



RESEARCH ARTICLE

MUTATION FROM ANALOG TO DIGITAL SCRUTINIZING THE STATUS OF DIGITAL
TRANSFORMATION IN CONSUMER GOODS INDUSTRIES

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ABSTRACT

The ascent of products from stark commodities to prominent brands all through the 20th century was a salient development in consumer industries. In the 21st century, the internet makeover is impelling the industries' mutation. In conjunction with technological evolution, the subtler but still imposing propellers of social and behavioral conversion have also provoked consumer industries to remodel. Digital is blurring the precincts between consumers, stores and shoppers' brands, which embrace strategic breaks for consumer packaged goods companies who are geared up to radically remodel for the digital globe and apparent risks for those who would not be up to snuff. The present paper highlights an assortment of models of digital mutation in consumer goods industries and endorses a range of measures for enterprises to combat the backdrop of the fundamental changes affecting consumer industries.

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INTRODUCTION

One of the imperative facets of our generation is its affinity with the digital world, as technology has superseded a considerable part of our lives and millennial hold the vigor to acclimatize to the modifications produced by the contemporary mutation. Disrupting with digital is inexorable as progress in the future of consumer goods will necessitate it. Consumers are steadily embracing the digital world. They are swiftly bending to shop for groceries during the daily commute; downloading books, music or films on the move; or sharing, pinning or tweeting their purchase resolutions on social networks. This aspiration for 'anytime, anywhere' consumption has swelled exponentially, bolstered by the ascendancy of a mobile, social, cloud based epoch of computing. The makeup of today's enterprise milieu is increasingly mutual, smart, receptive and proficient which is leading to striking augmentation in output and exalted economic standards of brand new ventures. The networked economy has divulged breaks for both whopping and miniature enterprises to redeem the payback of a more sprawling illimitable platform. (Sengupta, 2015) Digitization is the dais of large-scale and sweeping mutations across multiple aspects of enterprise, proffering unparalleled occasions for value creation and entanglement, while also embodying a leading source of risk. Enterprise leaders across all sectors are grappling with the strategic implications of these

mutations for their organizations, industry ecosystems, and social system. The economic and social implications of digitization are contesting and eliciting serious questions as regards the extensive impact of digital mutation. As a consequence of their place in the digital vanguard, consumer goods enterprises are moving further ahead into uncharted waters. Mounting digitization is fashioning opportunities for companies to exploit consumer data to impel innovation and perk up customer experiences. Crafting data monetization models will be a serious challenge for consumer industries. The expanding magnitude of consumer and enterprise data will outline amplified inquest and activism from consumers and regulators, as the social order puts an even superior premium on data confidentiality and transparency. Products will develop into services and services into knowledge with data servicing as the vertebrae on their delivery. Envisaging new revenue techniques is an opportunity in a setting where revenue might potentially be decoupled from output and more intimately linked to outcomes for people and social system. Traditional stores will endure a metamorphosis to stay applicable when online purchases in the majority of categories are budding. Omni-channel strategies will execute a significant role. Consumer products companies will also necessitate effectual strategies to contest in a 'flatter world' and discover ways to replicate and sustain the quality of consumer experience across channels. Smart supply chains and smart workshops will be developed, aiding the mass customization of products and omni-channel experiences will be vital to gaining a competitive lead.

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These digital themes are anticipated to put a cumulative \$4.9 trillion of value at stake for the consumer industries in terms of operating profits from 2016 to 2025, which is just about 14% of the entire operating profits of the industry during the same period. The financially measured blow to social system and consumers from digital themes is estimated to be around \$5.4 trillion. (World Economic Forum White Paper Digital Transformation of Industries: Consumer Industries, 2016) The triumph of digital mutation will hinge on the execution of the consumer companies in innovating while retaining the conviction of their consumers. digital mutation would promote the environment through the economical use of resources, dropping off energy usage and dwindled wastage. It will also influence social system by generating employment in fresh fields, which will entail efforts to preserve and foster the skills of the personnel, and by producing and promulgating a wellness culture, leading to enhanced health outcomes. (World Economic Forum White Paper Digital Transformation of Industries: Consumer Industries, 2016) Irrespective of the channel an enterprise prefers to take, 'no regret' investments can be created to persist and thrive in the future, which embraces breaking down customary organisational impediments, edifying ecosystem partnerships, investing in skills and digital resources, and edifying an omni-channel presence. It's the moment in time to discontinue dabbling with digital. In fact, it's the moment to disrupt with digital.

