

# TECHNOLOGY - ENABLED CONSUMER - CENTRIC INNOVATIONS BY FMCG SECTOR DURING THE PANDEMIC

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## Abstract :

*Innovation is considered a by-product of adversity. The pandemic disrupted normal lives across the world and caused serious disruptions to business operations. A fragmented supply chain and mounting losses exacerbated matters. Shift in consumer behavior was triggered by lockdowns, declaration of containment zones and social distancing rules. However, some businesses, particularly in the FMCG sector demonstrated exemplary resilience by realigning their operating models with these changes in consumer behavior. Companies collaborated with others to offer innovative solutions to address consumer pain points. Demand from Tier-2 and Tier-3 cities and rural areas enabled FMCG players to recoup their losses. The crisis also acted as a springboard for monumental growth in E-commerce in a shorter time frame and spurred innovation and entrepreneurship. This research effort attempts to understand the drivers for technology-enabled consumer-centric innovations and the resultant benefits for functional areas. Finally, the research bases conclusions on the real-time evidence collected highlighting the strategic value that this experience would give to the FMCG players. This is a conceptual study based on secondary sources of data available that uses a descriptive research design. This study can be a good starting point for businesses wishing to drive innovation-led growth by using technology levers.*

**Keywords :** Covid-19, Entrepreneurship, FMCG, Innovations, Pandemic, Technology

**JEL Code**

L24, L26, L66, M31, M37

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## 1. INTRODUCTION

The Covid-19 pandemic disrupted normal lives creating large scale fear and paranoia among people across the globe. Businesses came to a screeching halt with lockdowns, declaration of containment zones, social distancing norms and fractured supply chains. Sales and distribution mechanisms were gravely affected during this global crisis. Yet, many businesses have successfully overcome this challenge by using technological support and through fostering a climate of innovation to convert adversity into an opportunity. Innovation is not just about new product development – there can be innovations in business processes, innovations in business models, innovations in packaging and



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innovations in new delivery formats. New forms of consumer engagement can be also considered as part of the innovation agenda. Gary Hamel, renowned management scholar has indicated the need for management innovation too.

Fuelling the innovation pipeline has led to many global and Indian FMCG players introduce products in the market even during periods of extended lockdowns. The innovations were driven by consumer's pain points and need to arrive at solutions to help consumers within the framework of safety rules prescribed by the government. Social distancing and contactless delivery became buzzwords. Every organization under the sun tried to introduce products that claimed to decimate the virus. Since the production had to be aligned with changing consumer demand, FMCG players began producing stock only as per demand. Besides the launch of several innovative products (solutions) in the market, the FMCG players also began exploring new formats of delivery of products like Direct to Consumer and use of E-commerce channels. Technology has come to their aid and data-based decision making became inevitable.

This research effort attempts to understand how consumer behavior changed during the pandemic and how an understanding of this change in the behavior enabled FMCG companies to launch innovative products (solutions) in the market. It will be of interest to know how these businesses were able to leverage technology for consumer-centric innovations. Hence, this research explores the technologies that were used by FMCG players to meet needs of their consumers amidst all the chaos and uncertainty. Finally, the paper analyses how these innovations by FMCG players during a crisis of such a magnitude will

enable them to adapt to the new normal and gain sustainable competitive advantage in the market.

## **2. STATEMENT OF PROBLEM**

Companies in FMCG sector have been caught unawares with a massive shift in consumer preferences and demand during the pandemic. Lockdowns and social distancing guidelines had a major impact on business profits. It was therefore becoming critical for FMCG companies to understand consumer behavior to grow business, make profits and sustain in the market. Innovation in products, packaging, processes, distribution channels and services aligned with change in consumer behavior will play a role in achieving this goal. The challenge is to understand how FMCG players can use the right innovations to target the right consumer segments and what changes are needed in the marketing variables (4Ps) along with the deployment of technology.

Research Objective: To understand how FMCG companies can review changes in consumer behavior and explore innovative ways to deliver greater value to them during a crisis like the Covid-19 pandemic.

