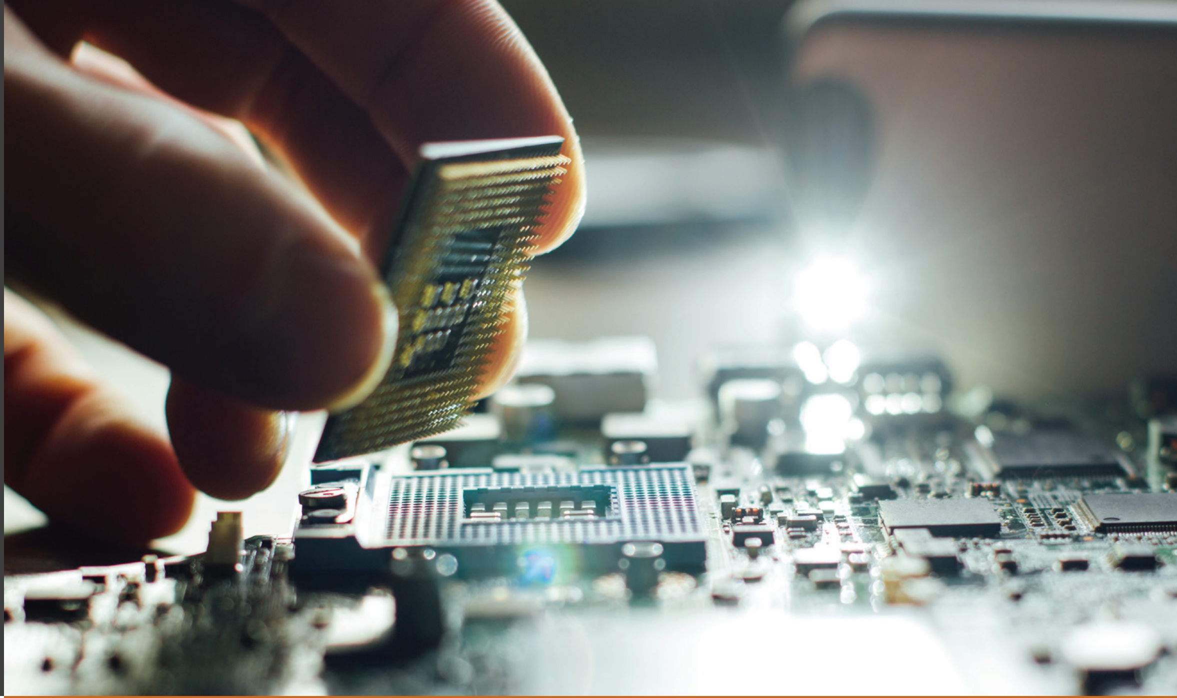

Future of consumer durables and electronics in India – the changing landscape

Foreword

India is seeing major changes in its policies, especially those related to the regulatory and business environment. The government is making some long-due reforms leading to recognition in the 'Ease of Doing Business' rankings. The appliance and consumer electronics (ACE) sector and the upcoming national policy for electronics (NPE) will further bring about major policy changes for the industry. The India growth story is set for a major push given the low penetration levels of consumer durables save for the television segment.

While the cost of finance has gone up with various regulatory and energy efficiency parameters, GST has led to benefits being passed on to consumers. There is a mixed environment with rising input costs and some operational efficiencies in the supply chain that have led to muted growth of the electronics and appliances industry. A few smaller segments such as refrigeration and washing machines are growing, whereas the large television segment is seeing de-growth.

To ensure a growth story across the board for the ACE sector, we need to have policies in place to create economies of scale and future free trade agreements (FTAs) (especially with consumption economies). These will be an impetus in the 'Make in India' story and will reduce the cost of finance, thereby reducing the cost of ownership for the end consumers leading to a huge demand.

CEAMA has joined hands with PwC again this year to look at the 'Future of consumer durables and electronics in India – the changing landscape'. I'd like to thank Somick Goswami and Rituparno Mukhopadhyay and their dedicated teams for articulating their perspective.

Manish Sharma
President, CEAMA

The macroeconomic indicators for the Indian economy have been very positive over the last year. India is now the sixth largest economy and within striking distance of becoming the fifth largest. The icing on the cake has been India leaping 23 notches in Ease of Doing Business 2018 and breaking into the Top 100 for the first time.

Having said that, what does this mean for the industry in terms of growth, its challenges, changing consumer behaviour, complexity of the supply chain and adoption of technology in consumer durables while looking through the lens of Industry 4.0?

The burgeoning middle class in urban areas and aspirational demand from rural India, coupled with government reforms in the form of GST, are making the electronic and appliances industry look positively towards the next phase of exponential growth. Along with rising incomes, the technological advancements to create connected devices and the concept of smart homes are changing the way consumers and the industry look at ACE products. Consumers are becoming more and more technology savvy and manufacturers have to be ready to offer the best of technological advancements to the users and thereby increase investment into their R&D.

