also manage successfully.

Moreover, as Muzellec and O'Raghallaigh (2018) argue, recent advances in mobile technology have resulted in ubiquitous moment-of-truths that occur simultaneously, often on the same device. In other words, all four stages – search, purchase, consumption, and sharing – may happen within a single set of transactions. Moreover, modern retail is increasingly becoming channel agnostic, with a need for a consistent experience across online, mobile and offline channels. This calls for an integrated touchpoint architecture across customer journeys that also integrate Delivery and Return (see Figure 4-D).

Amazon app is an excellent example of such ubiquitous moment-of-truth and integrated touchpoint architecture. Instead of searching on a search engine, customers directly visit the app or the website to search for the product or service. They are then able to compare across offerings and make purchase decisions. Oftentimes, their contact and payment details are saved on the platform, making purchasing just a matter of clicks. While physical products would take time to get delivered, digital products (such as eBook or a Game) would be available instantly. At the end of the transaction, the customer can rate the product as well as the vendor. Moreover, if they are not happy with their purchase, the same app or website can be used to cancel the

6 See Kantar Report on Media & Me, as accessed on May 2022.

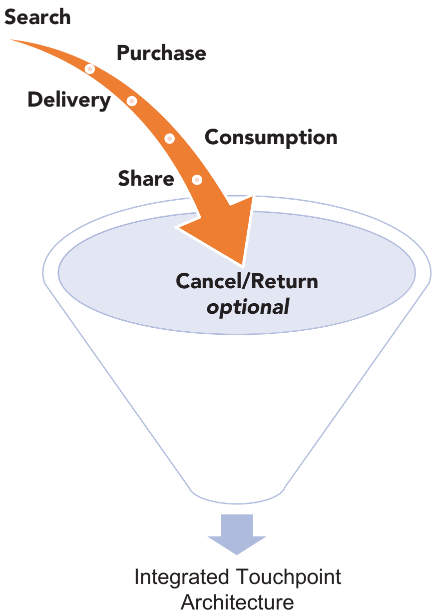

Figure 4-D: Towards an Integrated Touchpoint Architecture.

order or return the product. Thus, by providing an integrated touchpoint architecture, the company keeps the customer on its platform.

Google runs a think tank that offers insight into the way the internet affects buyers' decision process. This demonstrates that e-commerce sites must understand their buyers' decision-making process, such as whether a mobile is important to them and their location when they are looking for the information. They must also note if they are buying for "now", such as when booking an Uber cab while standing on a sidewalk, or buying for "future", such as when arranging holiday accommodation in two months' time.

Understanding a buyer's location and motivations helps e-commerce businesses reach them at the right moment in their decision process. If they are to prioritise the devices and services appropriately, businesses must know when these "I want to go", "I want to do", or "I want to buy" moments are.

Until recently, purchasing clothing online seemed illogical to shoppers due to worries over fit and quality. It was the same with fresh produce. How could food stay cool if delivered when the customer was not at home? However, thanks to e-commerce innovations, buying clothing and fresh food online is now commonplace.

Naturale was one of the first e-commerce companies to sell online fresh produce in France and the UK when it launched in 2000. To deliver fish as fresh as customers could get at the seaside, the company was required to overcome the supply chain challenge of first transporting fresh food and then keeping it in perfect condition between delivery and the customer arriving home. In order to accomplish that, Naturale developed a container that kept food cold for up to 48 hours, even in extreme heat.

As you might expect, the average cost of ordering food from Naturale was much higher than buying from a local supermarket for several reasons.

- Fresh products generally cost more than packaged items.
- Naturale was selling premium products at a higher price.
- To reduce shipping cost-per-item, customers generally ordered more food at one time so the cost of weekly shops was higher than it would be from a supermarket.

Despite this, Naturale was able to build its customer base as its climate-controlled containers kept product quality high, and the customers came to trust the brand. They also appreciated the convenience, time savings and the appeal of not having to grocery shop in the evenings or at weekends. Such positive experiences lock-in customers and generate recurring business.

For Naturale, understanding the "I want to buy" and the "I want to do" moments of their customers were key to the successful launch of their business.