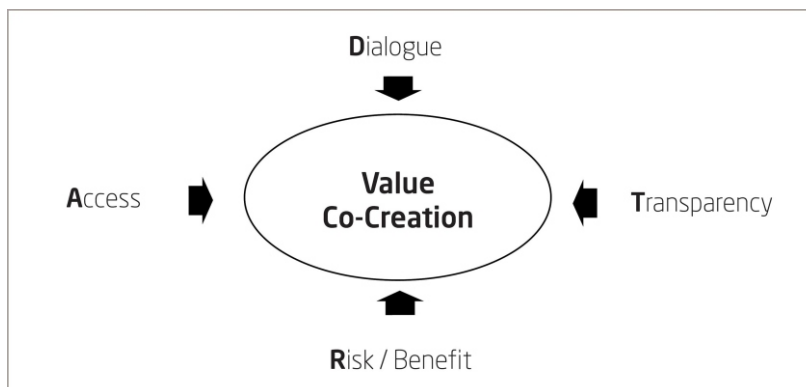
The concept of consumer behavior, innovation and customer value are clear to this study.

## **3. THEORETICAL FRAMEWORK**

### **3.1 Customer Value**

Earlier, customer value creation was company-centric but personalized co-creation with consumers has become essential now in a connected world. Today's consumers are digitally savvy and well-informed. This has led to the DART model (Prahalad & Ramaswamy, 2004). This model dovetails the competencies that organizations have to develop to co-create value with consumers. Organisations need to

provide consumers access to their products, services and information that will enable customers to arrive at a decision.



There can be differences in consumer's perception of value compared to that of organizations. A customer is interested in product, service level, guarantees and warranties, return policies. So, according to Kotler (2017), companies face the challenge of influencing customer perception about value in relation to the cost.

Yen, Teng & Tzeng (2020) claim that co-creation can lead to customer satisfaction. They concluded that innovativeness and customer engagement are positively associated with innovativeness and customer value co-creation behaviors. Innovations can engage consumers better and this leads to co-creation of value between organizations and consumers.

Interestingly, a few FMCG companies used the opportunity to co-create value with customers using digital communication technologies. Social media channels are providing a platform for customer to voice their opinion and this is an opportunity for businesses to listen to customers. Kotler's value proposition is also in sync with consumer behavior during the pandemic wherein consumers facing salary cuts and the threat of losing their jobs looked at down trading (buying less/ smaller packs) even though the lockdowns prompted panic buying of essentials.

### 3.2 Innovation

Innovation can be considered as the successful exploitation of new ideas. While innovating, organizations have to answer three fundamental questions (Managing Successful Innovations, Book Boon, Venkatesh Ganapathy) – what is desirable to users, what is viable in the marketplace and what is possible with technology. Innovation can deliver sustainable competitive advantage to a business, increase revenues and boost profits. Organisations can access new markets, acquire new knowledge and enter into strategic alliances to deal with competition in the market.

Schumpeter (1934) proposed that innovation covers a gamut of activities – like introduction of a new product, improving the quality, exploring a new market, sourcing a new raw material or scouting for a new source of supply. Oslo manual defines innovation as the implementation of a significantly improved product (good or service), or process, a new marketing method, or new business practices.

Innovation ecosystems are collaborative efforts between organizations that can lead to greater synergies to deliver value to customers through bespoke solutions.

**Table 1: Innovation Theories**

Name of theory	Year in which the model was proposed	Proposed by	Description of the theoretical model
The Innovation Theory of Profit (Sweezy, 1943)	1934	Joseph Schumpeter	Main role of an entrepreneur is to introduce innovations and he is rewarded for his efforts in the form of profits. Innovations can include creative ways of reducing cost of production or new approaches to boost demand.
Diffusion of Innovation (Lundblad, 2003)	1962	E.M Rogers	The theory explains how an idea or product spreads over time through population or a social system. This results in people adopting that new idea, behavior or product. Understanding the target population and its characteristics is crucial for adoption of the innovation.
Docherty's innovation model (Docherty, 2006)	1986	Mike Docherty	How can organizations approach innovation when they have no prior experience; the initial phase of the innovation journey is exciting but this is followed by challenges – innovators persevere while others quit. Innovators gain a transformational knowledge and deep experience that they can leverage in the future.