With the explosive growth of e-commerce channels and supply chain optimisation and consolidation of the traditional sales channels, the ACE sector is today revisiting the overall channel mix and spends on the same. There is an increased focus on increasing the service delivery mechanism and using it as a differentiator in the consumer's mind.

However, there are challenges that the industry is facing due to the fuzziness of manufacturing, compliance issues and inefficient infrastructure. This is leading to higher cost and lower value addition in the domestic market.

Our report delves into the areas needed to boost growth in India's ACE sector. PwC and CEAMA have again come together this year to relook these aspects and put forth recommendations for the industry as well as the government to move towards the next phase of sustainable growth. We have tried to bring in areas concerning manufacturing and reforms on one side, growing consumer needs on the other side, and internal governance and supply chain needs on the ACE sector side.

We take this opportunity to express our gratitude to industry members who helped us contextualise and formulate our viewpoint and actionable recommendations. We would also like to thank Mr. Rohit Kumar Singh, CEAMA for his support, especially in facilitating interactions with CEAMA members who have provided valuable insights that helped frame this report.

Rituparno Mukhopadhyay and Somick Goswami
Advisory Partners, PwC India

Context and methodology

We followed a methodology of primary interviews of the C-Suite among industry body members as well as secondary research.

Our report will further discuss the following:

- Overall consumer buying behaviour and macro indicators for ACE and other industry verticals (vis-à-vis FMCG and automotive);
- Technological changes in the ACE sector leading to connected devices;
- The regulatory environment in manufacturing with benefits and impediments for the ACE sector;
- Supply chain efficiency to reduce the overall cost of ownership; and
- Service as a differentiator for the industry.

A survey was also conducted with CEAMA members to understand the trends related to the above-mentioned aspects.

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Godrej & Boyce

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Associate Secretary General, CEAMA

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Macroeconomic indicators and consumer behaviour

A look at the macroeconomic environment suggests that India's consumption story is poised for uninterrupted growth, which makes it a high-potential market for the retail and consumer goods sector.

After the apparent brakes demonetisation and the introduction of the Goods and Services Tax (GST) applied on the growth rate in the country, recent reports issued by the International Monetary Fund (IMF)[1] suggest that India has stepped up the gas on its rate of development. Earlier in 2017, it overtook France to become the sixth largest economy in the world, measured in terms of GDP, and is expected to surpass the UK in 2018 and secure the fifth position. This is particularly impressive considering the overall strain the global economy (except for the possible exception of the US), including China, is continuing to experience. If this upward trend continues, India's GDP is expected to touch 9.6 trillion USD by 2020.[2] The latest indicators from IMF continue to place India on a relatively high growth trajectory, as indicated below:

Country/region	Expected GDP growth rate (%)					
	2018	2019	2020	2021	2022	2023
India	7.3	7.7	7.9	8.0	8.1	8.2
China	6.5	6.4	6.2	6.0	5.7	5.5
United States	2.9	2.7	1.8	1.7	1.4	1.3
EU	2.5	2.1	1.8	1.7	1.7	1.7

Many macroeconomic fundamentals continue to support the case for India as the high-potential market for retail.[3] These include:

- India is the fastest growing major economy and second largest by population, accounting for 17% of the world's population and 3% of the global consumption. It has the highest consumption growth amongst the top 10 countries ranked by size of HFCE.
- Per capita income in India has nearly quadrupled since the start of the century, rising from 452.4 USD in 2000 to 1577.6 USD in 2016. This has put more disposable cash in the pockets of consumers who are not shy of spending it.
- The consumption growth in India can be attributed to the democratic rise in affluence, which is not limited to just the metros or a limited income bracket

In addition to the growing consumption, there are unique drivers that are causing the rapid growth of organised retail formats.

Growth in young urban consumers and nuclear families: Forty-seven percent of the population is under the age of 25 years and India is slated to be the youngest country by 2020.[4] Further, rising urbanisation (27% at the beginning of the century to 32% in 2015) and increase in the female participation in the workforce are also creating a time-starved consumer group which is likely to pay a premium for convenience. Nuclear families are also increasing, with 70% households with a nuclear construct, up 13% over the past two decades – and nuclear families spend 20–30% higher than joint families.[5]

Growth in aspirations: There is a growing trend among Indian consumers to 'uptrade' to branded products from those sold 'loose', paying for service and convenience. This is driven by the shift in demographic structure, increased awareness about global trends, quest for better products and focus on healthier living.