Literature review

Saunders et al. (2016) has emphasized that in digital mutation risk taking has transpired to be a cultural directive as numerous digitally progressive undertakings are looking for new levels of competitive lead.

Vacirca et al. (2014) The authors have elucidated that companies which are used to exploit the mass market, will have to learn to exploit the market of one. Focus on the individual consumer, influencer, and the shopper which are all digital and expect specific attention could be highly profitable.

The future of consumer goods: Moving from analog to Digital, (2014) The author contends that we are on the verge of a dramatic digital disintermediation which will literally redraft the formulas of doing business and disrupt contemporary consumer goods companies' relationships, whether they are with suppliers, retailers or consumers. It will impinge on all aspects of their enterprises- the manner in which they are structured internally; they instruct employees; engage with supply chain and retailers; produce and market their products; and their interaction with consumers and shoppers.

Goenka et al. (2015) have observed that digital mutation insinuates a fresh set of worth conceptions, standards and enhancement in opportunities, which can be attained by the assimilation of digital technologies in the IT stuff, altering the undertaking's focal point from lashing adoption of matching payback apprehensions with security and regulation concerns.

Rajagoplan, (2015) The author puts the accent on the fact that those with the resources to valve data streams for actionable insights have a competitive lead over others and this is precisely what Digital Transformation does – assisting businesses bump into changing customer demands and endure with variable market conditions.

World Economic Forum White Paper Digital Mutation of Industries: Consumer Industries, (2016) In this report, it has been elucidated that digital innovation is shaking up consumer industries: shifting command from brands to consumers, shifting value from conventional players to digital insurgents and setting the consumer as the key enabler of all operations. Social and mobility cult, in addition to those in media, analytics and the cloud, have primarily shifted the mode consumers buy and use products and services around the world. Consumers are forcing companies toil harder to earn their money. The mutation of consumer industries has also led to some imperative innovation, predominantly on the fringe of the consumer ecosystem, in spheres such as payment technology and last mile delivery.

Objectives

1. To construct a SWOT analysis matrix for digital mutation in consumer goods industries.
2. To elucidate the models of digital mutation in consumer industries.

Implication of digital

Digital mutation is an enduring drift and the undertakings are investing in SMAC, with cloud and mobile escorting the pack. Sector-wise Banking, Financial Services and Insurance (BFSI), government, retail trade together with e-commerce and telecom are foremost in the investment facade for digital mutation. India is at the cusp of a paramount revolution as digital technologies are gradually fetching the core of enterprise designs of premier enterprises. (Kurup, 2016) Digital venture is the conception of new business blueprints by blurring the digital and tangible worlds. It is with reference to the interface and dialogue between, enterprise and things. It insinuates to escort in an unprecedented convergence of people, enterprise and things that disrupts existing enterprise models even those which are born of the internet and e-business themes. (Jorge, 2014) Digital mutation is the insightful and accelerating makeover of enterprise activities, sequences, competencies and models to effusively leverage the alteration and opportunities of digital technologies and their blow across our civilization in a strategic and prioritized way, with the contemporary and potential swings in mind. (Clerck) Digital mutation is by now having an intense blow on enterprises. Undertakings are encountering elementary modifications owing to digital mutation. It has amplified conventional enterprise sculpt, such as repositioning from selling products to providing solutions. There is an enhanced experience surfacing entirely new types of enterprise sculpts which has upshot outshined customer experiences, streamlined operations and enhanced profitability. (Goenka, Suresh, & Bansal, 2015)

The new digital mutation web

The smart, mobile linked digital world is motivating undertakings to fabricate and sustain an utterly new technology infrastructure. This "technology web" is the interplay of leading edge Social media, Mobility, Analytics, Cloud and internet of everything (SMACi) technologies, which are empowering enterprises athwart decisive digital dimensions including products and services, customer experience, functions and workforce.