Henderson-Clark Model (Henderson & Clark, 1990)	1985	Henderson-Clark	This model distinguishes components and a product's architecture. Incremental innovation will build upon existing component and architectural knowledge. Modular innovations will need new knowledge for one or more components, but architectural knowledge will remain the same.
The Teece Model (Teece, 2010)	1986	David Teece	Two factors – imitability and complementary assets – will determine which firms will profit from innovation. Complementary assets are those that support the organization's core innovation activities (distribution channels, reputation, strategic alliances etc)
Open Innovation Model (Chesbrough & Bogers, 2014)	2006	Chesbrough	Knowledge can be exchanged internally to drive innovation but integrating knowledge from external resources can also add value to a firm's innovation processes.
Disruptive innovation theory (Christensen et al, 2015)	Mid 90's	Clayton Christensen	Disruptive innovation is the process in which a smaller company (with fewer resources) challenges an established business by entering at the bottom of the market and moving up-market.

*Source: Author*

Among all these frameworks, Schumpeter's model can be used to explain the growth of start-ups during the pandemic year. As on date (January 2021) there are 41000 startups in India with 1600 startups in 2020 (with a \$ 3.5 billion funding). (Economic Times, 15th January 2021). Some of these startups used innovation to drive profits. Roger's model is very apt for this research effort as consumers slowly began adapting to the new normal as information about safe behaviors started gaining wide spread acceptance. This information buttressed a shift in consumer behavior which was leveraged by the FMCG sector. The Teece model can be used to explain the trust imposed by consumers in big brands and how the latter used brand equity, alternative distribution channels (by following an omni-channel strategy) and strategic partnerships to reach out to consumers.

The Docherty model is also relevant as this can explain how companies with no prior experience in manufacturing hygiene products began manufacturing hand sanitizers and surface disinfectants. Perfume makers, brewers and companies making paints ventured into new product development with manufacturing of products that would have sounded unthinkable had the pandemic had not hit the globe. However, scope for open innovation was limited due to social distancing norms though a few players in the FMCG sector chose to use data-driven decision making. Christensen's model can be used to explain how start-ups attempted to disrupt the market with their path-breaking out-of-the-box innovations.

#### **4. REVIEW OF LITERATURE**

##### **About FMCG sector**

Fast moving consumer goods (FMCG) are packaged goods that are generally purchased at retail stores. Focus on cooking at home and personal hygiene and health has led to a drastic

shift in consumer behavior. Allied Market Research reported that the global FMCG market is predicted to reach \$15,361.8 billion by 2025. The sector is the 4th largest in India and has three segments – Food & beverages (19%), Healthcare (31%) and Household and personal care (50%). The packaged food market in India is expected to reach USD 70 billion from USD 35 billion by 2025.

##### **Need for Innovation**

Strong focus on innovation in the current uncertain operating environment is crucial for better organizational prospects in the future. This needs the business to encourage diverse thinking among the employees and motivate those employees working remotely to champion the cause of innovation. Fostering an innovation culture during a crisis will need

1. Understanding of changing needs of consumers
2. Understanding consumer experience and perception about products/ services
3. Explore new and emerging consumer needs
4. Use innovation lens to tap business opportunities
5. Leverage existing innovation processes like open innovation networks, crowd sourcing platforms etc.
6. Engage with external ecosystem (customers, suppliers and other stakeholders) so that their insights can be used to add value to the innovation efforts
7. Use employees to connect and co-create new ideas
8. Maintain a healthy innovation pipeline in anticipation of shifts in consumer needs and behavior



### **Drivers of innovation**

Greater empathy towards needs of consumers and communities and changing consumer trends is driving innovation of FMCG companies. Pandemic prompted FMCG sector to make changes in business ecosystems, innovate across the value chain and deliver greater customer value. The idea was to make offerings relevant to the consumer lifestyles during lockdowns and in subsequent periods.

The Covid-19 pandemic engendered structural shifts in consumer behavior affecting the FMCG sector. Though they struggled to meet demand initially, many firms in this sector proved to be resilient despite challenges in manufacturing. Only those companies that are agile and responsive to dynamic changes in the market place can survive (Mahajan, 2020).

Lockdowns and social distancing norms affected FMCG supply chains. To minimize physical contact, automation of business operations became inevitable (Koncar et al, 2020). Fear of transmission of virus from packaging services created an opportunity for smart and intelligent packaging using sensors. Modified atmospheric packaging technique was used for packaged foods. Packaging industry began using automation in manufacturing to scale up production (Saha, 2020).

