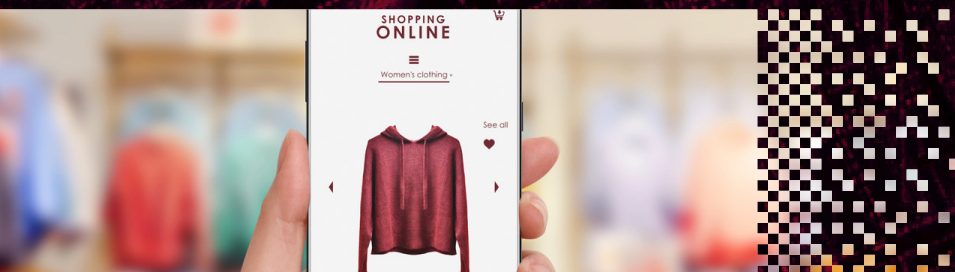


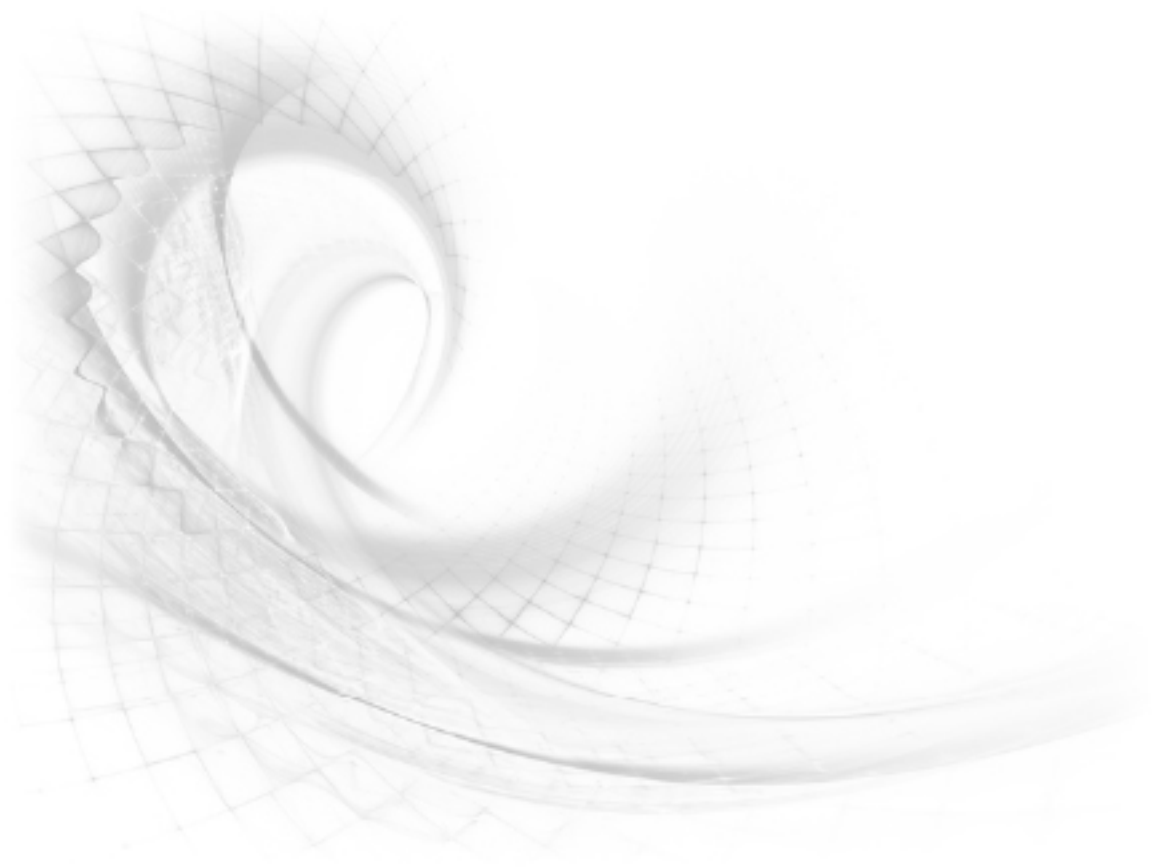
The Journey from Personalized to Homogenized and Back Again

By Theo Rose & Linda Mason



“IT IS NOT THE STRONGEST OF THE SPECIES THAT SURVIVES, NOR
THE MOST INTELLIGENT, BUT THE ONE MOST ADAPTIVE TO CHANGE.”