Strategic enablers of digital mutation are:

- (1) **Social media** Social channels are being induced by enterprises to interconnect with their customers.
- (2) **Mobility** Mobility is shifting spotlight of application rejuvenation away from the customary “desktop-based” style to a “mobile-first” one.
- (3) **Analytics** Analytics is fostering enterprises to explore outsized volumes of data to expand insights and impel strategic decisions.
- (4) **Cloud** Cloud computing is restyling the technique software and services are being sold and delivered.
- (5) **IoE** Internet of everything (IoE) is breaking momentous opportunities by linking everything to internet.

The discrete components of SMACi stack had been thriving in silos over the bygone few years. Owing to the convergence of SMACi, the IT backdrop now perceives the burgeoning muscle of digital mutation. This entails the integrated play of SMACi to consign content, commerce and collaboration to customers anytime and anyplace in a comprehensive, personalized, contextual and cost effective manner.

Important statistics

The pace of digital change has surpassed all prior shifts in the nature of an industry; it took just seven years from the launch of internet in US for it to become a mass medium, faster than any prior innovation. Today digital is ubiquitous. It crosses all boundaries: age, geography and stage of economic development. Kenya, for instance, leads the world in mobile banking update, and Korea has the world’s fastest broadband network, while 6 in 10 Japanese consumers go online with their phones today. Some other startling facts about digital are:

1. Online sales are growing rapidly by 18%.
2. Online grocery shopping is growing and most prevalent in Asia.
3. 19% of Brand purchase decisions are made in store. While 81% are made from home.
4. 5 billion apps were downloaded within 6 months of iPhone’s launch.
5. eBay ® generated over \$400M in sales from its iPhone app in the first full year. (n.a., The Future Of Consumer Goods: Moving From Analog To Digital, 2014)

Digitalization in Consumer goods Industries

Digital mutation is engendering a revolutionary mutation in the consumer products and retail sector in India. On one hand, the dynamics of consumer behavior are enduring a mutation, as consumers are disbursing extra time online and are multitasking amongst screens. On the other hand, organizations are directing their exertion towards edifying omni-channel marketing and supply chain competency. Today’s tech savvy consumers are glaring at brands for cutting edge interactive experiences and are in quest of innovative elucidations to embark upon the swelling need for expediency and more brisk “anytime anywhere” solutions. (Jorge, 2014) Digital mutation is acting as a disruptive energy across the entire value chain as it is endorsing:

(1) Consumer-driven marketing and communication

- Digital splurge on rise
- Changing avenue of consumer engagement

- Consumer co-creation and correlation with startups for new product development

(2) Upsurge in disruptive distribution channels

- Online distribution dais for cut-rate costs and all-embracing customer reach
- Rapid delivery
- Novel payment mechanisms

(3) Dexterous decision making models for enterprises

- Digitally embedded enterprise blueprints
- Enhanced store layouts, merchandising, array and shelf space
- Analytically motivated CRM capabilities

(4) Agile supply chain management

- Superior demand forecast and inventory management
- Automated warehouses for enhanced customer service levels

With digital shifting control to consumers and path to market turning more complex, undertakings are being constrained to acclimatize to the new veracity, or risk becoming extraneous for consumers.