Resilience of supply chains during Covid-19 despite the fact that many sources of risks were uncontrollable is remarkable (Sharma et al, 2020) Singh et al (2020). Even though SMEs in UK struggled to sustain the innovation momentum during the crisis, prior experience (during the 2008 global economic crisis) suggested that those firms that are able to manage their innovation efforts during a crisis will emerge stronger and profitable (Roper & Turer, 2020). Han & Qian (2020) make an empirical claim that innovative abilities of Chinese firms (both large scale and small scale)

improved during the pandemic. New consumer habits may outlive the pandemic (Vokshi & Pasuli, 2020).

### **What did the companies do?**

A report by Data Labs says that the size of the health tech market in India is likely to touch \$ 21 billion by 2025 from \$ 5.2 billion in 2019. Hospitals used real time location systems to improve patient and visitor experience so that availability of beds and critical equipment inside hospitals could be tracked. Challenges due to pandemic resulted in opportunities for health care start-ups. Sanitisers, masks, PPE Kits and ventilators were in demand. Those companies wishing to innovate did not feel that shortage of labor or disruptions in Supply Chain were things that they could not deal with. Artificial Intelligence and machine learning algorithms were made available to doctors, patients and nurses as part of better health care practices.

Lockdown resulted in companies launching new pack sizes and variants. As families began cooking meals together, this became a catalyst for innovation in food products. Food products companies had their teams using their home kitchens to finalize flavors and talk to suppliers using Google hangouts. Post the lockdown, demand began to stabilize. FMCG companies had to transform growth levers by understanding where the consumption was growing. FMCG players are integrating end-to-end supply chains to have greater control on product distribution. There was demand for warehouse automation to maintain adequate social distancing without losing on productivity. Statutory hygiene related messages were flashed on packaging for masses.

FMCG sector has introduced innovations in products ranging from ayurvedic products to surface disinfectants, vegetable cleaners,

honey, ready-to-cook foods and many products in the health & hygiene segment. A report by research firm Nielsen claims that new products in the health and hygiene space contributed 37% in value among all the launches in India. Rising demand for healthy food items (sugar-free or low-calorie) is spurring innovations.

DTC channels began digital engagement with consumers. Brands began focusing on personalization, use of social and mobile media to target the right marketing message. Private labels began competing with big brands forcing larger brands to redesign products to maximize customer value.

Large companies are looking at adopting the business models of smaller competitors who are nimble-footed when it is a question of launching new products in the market with extraordinary agility. Some FMCGs are also partnering with SMEs.

The FMCG sector also concentrated on meeting the demand for Ayurveda-based preventive care products. For example – the Guiloy tablets sold out fast due to their immunity-boosting properties. The sector is using innovation pipeline to align product portfolio in line with the new normal. Affordably priced packs of products were supplied by FMCGs in rural areas in India.

Marico, ITC, Dabur, Godrej, Emami and Pantanjali have diversified their product portfolio to include health and hygiene products like sanitizers, floor and surface cleaners, disinfectant sprays and immunity building products.

ITC identified the crisis situation as an opportunity to identify market trends, launch new products and scale up quickly. They also tapped the right channels to reach consumers along with greater cross-functional collaboration between sales, marketing and production.

ITC launched NimWash Vegetable and Fruit wash with neem and citrus fruit extracts. ITC also collaborated with Amway India to launch B Natural + fruit beverage and joined hands with Swiggy. ITC used store on wheels to reach out to customers directly. ITC used its perfume manufacturing facility in Manpura (Himachal Pradesh) to manufacture Savlon hand sanitisers. ITC partnered with Domino's Pizza to deliver wheat atta and spices to customers. Customers could order these items on Domino's app. Patanjali, Emami, Raymond Consumer Care, Dabur and liquor makers like Radico Khaitan and Diageo began manufacturing hand sanitizers. Chennai-based CavinKare launched one rupee sanitizers in sachets by using its manufacturing facility for making Chik and Nyle brands. ITC introduced new fruit beverages that promised better immunity. They also introduced Savlon sachets at 50 paise and frozen snacks under the ITC Master Chef brand.

Under the Protekt brand, Godrej introduced a range of 12 hygiene products (anti- bacterial wipes, face masks, fruit and vegetable wash, surface disinfectant spray etc).

Coca Cola started supplying its products through Grameen e-store platform. Even Coca Cola launched immunity-boosting fruit cocktails and a hyper local offering like Spiced buttermilk.

MTR Foods has tied up with Swiggy, Zomato and even Cure.fit. Beverage alcohol companies began manufacture of hand sanitizer to be distributed to hospitals. Need for sanitation, zero contact and social distancing has led to surface disinfectant sprays.

