



## Accelerating growth in online retail with the 'digital factory'



### Abstract

With the world going increasingly digital, retailers are dealing with the challenges of rapid changes in customer habits, technologies, and the economic environment. While Internet retail giants have a head start, largely traditional retailers can maximize the effectiveness of their online investments by utilizing the model of a digital assembly line.

## Introduction

With the extensive growth of online sales, the retail industry is now facing the challenge of providing scale and agility to customers on multiple digital channels. While Internet retail giants like Amazon, John Lewis, Nordstrom, Debenhams, and M&S have benefited early by investing in robust omnichannel and omncommerce digital sales and delivery engines, traditional retailers with large brick and mortar components are facing increasing pressure not only to make significant investments in digital channels, but also to successfully execute these digital strategies under increasing cost pressures in their markets.



Figure 1: Internet retail giants are growing with digital sales. Amazon at the peak.

Traditional retailers, already falling behind on their brick and mortar business, have to deal with the triple whammy of change when preparing for the online economy: changing customer habits, technologies, and economic environment.



### Changing customer habits

- Digitally influenced
- Interacts on multiple digital channels

### Changing technologies

- Rapidly evolving technologies and devices
- Legacy systems and silos

### Changing economic environment

- Global scope of operations
- Regionalization of markets

Figure 2: Recent trends in a world going increasingly digital



### Changing customer habits

- Customers are increasingly shifting to digital channels for evaluating a product as well as for purchasing
- Customers are also being influenced by digital media for shopping. Over 75 percent of customers buying luxury goods in 2015 were said to be influenced by digital marketing before their purchase
- Boundaries between channels are blurring with customers opting for brick and click options, online shopping, 'deliver in store' options, and shopping across multiple devices such as tablets, laptops, and mobiles

### Changing technologies

- Legacy systems are quickly being replaced by next-generation cloud

technologies. The traditional silos and constraints of legacy systems have been eradicated by the new features of seamless integration of the recent platforms. This has created avenues for utilizing data and analytics to a far greater degree of effectiveness than ever before

- Traditional processes are giving way to newer, more efficient marketing and commerce, such as programmatic and real-time bidding software. This requires not only implementing new technologies but also putting new systems in place

### Changing economic environment

- Rising protectionism in the US and UK (post-Brexit) markets poses challenges for marketers who need to operate on a global scale

- Operations on the other hand are global, with supply chains spanning continents. This throws up the additional challenges of negotiating trade barriers in an increasingly protectionist world

While these challenges can be addressed through hard-to-come-by investments and a radical change in the operating model, companies still balk at the magnitude of the investments and its impact on their margins. Meanwhile, global Internet retailers who have the potential to completely displace local players within months of entering a market are quickly expanding operations. In India, Amazon displaced Flipkart within 24 months of entry and with Amazon entering the Australian market in July 2017, the writing is surely on the wall.



## The time is ripe for a digital 'factory'

The only option for retailers to overhaul their existing online sales models is to establish a true digital factory which can bring the benefits of scale, consolidation, and speed to their online conveyor belts. A digital factory that seamlessly enhances their online content, boosts e-commerce, and provides analytics to endlessly drive up customer engagement and sales, while driving down costs, might just be the magic pill to justify this radical change. The digital factory will have to perform three basic functions:

### Provide a scalable and highly agile model of producing and managing digital content and processes

- The digital factory will be able to consolidate digital operations into a new operating model, making use of right-shoring, global delivery models, and virtual governance teams. These delivery teams will be able to operate seamlessly in a virtual environment enabled by cloud technologies to provide an agile set of operations for the digitally savvy

organizations. Rapid ramp ups and scale downs or fluidity between the services / markets / processes handled, will be the norm.

### Utilize economies of scale and the power of analytics to multiply return on media investments

- Consolidation will help unlock the levers of scale and standardization of processes. A uniform brand experience across multiple regions / markets will make today's global and jet-setting customers relate to the product and organization across the world.
- The breaking down of silos in legacy systems and consolidation will also help unlock the power of data. The ability to use data sets across functions, processes, brands, and markets will help multiply the benefits of traditional analytics. The application of artificial intelligence on these unconstrained data sets will explode the relevance and actionable

insights this data will provide in terms of increasing the ROI on digital factory investments.

### Improve customer engagement by faster response and reaction times to evolving customer needs

- Delays in response times due to fragmented processes with a lack of ownership or understanding of the big picture will be reduced with the factory tracking and churning out digital delight to customers on an industrial scale. This, in turn, will help digital organizations not only to become more responsive to customer needs but also respond to changes in real time. For instance, a sudden change in customer habits can be immediately countered by realigning the process in the factory, ineffective marketing campaigns can be modified midway, or negative sentiment on social media can be immediately responded to with appropriate sentiment boosters.