Digital influence: Digital penetration in India is growing rapidly: 13% of the population uses a smartphone, 91% of whom search for products to buy via their device and 54% of them have completed a purchase. This level of digital maturity comes to a population with 37% Internet penetration, growing at a CAGR of 31%, which is higher than that in China and the US. This bodes well for the e-retail sector and omnichannel players.

This shift in the overall macroeconomic environment of India will result in higher affordability of consumer durables and electronics products.

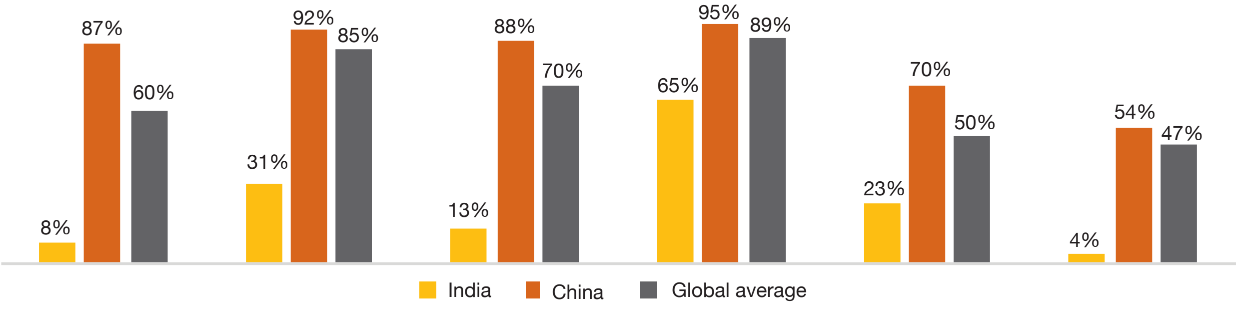
1. https://www.imf.org/en/Publications/CR/Issues/2018/08/06/India-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-Executive-46155
2. https://www.forbes.com/sites/kenrapoza/2011/05/26/by-2020-china-no-1-us-no-2/#3971276a4aef

3, 4, 5. PwC's report 'The promise of Indian retail' (2017)

The rapid rate of urbanisation and the growth of a young population that is enjoying rising incomes is creating a large emerging middle class in India. This segment of the population is expected to grow by 21% over the next decade, from about 470 million people in 2010 to 570 million by 2021, constituting about 42% of the country's total population.[6] As digital access becomes more and more affordable, along with increasing product awareness and a shift in lifestyle patterns, consumer spending on electronics and home appliances could see strong growth in the next five years.

Apart from the growing income levels, the other important factors are changing consumer behaviour and evolving spending patterns. Indian consumers today are looking to improve their homes and lifestyles through global brands and experiences. Fuelled by the falling prices of consumer electronics, these radical demographic shifts are expected to further transform the consumer durables and electronics market in India. The current subpar penetration levels, compared to the global average for consumer durables and electronics products such as air conditioners, washing machines and refrigerators, also highlight the significant headroom for future growth.

Household penetration of consumer durables and electronics



Traditionally, for many consumer electronics products, increasing market penetration has been a key driver of sales growth. There exists a significant opportunity for companies to tap the huge potential, especially in the semi-urban and rural markets of India. The government's push for infrastructure through the development of roads, rail and power supply is helping to reduce the urban-rural divide.

Benefiting from the fast-improving infrastructure, companies are looking to replicate the success of mobile phones in the white goods segment. However, today's consumers have high awareness and a strong value-for-money orientation. Multinationals worldwide are being forced to work towards building products that can trigger simple behavioural shifts, grow demand and create business value.

Incumbent players are realising that it is no longer important to just achieve scale but equally important to make consumption sustainable and more relevant to consumers by redesigning products and services to meet the needs of local markets. In addition, strengthening distribution and after-sales service reach will be key for consumer durable and electronics manufacturers in driving innovation and product development at the local level.

As spending patterns evolve and there is a shift in factors driving the purchase of electronic products, it will be imperative for companies to adopt the right strategy and approach consumers by identifying specific areas of opportunity within each category of products.

6. PwC's report 'Championing change in the Indian ACE industry' (November 2017)

Product-specific demand drivers will lead to strong growth across all consumer durables and electronics product segments.