Nestle invested in corrective skin care as well as therapeutic nutrition solutions. Nestle has realigned its innovation funnels to accommodate shift in consumer behavior. The company's growth in Tier 2, 3 & 4 cities in



India was promising. Nestle's flagship brand Maggi noodles added 10 million households in 2020. According to an interview given by Mr Suresh Narayanan, Chairman, Nestle India – the pandemic has resulted in converging of aspiration and availability. The digital revolution in India has ensured that rural India and semi-urban India have similar aspirations as metros. Growth in E-commerce has catalyzed this trend. In fact, Nestle launched close to 80 new products in the last five years.

Unilever introduced nutraceutical supplements for hair growth and also launched an app called Dove Nutritive Solutions. P&G moved its creative functions in-house leading to agile innovation processes. FMCG like Reckitt Benckiser (RB) focused on flexibility, resilience, optimism and purpose. The company relooked at all the business processes and relied on local teams to derive market insights and manage change. Britannia supplied directly to distributors from factories avoiding going to the warehouse.

FMCG industry has entered into innovative tie-ups to serve customers better – Marico has tied up with Swiggy and Zomato to launch Saffola store; Big Basket and Uber India have formed an alliance to improve last mile delivery.

Co-creation of products with e commerce players resulted in products that were launched online first (Godrej's Hit Anti-Mosquito Racket or Dabur Himalayan Apple Cider Vinegar). Strategic tie-ups with Swiggy, Zomato and Dunzo improved last-mile deliveries. Godrej also partnered with the Indian Railways' Central Railway zone to promote travel hygiene among passengers and railway employees. Two lakh hand sanitizer sachets and disinfectant sprays were supplied.

L'Oreal began producing hand sanitizers using the facilities meant for manufacturing

fragrances and hair gels so that their workers had employment opportunities. Prada produced a designer face mask to appeal to those consumers who were fashion conscious. A North American producer of medical and technical textiles – Duvaltex- launched a protective face mask by using unique 3-D knitting technology.

Tetra Pak is known for cutting edge technology and integrated solutions for processing & packaging. Tetra Pak conducted virtual product development trials from the product development centre in Lund, Sweden.

The Bangalore Bio Innovation Centre is an initiative of Karnataka Innovation and Technology Society (KITS), Department of Electronics, IT, BT and S&T, Government of Karnataka. In August 2020, products aimed at mitigating Covid 19 were developed by startups.

These products are

1. Padma Vitals+ (Dr Madan Gopal, Cardiac Design Labs) (Centralised monitoring system for ECG, respiration, body temperature)
2. MallisCordytea (Dr Moushmi Mondal, Mallipatra Nutraceuticals)
3. CD4 Shield (Dr Vijay Lanka, Stabicon)
4. BeamRoti (Immunity booster chappathi with herbs) & Immune Booster daily drops (Dr Srinivas, Aspartika)
5. VegPhal – Fruit & Vegetable Sanitiser (Deepak Bhajantri, Krimmi Biotech)
6. Water sanitizer kitchen trap and antimicrobial HVAC module (Ravi Kumar, Biofi)

**Table 2: Examples of global innovations during Covid pandemic**

Paranoid Fan (USA)	Helped sports fans find parking spots; food delivery to the stadium seats; supported food banks in enhancing their logistics and delivery services.
VEJA (Brazilian cleaning products brand)	Supported Brazilian domestic workers who lost their jobs during the lockdown; Veja launched the “See with heart” movement to give donations to such workers
Clear Electron (maker of natural antibacterial agents and Ohishiya (manufacturers of soy sauce containers)(Japan)	Tiny plastic fish were used to package hand sanitizers
Lush (UK)	Created a 30-second soap, a self-timing soap that dissolves after 30 seconds of vigorous use; communicate to customers about how long one has to wash hands
Woolworths (Australia)	Dedicated shopping hour for elderly and people with disabilities
WaterWipes (UK) launches Early Days Club, a virtual community for new and expecting parents during COVID	The company launched Early Days Club, a virtual community for new and expecting parents during the pandemic
Japanese startup Donut Robotics designs smart masks that connect to phones via Bluetooth  Donut Robotics (Japan)	The Japanese start up designed smart masks that connect to phones via Bluetooth. The face mask, called 'C-Mask,' that can be worn over fabric-based masks connects to an app. Speech is converted to text which can be sent via user's smart phone. User's voice can also be amplified.