Models of digital mutation in consumer industries

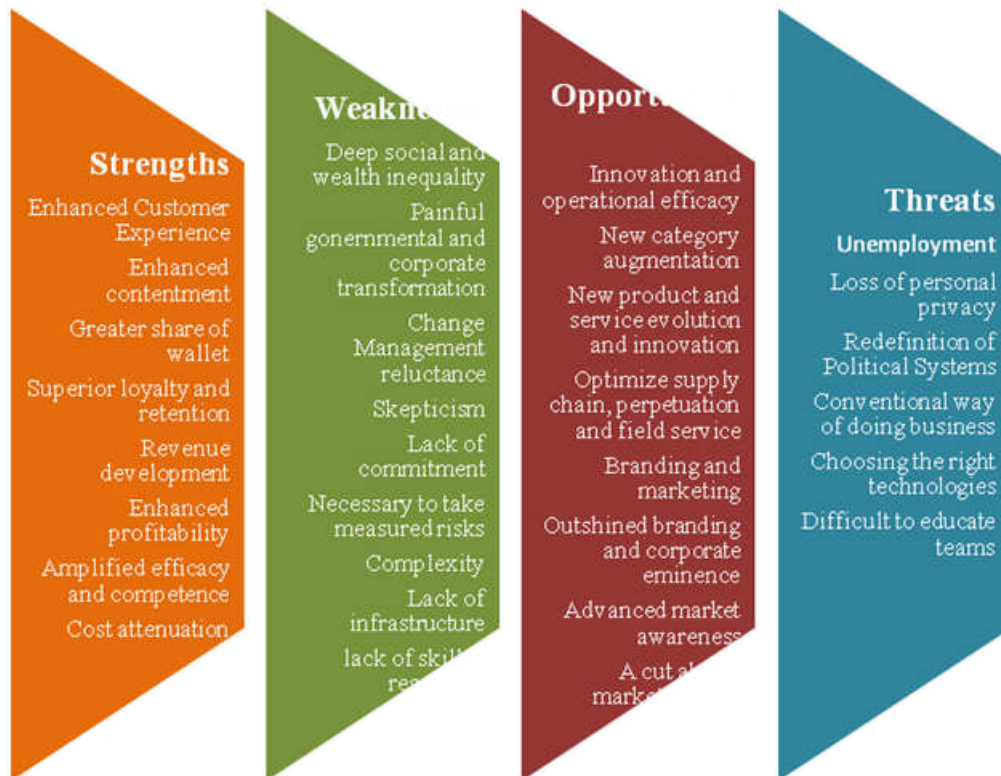
While consumer goods companies are usually adept at exploiting new trends, and although it is seen that there are some exiting innovations in the digital space, it is fundamentally believed that the consumer goods industry has not grasped the scale of the change ahead. Most consumer goods companies’ experiments so far are tactical rather than strategic responses to the challenge of the Digital Revolution: digital add-ons to an existing, analog enterprise. They are still primarily focused on digital marketing, and happen in pockets of the organization, limiting returns on investment. Of course as the lines between manufacturer, distributor, retailer and consumer blur, there has been much experimentation with digital, from both consumer goods companies and retailers. Some prominent models of digital mutation consumer goods companies are:

1. Luxottica, the world’s largest producer and retailer of modish eyewear, uses advanced analytics to provide rapid insight from the data it collects from 100 million consumers. These insights are used to identify the company’s highest-value customers and create personalized marketing campaigns, which Luxottica believes will boost the effectiveness of its marketing by 10%.

2. ITC, a large Indian conglomerate with about \$8.5 billion in revenues, runs the e-choupal program, linking farmers directly to the company via internet. The system has 6500 centers across 40000 villages in 10 states, helping approximately 4 million farmers get the best rates for their produce and reducing ITC’s procurement costs.

3. John West, a canned fish company based in the United Kingdom, has introduced a service for consumers to identify the source of the fish they have just bought. Consumers need to enter a unique code on the John West website, which then provides them with the information about the origin of the fish, including the ocean it came from and the fishing boat that caught it.