Smartphones
Feature phone to smart phone; increased penetration of Internet payments

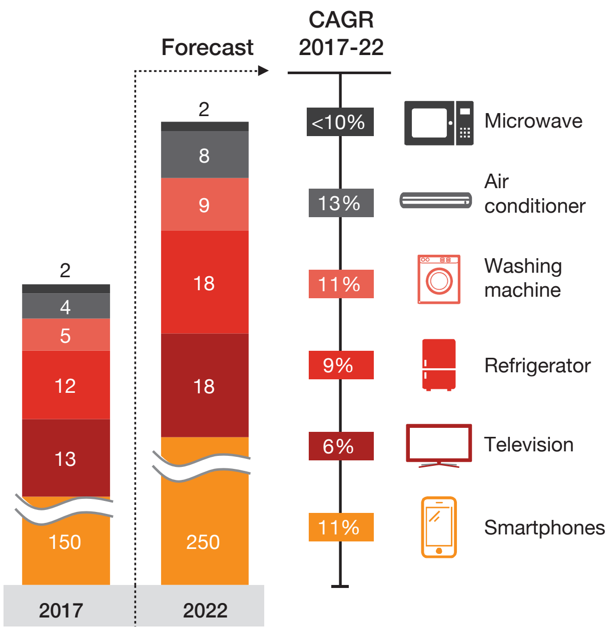
Washing machine
Shift from semi-automatic to automatic; penetration in tier 2, 3 towns

Televisions
Shift to larger screen size; Internet penetration driving demand for smart TVs; increase in demand for flat panel TVs

ACs
Shift to split ACs; new energy-efficient inverter technology

Refrigerators
Penetration in tier 2, 3 towns

Forecasted growth in consumer durables and electronics product categories[7]



As a result, the Indian consumer durables and electronics industry is expected to grow at about 9% over the next 4 to 5 years. India's overall retail opportunity is substantial, and coupled with the demographic dividend (young population, rising standards of living and upwardly mobile middle class) and rising Internet penetration, we are seeing a strong growth in the sector. The Indian government's ambitious Digital India project is expected to boost the adoption of e-commerce in remote corners of the country. Along similar lines, the government's push towards Skill India will also help in creating more technicians, who will help push the serviceability of white goods and make service a revenue generator for the industry. Higher financial inclusion through mobile and increasing connectivity in rural India will also lead to an increase in trade and efficient warehousing, thereby presenting a potentially large market for consumer durables and electronics products.

There are some headwinds that India as an economy and, more so, its ACE sector will have to deal with which are more geopolitical in nature:

Exchange rate: With the dollar to rupee exchange rate increasing from 63 INR to around 73–74 INR, the profits of the ACE sector have been severely dented, making it imperative for the industry to raise prices or shift to local manufacturing. With electronics being the second largest import material (10.97%) next to only crude (27.07%), the industry is clearly under strain due to the exchange rate.

Trade war and oil prices: India's public finances are increasingly dependent on oil revenue and with oil at 3.3% of the GDP and increasing by the year, it will have a huge strain on the economy. With trade wars escalating on top of the increasing oil prices, the headwinds are growing even stronger.

The following are the trends that we expect to see for the next 5 years in the durable industry as a whole:

1. Expansion into new segments: Many new players are entering the consumer durable sector as the future looks promising.
2. Increased affordability and rising incomes: Advancement in technology and higher competition are driving price reductions across various consumer durable product segments.
3. Focus on energy-efficient and environment-friendly products: Companies also plan to increase the use of environment-friendly components and reduce e-waste by promoting product recycling. India has made it mandatory for manufacturing companies to control emissions from climate-damaging refrigerants (e.g. in the AC segment, many companies have started focusing on only invertor ACs).
4. Powerful competitive and marketing strategy: Traditional sales models are slowly giving way to online and social media related sales and helping increase the footprint of many of the mobile handset providers as well as new entrants to the market.

7. PwC's report 'Championing change in the Indian ACE industry' (November 2017), CEAMA, India Retail Report, Aranca research, India Brand Equity Foundation 2018

2

Policy environment, challenges for the ACE sector and the way forward

India is undergoing a major change in its economic environment and is growing fast. In the preceding chapter we showed the overall macro-economic positives and challenges for the industry. The current chapter deals with the policy environment, challenges and the way forward for the sector to remain on the growth path.

It is crucial to boost domestic electronics manufacturing through an enabling policy environment. Some of the challenges facing the appliance and consumer electronics (ACE) industry include the following:

a) Competitiveness

India has an advantage in terms of having a highly skilled workforce that is available at a comparatively lower cost. This point combined with English being a widely spoken language lures companies considering India as a base for setting up a manufacturing unit. These advantages, however, are often offset by the high manufacturing cost structure and lack of economies of scale. The cost of finance, power and transportation together add a cost disability of 7-8%[8]. Interest rates in India range from 10 to 14% compared to approximately 5-6% in countries such as China, Vietnam, Japan and South Korea. Logistic challenges such as availability of ports and quality of infrastructure add to the cost of manufacturing in India.

b) Free Trade Agreements (FTA)

India has signed FTA with several countries such as Singapore, Thailand and ASEAN. Under the FTA, each country is required to gradually reduce and eventually eliminate tariff rates on the other country's goods (including electronic goods) according to pre-decided timelines for implementation.[9]