Source: [www.covidinnovations.com](http://www.covidinnovations.com)

## 5. RESEARCH QUESTIONS

1. How have FMCG manufacturers leveraged technology to increase profits during the pandemic?
2. How have the distribution channels of FMCG products evolved during the pandemic?
3. What were the drivers for innovation and

new product development during the pandemic?

4. How can businesses use technology-enabled innovations to achieve sustainable competitive advantage?

## 6. RESEARCH METHODOLOGY

This study uses a Descriptive research design to address the research problem relying on

secondary sources of data and basing observations and deducing conclusions based on the data collected.

## **7. OBSERVATIONS & FINDINGS**

A McKinsey survey indicated that companies that invested in innovation during a crisis outperform their competitors after the recovery. Businesses that pivot opportunities and exploit them will achieve success. Business models that are rigid cannot adapt to the new normal.

Innovation requires prioritization, dedicated resources and leveraging of an organization's core competencies. Innovation agenda is driven by change in consumer behavior during the pandemic and also guided by the Government rules and regulations. Innovations are triggered by single-serve needs, consumption at home and competition for brands from private labels.

FMCG companies have to innovate – from product development, in-store services and marketing strategies to cater to discerning customers. The pandemic may not be the right time to launch innovative products at a premium because of reduction in consumers' disposable income.

Innovation is not merely confined to launching new products in the market. For example, a report in the Economic Times dated 18.12.2020 claims that FMCG companies are supporting the modernization of traditional kirana system. Thus, these companies are looking at innovative distribution strategies too. Rajasthan-based Kirana King has turned an aggregator for connecting consumers with kirana stores.

Consumers are looking for unique and seamless experiences online. This is the reason brands are getting closer to consumers' consumption moments with the right product at the right time. A company like Mondelez India used this opportunity presented by the

pandemic to develop product bundles for multiple occasions like mid-day snacking, zoom parties and Netflix nights. Impulse purchases by consumers have necessitated the introduction of new pack designs that are customized to suit the needs of consumers.

Consumer behavior is often unpredictable but during a crisis, trust and credibility play an important role in the buying behavior. Consumer demand and need should be the key metric to review innovation agendas of organizations. 77% percent Indian consumers shifted to a trustworthy brand during the pandemic. Businesses have redesigned branded products to deliver greater customer value.

Understanding behavioral trends is crucial for business sustainability. Marico learnt that consumers often purchased honey and oats together. This prompted the company to launch honey under the 'Saffola' brand. ITC's consumer dipstick study revealed that direct to consumers marketing efforts has increased customers' awareness of product portfolios. This is the reason why creating a community of loyal customers who swear by your brand has assumed greater importance now.

The marketing mix has been impacted. Marketing communications and consumer touch points are becoming digital. Instead of targeting ROI on marketing budgets, today the attention has turned to brand building. Companies in FMCG sector have used predictive modelling, data based decision making and increased production of personal hygiene products like sanitizers, body wash. Creative approaches across different business verticals from sourcing to manufacturing to logistics enabled these companies to explore solutions. FMCG sector has attempted to understand the price-value equation. Companies have shared warehouses and used data to improve customer experience.

Supply chain challenges have prompted direct to consumer channels by FMCG sector and this has led the need to re-assess their engagement platforms and sales channels. Revamping of sales and distribution has become essential.

FMCG industry embraced technology based solutions to expedite innovations like augmented reality experiences for consumers. A slew of tools like Sales Force Automation, Distribution and Warehouse Management System are now used to improve sales and delivery.

Changing shopping behavior demands innovative forms of consumer engagement. Combination of physical and digital channels can make a difference to the lives of customers. FMCG strategy must focus on consumer. Technology can be used to understand consumers better, improve market reach, reduce time-to-market, target the right customer segments and enhance customer base. Shift from product focus to consumer focus: point of sale to point of experience: Personalized, relevant consumer experiences. Drive customer loyalty and advocacy by providing highly relevant, context-specific experiences during the customer journey.

FMCG manufacturers need to develop relationships with retailers. The plans have to be constantly reviewed and recalibrated so that there is greater flexibility around product mix and shelf space. Such interactions will lead to greater alignment of processes which can strengthen bonds between manufacturers and retailers and create more opportunities for innovation. Retailers and consumer goods companies must evaluate and review the emotional, psychological, and economic drivers. They must understand the reason for behavioral changes and the future impact of these changes on consumer behavior. Agile manufacturing and building a direct-to-

consumer (DTC) model for testing new products is no longer an option.