SWOT Analysis of Digital Mutation in Consumer Goods Industries



SWOT Analysis matrix of digital mutation in consumer goods industries

4. Companies such as **Fits.me** allow retailers to benefit from concepts such as virtual stores by providing the necessary agility and expertise without the need for large upfront investments. Thomas Pink, a leading luxury shirt brand was one of the first UK retailers to use the concept of a virtual fitting room, done in this case by Fits.me. the shirt maker reports that customers entering the virtual fitting room are more likely to buy a product than those who don't enter it (the virtual fitting room leads to a conversion rate that is 29.6% higher than that for consumers who don't use the room). (n.a., World Economic Forum White Paper Digital Transformation of Industries: Consumer Industries, 2016)

5. **Nespresso** has successfully introduced its own brand boutiques to showcase their coffee machines and capsules, while closely integrating these with their online ordering and fulfillment services for consumers.

6. Supermarket giant **Tesco** has created a virtual store in Korea's subway system where consumers shop scanning QR codes.

7. Brazil's magazine **Luiza** has invited consumers to create social media 'stores' on Facebook, with the company providing fulfillment and paying 'storeowners' a commission. Over 33000 consumers opened Facebook stores in one month. (n.a., The Future Of Consumer Goods: Moving From Analog To Digital, 2014)

8. Luxury product companies have been taking steps towards personalization. **Burberry** first launched a made-to-order catwalk service as part of its London Fashion Week show in 2013. It featured a personalized service that allowed consumers to order products and have their names engraved

into the coat tag or bag plate. Similarly, **Fendi** is manufacturing 'personalized handbags'. Customers can create a one-of-a-kind bag by selecting the color and material, and having their name or initials woven into the body of the handbag.

9. In 2012, **Nike** launched the FuelBand, a wristband that monitors the wearer's activity levels. Importantly, this new product to share their fitness exploits with other members of the 7-million strong Nike+ Web community. While Nike has now decided to move out of manufacturing wearables and is focusing on partnerships with Apple, this remains a relevant example of a company that has tried to focus on creating an experience around a product.

10. **Samsung** has decided to introduce health-related sensors, such as pedometers, in some of its smartphones. These phones help users track exercise schedules, food intake, weight, sleep patterns and heart rate. A health wearables company, Fitbit allows users to share their health outcomes and compete with a community of friends. 11. Nordstrom in the United States has linked up with the Pinterest to exploit the data that users create on the site about their tastes and latest fashion choices. Nordstrom uses the data to update store merchandising weekly, and also gives staff an iPad app that allows them to show customers what products are trending.

12. UK retailer **Argos** has transformed five of its physical stores into digital stores in London, offering customers a quick, easy way to shop using digital tablets instead of catalogs and physical products. A seamless paying process works with the company website to enable customers to choose from more than 30000 products and pick up their purchases straight away. The company has announced plans to run a trial of 10 new

stores where 20000 products can be bought instantly or reserved, while an additional 40000 products can also be ordered in-store for home delivery. More than 40 Argos stores offer Wi-Fi and 60 second collection for online orders.

13. When **Amazon** was launched, it use to sold only books, but now it offers more than 100 million in more than 30 product categories. The company also made the astute move of allowing other retailers to sell their goods through the Amazon website. Moreover, because of the efficiency of its logistics infrastructure, Amazon could offer to warehouse and ship goods on behalf of these retailers. Amazon also introduced the innovative Vendor Flex project with P&G. this program allowed Amazon to work directly within P&G's warehouses and distribution networks, enabling it to save moving and storage costs. As a result, Amazon has competed better against Walmart and Costco in the personal care sector, while P&G benefits from lower transportcosts from not having to ship products to Amazon. Lining up against Amazon is **Alibaba**, a Chinese e-commerce platform that recorded a 45% year-on-year growth in active customers in 2014.

14. The **Coca-Cola** Company has introduced Freestyle fountain machines, which use RFID to monitor and track dispenser operations and place orders for supplies. These machines also have the ability to provide real-time analytics about product consumption and preferences. For consumers, the machines are appealing and have contributed to increasing traffic in restaurants that use them.