As an example, the FTA signed by India are with production-driven economies resulting in finished products from these countries being imported into India at a cost lower than what it would have cost to manufacture the same products in India. This factor combined with the fact that in most cases, components of the finished products are subject to import duties at rates higher than the duties applicable on finished products, the FTA has contributed to the decline of the manufacturing of products in India.

c) Compliance costs

The ACE sector has been witnessing an increasing cost burden due to the evolving nature of compliances prescribed by the Government in the recent years. This cost burden is ultimately passed on to the consumer, making the products unaffordable and having a detrimental impact on demand. Following are a few of the compliance elements:

a) BEE Star rating compliance

A major segment of electronic durables such as air conditioners, refrigerators, geysers, colour televisions fall under the mandatory Standards and Labeling Programme introduced by the Bureau of Energy Efficiency (BEE) under the Ministry of Power. This has been undertaken to limit the growing electricity demand by introducing energy efficient, environment and cost saving appliances. While it is crucial that consumer appliances in India continue to innovate to remain energy efficient, the industry is of the view that BEE is 'pushing too fast, too ahead' in its aggressive push towards annually changing stringent standards.

The BEE ratings are changing almost biennially, making it difficult for the industry to abide by the norms and equip the appliances with new technologies. This has two implications for the industry.

1. The changing of standards results in downgrading of the existing 4 and 5-star rated appliances, thus affecting the demand and reputation of the highly rated products.
2. A phased approach in revising the standards will allow the Industry to do a value add with the planned R & D. Sudden changes increases the cost of the new product and renders the older products obsolete much before the end of their lifespan.

8. CEAMA, October 2018
9. ASEAN-India FTA Trade in Goods https://www.asean.org/wp-content/uploads/images/2013/economic/afta/ASEAN%20India%20TIG%20-%20CTC%20scan%20(complete).pdf

b) BIS testing and certification

As a part of the Indian Government's push towards quality control, the ACE sector is required to ensure testing and certification of its appliances by the Bureau of Indian Standards (BIS). One of the challenges faced by the industry is the delay in the testing and certification of the products on account of a limited number of BIS approved labs in India. The increasing cost of compliance with enhanced fees adds to the cost of production for the organized sector."

c) Environmental norms

While plastic waste management rules and e-waste management rules and compliance with its obligations is a progressive initiative towards environment protection, lack of clarity in its implementation framework and uncertainty around the policy changes increase the overall compliance costs. This leads to increasing the cost of manufacturing in India resulting in an increase in the price of the products, and that in turn negatively impacts consumer demand.

d) Incentive schemes - modified special incentive package scheme

M-SIPS was introduced by the government to offset disability and attract investments in Electronic manufacturing. It has been well appreciated by the industry and helped in reducing domestic manufacturers disabilities.

Appliance and consumer electronics manufacturers have applied for and obtained the relevant approval under the modified special incentive package scheme. The scheme provides for capital subsidy that is an important aspect of making manufacturing cost efficient in India. The industry has been facing delays in disbursements of the capital subsidy incentives, resulting in the industry being unable to realise the benefits of these schemes.

Enablers required for the sector's growth

1. Unlocking demand

There is an urgent need to unlock domestic and export demand by making the ACE market affordable and increase the economies of scale. Also some consumer durables are considered luxury products from a GST perspective. With changing lifestyle patterns and consumer aspirations, such products have now become a necessity that warrant revisiting the tax structure and rates. Below are some recommendations to achieve in the short run:

GST

Treat the entire consumer electronics segment as a single category under GST to ensure uniformity in GST rate.

Subsidies and incentives

1. Provide consumers with incentives in the form of subsidies to encourage them to shift to higher star-rated energy efficient appliances
2. Provide subsidies to locally manufactured products to help them compete with fully finished goods imported at zero duty under the current FTA agreements

"To increase economies of scale, the Government needs to create opportunities and aggregate demand that will allow the industry to invest in manufacturing in India."

A leading Indian ACE manufacturer

2. Cost competitiveness for 'Make in India'

> "To promote domestic manufacturing and boost exports, Free Trade Agreements should be signed with consumption driven economies, rather than production driven countries."
>
> A leading home and kitchen appliance brand manufacturer

With the advent of industry 4.0, an increase in manufacturing productivity may be expected once businesses invest in technological infrastructure and processes. However, to reap the benefits of the productivity gains, it is crucial that costs related to operations, logistics, supply chain and sourcing do not offset the benefits. Below are some recommendations:

FTAs

1. India should focus on signing FTAs with consumption driven economies to promote an export focus and 'Make in India' for the world
2. Consider excluding ACE products from the future FTAs, especially Regional Comprehensive Economic Partnership (RCEP)