# The brass tacks of the digital factory

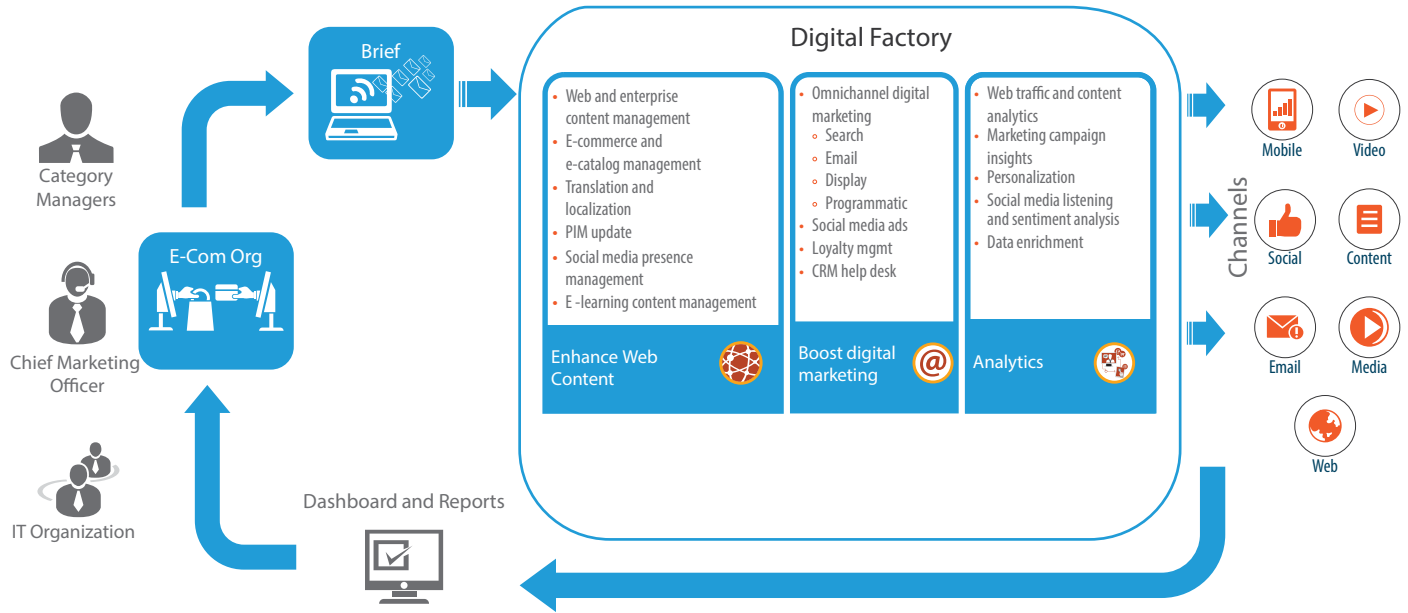


Figure 3: The workings of a digital factory

While companies have started to build the digital factory, it is important to understand what are the main functions being productized within the factory. While all digital interactions are being considered, we often observe that content, marketing, and analytics are the best starting points. As illustrated in Figure 3 above, the larger CMO and IT organizations reach out to the factory to boost all aspects of the online customer experience – managing a customer’s online journey, from evaluation to purchase – to optimize the marketing spend while continuously driving up efficiencies through analytics. While the factory publishes its output on various channels, we also see that it maintains a feedback loop to the organization providing visibility and transparency through customer dashboards and reports. This will enable the organizations not only to understand the bigger picture but also to refine their customer experience keeping it up-to-date in a constantly changing world.



Let's look at how the main functions within a digital factory add value to online retailing efforts:

**Enhancing web content:** The digital factory can enhance web content using web and enterprise content management, e-commerce and e-catalog management, translations and localization, and more. Web content management (WCM) systems have started using cloud as a hosting platform to offer platform-as-a-service (PaaS) to their customers, and more WCM vendors are now also providing marketing data warehousing. Chatbots, artificial intelligence, mobile payment and loyalty apps, social media sales, and many such trends are transforming e-commerce and e-catalog management.

**Boosting digital marketing:** The digital factory can help with the increased shift towards omnichannel digital marketing and social media advertising. Loyalty programs can be better designed using big data analysis, prediction of customer behavior, and personalization of offers and discounts. Customer relationship management (CRM) help desks can enable 24/7 support, self-service, knowledge-base integration, multichannel support, and more, to not just help the customers but empower them.

**Conducting analytics:** The analytics in a digital factory will help with predicting customer purchase patterns, wants, and needs, using big data, search engines, web traffic, and content analytics. It can provide great insight into the planning and designing of marketing campaigns. Social media listening and sentiment analysis will help monitor and assess the perception of an organization's brand among its actual and targeted customer base. Real-time enrichment and appending of data is now doable to enhance records with available data attributes such as buyer propensity, financial capability, and much more.

## The bottom line

In recent times, pioneers in digital factory investments have reduced cost of operations by 60 percent and increased return on media investments by over 25 percent. With Internet retail giants snapping at their heels, the latecomers to the digital marketplace do not have time at their disposal. It is time these retailers jumped onto the assembly line of digital factory production and efficiency.







## About the Author



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Shyam heads the Digital Business Services Unit at Infosys BPM and has over 20 years of experience in the area of global business service delivery with specific focus on Digital Marketing Services (DCX) and Master Data Management (MDM). Shyam is responsible for marketing, sales, and delivery of Digital Operations for leading Fortune 500 clients and has led several consulting engagements to define the digital operating model and drive innovation in their digital operations. Prior to Infosys, Shyam was in the manufacturing and financial services sectors managing their marketing and commercial functions.

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