Charles Darwin's observation about the animal kingdom
back in 1868 is a pitch-perfect assessment of today's
business environment. We must adapt or die.



The Journey from Personalized to Homogenized and Back Again

Digital transformation is forcing a stark choice: adopt and adapt or become irrelevant. Traditional retailers have been slow to appreciate this, and as such have created a competitive disadvantage for themselves versus their natively digital competitors.

The heyday of retailing has come to be remembered and characterized by three related core attributes:

- ✓ One-to-one selling
- ✓ Loyalty of customers
- ✓ Shopping as a social exercise

Some shoppers still enjoy this model today in country stores or upscale boutiques. All of us have seen movies depicting activity in a one-store western town where the shop owner greets everyone who comes in by first name.

As populations grew, demand for products changed. The drastic consolidation of the retail industry in the late 1980s meant retailers were faced with the challenges of rapid expansion. Retailers responded with generic marketing and more, larger stores, but failed to anticipate how all this would affect the way they interacted with consumers. Consumers were afforded no alternative but to accept the transition from one-to-one interactions to a world of one-to-many transactions.

In the late 1980s, there were more than 26 regional department stores across the country, reaching every major metropolitan area. The consolidation in the latter part of the decade saw the creation of the behemoth that we now know as Macy's with its 800-plus stores. Before this, buyers at regional stores had far fewer stores to buy for, which allowed them to really know the preferences of their regional consumers. The result: a shift from regionalized assortments to large-scale homogeneous product arrays, making the offerings statistically "good for the average" but bland and unexciting to all. This began the trend of disparaging stores as "cookie cutter."

Today, we are transitioning to the next phase: the age of digital retailing. This is characterized by the need to satisfy the customer's expectation of personalized service, multiple

access options, and a return to the social elements of shopping. This expectation requires retailers to deliver these experiences on a massive scale as they transform their business models and hope to remain profitable. The key to achieving this starts with data, and the overlooked but fundamental process of data management.

Successful transformation starts with data, and the overlooked but fundamental process of data management.



Data: The lifeblood of the changing retail landscape

Retailers are keenly aware that the rules have changed. The competitive environment is now in the virtual world rather than only the physical confines of a store. In the virtual world, data is critical. Think about it: Nothing can be represented, communicated or sold without data. There are no substitutions. The management of data becomes the determining factor for success or failure.

To digitally native retailers, the focus on data has been instinctive. Having no presence in the physical world, these retailers possess no asset other than data. This provides them an enormous operating advantage as all strategies, decisions, business processes and culture are driven by data.

What we mean by data is changing

When we think about data, intuitively we characterize it as structured and discrete items; for example, SKUs, sales, inventory records, customer records and other attributes of retailing in the transactional world. This understanding is incomplete. The digital revolution has brought a flood of additional data not considered before. Customers are now expressing interest in products shaped by the worlds of Pinterest, Facebook, Instagram and other social platforms — these are sources of decidedly unstructured data. Understanding the characteristics of each of these new data types and using them to create an integrated, timely and relevant consumer experience is at the heart of digital transformation.

Still on legacy systems, many retailers find themselves handcuffed to an outdated mindset of structured data. This places them at a strategic disadvantage. To make the transformation to the digital age, retailers must expand their understanding of the critical nature of structured data. The expanded universe of data is characterized as Master Data, which has two primary types: Product Master Data and Consumer Master Data.

Product Master Data

Retailers have never been good at collecting sufficient, consistent product data. The use of NRF color & size codes have helped, but there's still very little dedication on the part of retailers to consistent, clean product data. To make matters worse, legacy merchandising systems are filled with years of old data that further muddies the water. The color table below is all too common an example.