Lower cost of components

1. Short term measures include reducing the import duty on components
2. Incentivise research and development to be undertaken in India to build domestic capability to make components that are currently unavailable in India

Access to skilled manpower

1. Various schemes under Pradhan Mantri Kaushal Vikas Yojna and SANKALP to help benefit the Skill India movement and get ACE sector to be an active participant in these schemes
2. Industry may want to work with Polytechnics to create courses for technicians enabled for Digital India and Smart India

3. Ease of Doing Business

> "Any policy change should be assessed on how it impacts domestic demand."
>
> A leading domestic appliance manufacturer

The ACE industry has been contributing to the growth of the manufacturing sector by adding value and generating employment. The immediate need of the industry is to reduce cost of operations and compliances to help unlock the domestic demand and establish economies of scale. To build a conducive ecosystem for 'Make in India', it may be useful to establish a nodal body or a facilitation unit for the ACE industry within a government department to cater to the specific needs of the sector and provide support in a focussed manner.

While the regulatory authorities have been working on creating a conducive business environment, there have been frequent policy and regulatory changes that have led to an increase in compliance costs thereby leading to a decrease in demand for the ACE sector products. Therefore, any policy change needs to be accompanied with industry consultations to assess how it affects consumer demand and to avoid burdening consumers with increased prices.

Here are a few recommendations:

Access to credit

To correct structural cost disadvantages and redu ce the risks of investment, reduce the cost of finance by 50%

Environmental norms

1. Relax collection target in E-Waste (Management) Rules, 2016, and increase this gradually over the next 10 years
2. The government needs to conduct consultations with the industry to clarify and improve implementation of EPR under the e-waste and plastic waste rules

Energy efficiency standards

1. Implement BEE compliances in a phased manner
2. Reduce the frequency of upward revisions in the standards and bring in changes in consultation with the industry

Quality control

1. Increase the number of BIS labs for the testing of consumer electronics
2. Increase efficiency in the testing and certification process of BIS labs to reduce the time to market for a product

Implementation of schemes and incentives

Faster approvals along with timely and efficient disbursal of funds to eligible entities is needed to strengthen the implementation of existing schemes for the sector

Compliances

Reduce the number of forms and compliances to be undertaken by allowing online filings

3

GST - has it made the industry more nimble?

It's been more than one year since the introduction of the GST in India. In view of the magnitude of its impact, it may be premature to pass a final verdict. However, its impact is enough for reflection on what worked and what did not. This is a good time to explore new ways of doing business, that are more efficient and largely driven by commercial imperatives.

Publicised as the 'one nation one tax', GST replaced the multi-tax structure in India and brought with it free flow of credits, overall reduction in the prices of goods and services as well as barrier-free movement of goods across India. The roll-out of GST has been smoother than expected, with little impact on overall business operations. Specifically with regard to the benefits for the supply chain segment of businesses, with the advent of GST, it has been observed that the value proposition is visible across all touchpoints, which include procurement, manufacturing and distribution. Some of the major improvements witnessed by the businesses supply chain network during the year are discussed below:

Tax structure

Implementation of GST has led to the replacement of a plethora of Central-level taxes (i.e. excise duty, countervailing duty, Central sales tax and service tax) and state-level taxes (Value Added Tax, octroi and entry tax, local body tax, luxury tax, etc.). As a result, the rate arbitrage prevalent under the pre-GST period which impacted the consumer behaviour from state to state has become uniform upon implementation of GST. This has led to consistency in product pricing across all states which has immensely benefitted the business supply chain network and eased out operational and pricing issues on a state-level basis.

Further, the tax structure under GST has been divided into five slabs—that is, 0%, 5%, 12%, 18% and 28% (proposed for 'luxury' goods)—along with compensation cess on specific categories of goods. The slab rate of 28% was mooted as too high compared to other developing economies and was largely hailed as a deterrent to the impacted industries. During the initial stages, the 28% rate category comprised all major consumer electronics, namely ACs, refrigerators, TVs and washing machines.

However, in light of industry representation and growing consumption patterns, the GST Council decided to rationalise the tax rate on many consumer electronics (including refrigerators and washing machines). Over a period of time, the number of goods under the 28% tax bracket has been reduced from more than 200 goods to almost 35 goods.[10]

Reduction in costs of taxes and warehousing

The web of state- and Central-level taxes in the earlier regime made the inter-state trading of goods in India a cumbersome process. Moreover, each state had its own set of taxes and the businesses had to tie up with local compliance staff for getting the required permits. All these barriers ultimately led to an increase in product prices. Further, businesses had to engage multiple smaller warehouses to avoid wastage of time at the barriers on inter-state transfer of goods.