## **8. MANAGERIAL IMPLICATIONS OF THE STUDY**

The results of this study provide valuable management lessons. Companies can use innovation as a lever (a pivot) to meet changing needs of consumers even during a crisis. A crisis situation (particularly a pandemic that had a global impact) presents a multitude of challenges but with the right approach and support of technology, businesses can convert adversity into opportunity to grow profits and deliver customer value. The players in the FMCG sector kept their ears to the ground to understand consumer's pain points and used a "solution" based creative approach to turn this into a business opportunity. Thus, keeping track of shifts in consumer behavior and using technology support to drive path-breaking innovations can result in sustainability of business.

## **9. CONCLUSION**

A brand's long term sustainability in the market depends on the quality of its future ideas. Firms need to demonstrate remarkable agility in new product development. Innovation can be radical, incremental and also transformational. Companies can stay ahead of the curve due to innovation. Innovators have a purpose-driven mindset. This makes it easier for them to relate to challenges.

In the new normal, FMCG companies need flexibility, visibility and clarity in global logistics processes. The new normal demands that businesses tweak their existing strategies or adopt new strategies.

The pandemic resulted in consumers becoming more price sensitive and there was channel shifting. Consumers wanted to try out new products and they started relying more on

trusted brands. Consumers' price-value equation kept evolving. Lockdown resulted in panic buying and hoarding of stocks. Sales of packaged food, personal home care and hygiene products increased. The pandemic has deeply impacted the channel, texture and frequency of consumption across all the FMCG segments. Consumers were keen to improve their immunity. Innovation funnels were aligned with changing consumer behaviors. Innovative digital consumer engagement became a necessity.

Manufacturing organizations have demonstrated extraordinary resilience by reinventing themselves during the pandemic and realizing the need for an integrated and diverse supply chain. FMCG sector has displayed exemplary agility in experimenting with new products, packs, pricing models and have revised their distribution strategy through digital interventions in their supply chains. This was their way of retaining brand salience in response to changing consumer behavior. Rather than focus on perfection, the FMCG sector decided to shift focus to progressive perfection. Cross pollination of ideas and technology led to improved hygiene solutions.

Technology came to the aid of manufacturers of fast moving consumer goods. Some companies used automation for manufacturing instead of human labor who couldn't report to work due to nation-wide lockdowns. The sector understood the significance of integrating supply chain operations with mainstream manufacturing to allow seamless distribution of goods and services. Use of robotics in manufacturing, warehouse automation, data-driven insights to glean customer insights, use of digital marketing techniques and enlisting the support of E-commerce for delivery of goods were some of the methods through which the FMCG sector used technology support to innovate and deliver customer value.

However, it needs to be borne in mind that automation in manufacturing may also lead to loss of livelihoods for factory workers in the long run. This can eventually become a social ill.

It was during the Covid-19 pandemic that contactless delivery became the buzzword. E-commerce channels reported a strong growth during lockdowns and in the period after the lockdowns as consumers became wary of stepping out and purchasing essentials. Logistics operations and their importance were acutely felt and this spawned entrepreneurship in providing such services. Artificial intelligence and machine learning algorithms came handy for the FMCG sector so that new products could be developed in the shortest possible time frame. Time to market was crunched with a wide variety of innovations hitting the markets. Direct to customer channels evolved and companies began relying on one another to achieve their distribution goals.

Changes in consumer behavior, reverse migration, the federal rules on lockdowns and social distancing and the need to keep the business machinery well-oiled and running led to innovations by FMCG sector to address the problems faced by consumers and offer them solutions. Innovations were not confined to new products alone – they also involved re-engineering of processes, new business models, new distribution channels, new packaging, strategic alliances etc.

The results of all these efforts by FMCG sector resulted in the businesses making profits. Research has shown that organizations that reach out to customers during a crisis will continue to sustain in the long run and will gain competitive advantage in the market in comparison to those who were less agile during such trying circumstances. When the pandemic



hit the globe, the FMCG sector experienced an acute sense of shock as losses kept piling – but many players used the crisis as an opportunity to turn around their business fortunes. Organizations that were able to understand how consumer behavior was evolving during the pandemic and were nimble footed in their response to customers achieved success in their efforts.

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