COLOR	SYSTEM CODE	SYSTEM DESCRIPTION
Black	010	Bl
Black	001	Blk
Black	BL	BL
Black	NIk	BLK
Black	Blac	Black
Black	Black	Black
Black	Blaq	Blaque
Black	DM	Deep Midnight

This example, doubtless familiar to many, shows how something as simple as the color black can be misconstrued. The result begs this question: How can you possibly know how products are selling/trending if the foundational codes are inconsistent, diluted, or inaccurate? Indeed, the NRF introduced an additional level of color designation known as “Color Family”. This helps remediate the

process in the example above, so that all the products could be identified as black. Taking advantage of color family functionality requires an additional data point to facilitate accurate capture of this data. Yet few retailers are using this capability with enough consistency to add insight into customer demand.

Another example of Product Master Data is size codes. Trying to understand what is selling by size when there are 40 different codes representing the basic sizes is impossible. Even the best business intelligence systems are not equipped to overcome bad data; they were engineered to create insights based on good quality data. For anyone who has implemented a new merchandising or business intelligence application, the process of cleaning up and correcting data is a huge undertaking and unnecessarily prolongs any project. Compounding the problem is that the data correction process is treated as a one-time event rather than a mission-critical activity of daily business operations.

Unfortunately, retailers have adjusted to working around poor, anemic product data.



Size and color are just the bare minimum of product data. How are retailers managing data like fabric, fabrication, fit, fabric content or country of origin, to name a few in apparel? The same

goes for accessories, shoes, hardgoods, electronics, jewelry, furniture, even household products.


All this data has been used only for product identification, rather than to enhance the customer experience. Very few organizations are focused on this level of detail; in fact, most became accustomed to muddling through with patchy data on size, color and other product attributes that are needed to truly understand consumer preferences.

Most retailers still believe that digital transformation is the responsibility of the technical team. Unfortunately, because store-native retailers have suffered with this situation for so long, they've adjusted to working around anemic product data. Typically, assistant buyers and merchandise planners have become quite adept at the weekly download and transformation of data into reports. The reports are only as good as the quality of data that they are based on. For them, the easy fix seems to be the installation of a business intelligence (BI) application. The flaw in this strategy is that it ignores the fact that the information derived from these systems will never be of value if the underlying data tied to the item/article master is incomplete or inaccurate. Unfortunately, this condition has been accepted for years. This complacency manifests as a competitive disadvantage when compared to digitally native retailers.

Customer Master Data

The advent of the Universal Product Code (UPC) was a significant enabler for the industry to create a standard methodology for identifying products. Unfortunately, a similar identifier for the consumer does not exist. The consumer identifier equivalent to the UPC is the concept of the Golden Consumer Record (GCR). This identifier must be unique for each consumer, combining traditional retailer interactions with new methods of associating data across social media and other forums.

Many CEOs, CMOs and CIOs believe that their existing systems provide a 360-degree view of the consumer. However, even a cursory investigation reveals this is typically not the case. Most store-based retailers have multiple repositories of consumer data. First, most have a consumer database embedded within their POS or core merchandising system. Second, their loyalty application holds a great deal of consumer activity, and third,

A decorative graphic consisting of a series of white dots arranged in a stylized 'r' shape, located to the right of the text.

The consumer identifier equivalent to the UPC is the concept of the Golden Consumer Record (GCR).

they have consumer data in their webstore application. Many marketing teams are tasked with “running reports” to understand consumers’ activities across all these possible points. However,

developing usable insights is impossible if the same consumer has multiple records in any of these individual databases, to say nothing of the need to combine and establish a single identity across all these databases. Clean, consistent consumer data held in a single actionable database is the only way to have a 360-degree of the consumer and understand their true lifetime value.

Digitally native retailers have not had this burden. Their webstore infrastructure is the only conduit through which they reach, understand and interact with their consumers. If a consumer buys a product on the website, by default, their name, postal address, and email are collected. These data elements are the heart of the GCR.

For many retailers, a single customer may have multiple unique customer records in the customer database. Consider this possible scenario: Customer One has 10 individual customer records with a retailer. Customer Two has a single customer (GCR). Customer One buys the same white shirt (one on each of his customer identities). Customer Two buys the same 10 shirts all on his single customer record (GCR). From this example, it would be easy to determine that Customer Two is a good customer with specific preferences that the retailer could use to market similar or complementary products.