Further, the unified tax structure across all states in India has streamlined the supply chain. It has triggered the need for consolidation of state-wise warehouses which were previously being maintained by businesses in various states from where business was undertaken. Businesses are now free to structure their distribution and procurement channels purely based on commercial consideration and are no longer incumbent upon an inefficient tax structure.

Additionally, the unified tax and seamless availability of credits under GST has reduced the cost of supply and created re-negotiation opportunities in procurement of raw material. Elimination of CST on inter-state sales transactions has in a true sense contributed to making India a single tax country. The consolidation of storage points and a reduction in the number of inefficient nodes in supply chains have helped in lowering distribution costs by 8–12%.

Reduction in transit time

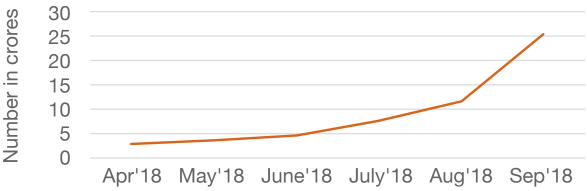
In the pre-GST era, precious delivery time was often lost as trucks transporting goods were held up for days on end at multiple entry barriers across states and for payment of local body/entry taxes. Removal of check posts at state borders has further led to efficiencies in the supply chain network due to reduction in transit times of trucks across India by 18–20%.[11] For example, the travel time between Delhi–Chennai, which used to be 5–6 days, has come down to 3–4 days post GST. Trucks are able to cover longer distances every day with an improved turnaround time, ensuring that transporters can carry out their business with a smaller fleet.

10. With effect from 27 July 2018
11. Based on a report by ICRA upon 1 year of GST

Standardisation of e-way bill system

The waybill system under the VAT regime, which varied from state to state in terms of its format, requirements and procedures has now been replaced with a single pan-India electronically generated e-way bill. The roll-out of the standard e-way bill system applicable across India has aided in relatively easier compliance requirements vis-à-vis the erstwhile regime. Almost 22.5 crore e-way bills have been generated since the introduction of the system on 1 April 2018.[12]

Number of e-way bills generated

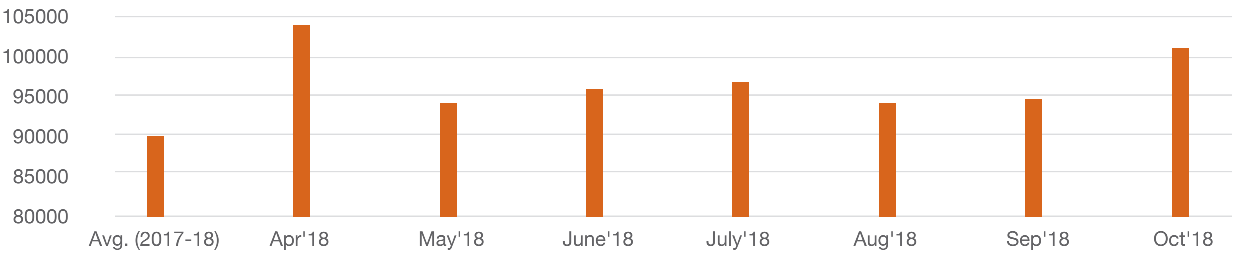


Source: Official twitter handle of the Government of India

Additionally, under the erstwhile VAT regime, officers had to manually check way bill related information with tax returns filed by taxpayers. However, the government is now optimistic that automation and standardisation of the entire process will help it monitor tax evasion and shore up its collections from GST. While the e-way bill process has been standardised, there are certain challenges being faced by the industry which have been discussed subsequently.

Despite some teething problems in managing compliance-related requirements, the implementation of GST is seen as a positive move and a major catalyst for the government to achieve its stated agenda of improving ease of doing business in India. As per the latest rankings released by the World Bank, India has jumped a further 23 places and is now ranked at 77 in the world on the parameters of ease of doing business. From a consumption standpoint, revenue collections crossed the 1 lakh crore INR mark for the first time in April 2018 and, more recently, in October 2018 (even while the government has reduced the GST rate on 200+ products over the past 16 months).

Comparison of gross GST revenue (Average 2017-18 & April '18 to Oct '18) (Figures in crores)



Source: Pib.nic.in

Recommendations

A period of over one year is hardly adequate to put in place a perfect tax system. Though the government has been proactive in resolving a wide range of issues, the following are some areas on which both the government and the industry need to focus in the current year to further improve ease of doing business for the Indian industry.

For the government

Rationalisation of tax rates

The government should consider rationalisation of tax rates on certain consumer durable electronics such as ACs and TVs (more than 24 inches) and cameras as they are no longer 'luxury' items of and have become common household items in the average Indian home. It is therefore important that the GST Council and policymakers revisit their definition of the term 'luxury items', considering the standards of living in today's world.