15. **P&G** and **Google** started an employee exchange program with the aim of encouraging innovation and enabling cross-pollination of digital talent. It used the program to scale up digital skills among its employees and step up its Internet marketing initiatives. With this program, the company gained expertise in digital and search marketing, helping it sell its products more effectively online.

Challenges

Digital transformation can drive customer satisfaction and retention by providing customers with products and services they require, whenever and wherever they need them. Mobile apps, location-based services, big data and analytics have brought about a significant change in the way retailers do business. These transformational forces have not only helped retailers access a larger audience, but have also helped them create a differentiated value proposition.

The road to digital transformation however is rife with following challenges:

(1)Commitment

In most cases, although initiatives are underway, they are not transformational enough. They are ending up being a new website or a mobile app at the most, which marginally improves customer experience. Also, the commitment to truly being digital transformation in an enterprise goes beyond just ideation. It requires leadership level focus, an assurance of budget and resources, and an ability to pursue the initiative with conviction.

(2)Change management

Most departments act on their own accord, defining and managing the touch-points differently and adhering to different metrics and standards. Transformation threatens the conventional way of doing things, provoking a self- defense mechanism that resists change. Also, changes in roles causes challenges in taking ownership and providing ROI. Thus, there is always a certain reluctance and skepticism associated with adopting new ways of working.

Action Plan Framework for Digital Mutation in Consumer Goods Industries



Action Plan Framework for Digital Mutation in Consumer Goods Enterprise



Framework of Digital Transformation of Retail Industry

(3)Technology

For a complete to be successful, the foundation has to be strong be it single view of customer, orders, inventory, products etc. or a scalable architecture to support dynamic changes in business. In addition, there is also the challenge of choosing the right technologies that can really add value, rather than jumping on the bandwagon. At the same time, it is necessary to take measured risks to understand what new technologies and infrastructure would work best for an organization.

(4)Complexity

Digital transformation is too critical and complex for retailers to handle all by themselves. But while outsourcing can ease the burden considerably, retailers must choose their partners carefully. It takes partnership of a different kind to co-create meaningful digital journeys for all stakeholders- customers and enterprise entities. The need is to unearth those digital moments in a customers' experience or a retailer's operational journey to create transformational impact.

(5)Training

Educating teams on the value of and empowering them through transformation is difficult, since all employees are not on the same digital page. Despite the abundance of data, companies lack both infrastructure and skilled resources to extract actionable insights from the information flowing in. (Rajagopalan, 2015)

Framework of Digital Transformation of Retail Industry

Conclusion

Consumer goods companies in order to enjoy sustained growth in the future must take a far more holistic approach that places the consumer at the center. There is an emergent call for Indian undertakings to pool resources with a strategic cohort and ensure embracing of digital technologies and pursuits that assist them produce their enterprise revenues while enhancing customer contentment and retention. Thriving enterprise leaders will require digital enterprise dexterity. While hottest positions, for instance chief digital officer, will transpire as

catalyst roles. All enterprise leaders and CIOs ought to expound digital leadership and technology competence to delineate and accomplish a digital strategy. In 2020, digital leadership skills will be implicit for all enterprise leaders and on par with other managerial skills such as finance. In 2020, the new digital enterprise technology conglomerate will synchronize the enterprise-critical digital enterprise architectures and back-office IT. The pledge of digital enterprise is that a cosmos of applications and digitalized assets that work collectively and virtually robotically will let incredibly hasty development of new faculty that will yield aggressive lead. In veracity, billions of stuff, humans and enterprises that are linked in concert will oblige refined engineering, assimilation and orchestration to discharge the anticipation of people, enterprise and things. With influence switching to the millennial, the road ahead for India's classy digital upgrade appears propitious. By embracing this conversion, we are whittling India's growth as a technologically empowered, erudite young economy. Digital mutation is a substantial deal for India and the world, and is the only way forward. (Sengupta, 2015)

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