Based on Customer One’s data, we know NOTHING about Customer One. Period. This simple example illustrates the critical need to conquer master Consumer Master Data.

Harnessing the power of unstructured data

As businesspeople and consumers ourselves, we are aware that there is a whole new world of content affecting our everyday life and our interests in products. Digital images and content from unstructured data sources like Instagram, TikTok, Facebook, Pinterest and YouTube, as well as customer reviews and the activity of influencers, are impacting demand for products. The challenge before retailers: How can this type of data be captured and utilized to drive business?

All that we have discussed regarding structured data is not the end point for retailing’s transformative challenge, but rather just the start. Too few retailers have mastered their structured data. Until retailers accomplish this, they will be unable meet the fundamental shifts in strategies and operations necessary to reshape their approach to business. Once accomplished, they will be ready to undertake the most important transformative activity: Building the integration between structured data with the unstructured data of their consumers.

Generally, there are two types of unstructured data: Confined data and unconfined data.

Confined Data

Confined data are elements that capture behaviors of what a consumer may search for, what he or she may sort on, compare, view, drill down on, or even spend the most time viewing on a website. This new information must then be associated with whether a sale is eventually consummated or abandoned. The activity of consumers as they move around a given website may seem random, but is in fact a reflection of their purchase journey. This activity is easily captured because it is confined. Because the activity occurs within the retailer's domain, it can be collected and utilized to understand how consumers are shopping.

Understanding how consumers search, view and compare products on their journey to purchase (or not) provides a wealth of intelligence to which the retailer can then respond. Within confined data, the source of the original search can be captured. If, for example, a search is started on Google or Facebook, and then directed into a company's webstore, the source of the original search will be captured, providing insight as to what the consumer was thinking on their journey to purchase.

Unconfined Data

Unconfined data is less intuitive because it exists outside the construct of the company's technology domain. This presents retailers with a new challenge. The sources of this type of data are almost unlimited. This new data vary in content type, frequency and complexity. They can take the form of images from fashion magazines or social media posts to unique cellphone device pings that allow a retailer to know when a consumer enters a store. The challenge is devising a methodology to capture and utilize it.

Sources of unstructured data will become more prolific and powerful in the coming years. Capitalizing on these sources will never be realized by the retailer unless they bring this additional data into their interactions with each customer. This can never occur if the retailer has not been rigorous in collecting basic structured data.

The goal is to engage in some dialog with the consumer in the moment whether the interaction is virtual or physical. But again, we stress that without dedication to a data management program that

assures complete, accurate and timely information, this connection will never be made. Without identifying the customer with a single GCR, it will be impossible to determine their lifetime value.

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Final thoughts: Survival depends on change; change depends on data

The world is changing at an accelerating rate and is compressing business cycles. Many merchants grew up with established seasons and sell-through cycles. Today, retailers are operating on more of a seasonless or fast fashion model, upending decades of old ways of doing business. This is made necessary by the need to keep up with the customer and their ever-changing interests driven by the stimulus of the digital world.

The challenge is to deliver a flow of new products to keep the customer engaged. Retailers must anticipate customers' needs and set the trends, not get caught reacting to them. This requires timely and accurate data because the margin for error has been significantly reduced, thus eliminating the possibility to recoup or capture a missed opportunity.

The need to understand customer's preferences requires a new level of timeliness and degree of specificity. Integrity of master data (both product AND consumer) is critical to the creation of timely and accurate information to keep up with the new decision-making cycles. Historically, the business teams have relegated the responsibility of data quality and integrity to the IT organization. For a time, there was no penalty to this.

Compounding the challenge is that retailers, wholesalers and brands have been reluctant to become technology leaders. Historically, they under-invested in technology. Today, they find themselves lacking the necessary technology infrastructure to compete. Additionally, they have been slow to adopt changes necessary to compete. In the past, improvements to business processes have been driven by the purchase and implementation of technology, not the customer's expectations.

The needs of the customer must transcend the needs and goals of any individual or group within the organization. This is achieved by starting with the customer and determining what drives their purchase decisions. Working from the customer backward is the only way we will be able to take the required business information and break it down to understand the required data elements. This knowledge provides the roadmap to then reverse engineer the necessary applications and business processes to maximize the lifetime value of every customer.



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