The government should understand that if such consumer durable electronics are considered luxuries, they can never grow in the market. In order to attain market growth and penetration, it is important to make such commodities affordable and thereby lower the incidence of tax on them. The market size in China is 65 million, which is nearly five times that of India, and yet the composite tax rate is not more than 14%. Moreover, the tax rate in other developing economies (such as Brazil, Russia, China, South Africa) on such consumer durable electronics ranges anywhere from 15% to 18%. Moreover, benefits or concessions under GST should also be extended to the e-waste scrapping done by industry.

In line with global practices, the GST Council should further rationalise the rate of tax on such products. The recent upswing in GST collections does indicate that consumption has gone up and a further rationalisation of the GST rate of goods in the 28% category is likely to provide impetus to consumption and penetration in the Indian market.

12. According to GSTN and official twitter handle of the Government of India report dated 14 September 2018

E-way bill

While the process related to e-way bills has been standardised, a few states are coming up with parallel rules and procedures for e-way bill generation such as differences in the threshold limit (like a limit of 1 lakh notified in Punjab), applicability to certain specified goods (like applicability of intra-state e-way bills only to 19 categories of goods in Gujarat), transaction-specific exemptions (like exemption to intra-state movement as provided by Rajasthan) and RFID requirement (as notified by Uttar Pradesh). The GST Council should strive to maintain uniformity in its implementation.

Moreover, the government should bring in a dispute resolution mechanism to address the concerns of transporters. The provision of a help desk number for redressal of complaints and issues faced by supply chain teams and transporters should be brought in place. This would help businesses in the effective functioning and implementation of the e-way bill system.

Anti-profiteering provisions

With the advent of GST, the government introduced anti-profiteering provisions in the law with the aim of striving to keep a check on inflation. The anti-profiteering provisions allow for passing on the benefit of savings in input tax credit and lower GST rate by commensurate reduction in prices. However, the government has not provided businesses any guidelines/clarification in terms of assessing and passing on any benefit.

It has become difficult for businesses to assess any benefit and mechanism to pass on the requisite benefits. The rise in crude prices and dollar exchange rate has further impacted the cost of goods sold. Another concern is in relation to the time limit for which the benefit is to be passed on to customers under the anti-profiteering provisions, which has further led to a lot of apprehensions in the industry.

Hence, there is a need for a more open approach from the government in terms of bringing clarity on this aspect. Also, the government should provide some time to industry for dealing with existing stocks in case of reduction in the rate of tax applicable on the same. For instance, the procedure for change of MRP stickers should be clarified, the timeline for effecting price change should be notified, etc.

For industry

Evaluate the need for technology

Businesses need to identify the changes required in their IT systems, specifically in line with e-way bill compliance related requirements. The main objective of the introduction of the e-way Bill system is to curb leakage of revenue. As we move ahead, the government will expect taxpayers to match outward supplies reported in their GSTR-1 with the value of e-way bills generated and provide the necessary reconciliation-related data for any differences.

Additionally, it is crucial for businesses to have control over their vendors and transporters and to ensure they are well versed with the procedures and the system. This should reduce compliance lapses and render a compliant ecosystem.

In this regard, businesses need to understand the importance of putting in place comprehensive technology-based solutions to manage their compliance with these directives. This will help them in the long run by reducing manual intervention and automating the entire process in their organisations.

Compliance with anti-profiteering provisions

For compliance with the anti-profiteering provisions, robust documentation should be maintained by businesses to strongly support the basis of pricing and pricing decisions. They should retain the official records on the basis of which pricing decisions were made during the GST transition period. The government has already set up a mechanism to ensure compliance with anti-profiteering (i.e. screening committee, standing committee and NAA constituted under the act to keep a check on unreasonable high prices under the GST regime). It is also necessary that companies set up requisite internal committees to keep a check on compliance with the anti-profiteering provisions by ensuring regular re-computation of potential benefit and comparison with benefit passed on.

A major focus should be on promoting compliance by way of on-going communication with both businesses (in competition) and customers. Press releases, publications, etc., should be used as a medium to spread information with respect to how the company is ensuring compliance with the anti-profiteering provisions. The message should be clearly communicated down the value chain and principles of anti-profiteering should be applied across the entire distribution network of the company.

Implementation of GST is truly a remarkable achievement for the Indian government and has made the industry more nimble. Although it is still early days, GST started on a positive note and the benefits for all stakeholders are evident. It is now time for the government to stabilise the system, remove uncertainty, facilitate compliance by easing processes and expand the tax base to overcome the existing hurdles faced by the industry. At the same time, businesses should quickly adapt their operations to the new dynamics and support the government in making GST a success.

4

Supply chain in the ACE sector and emerging trends

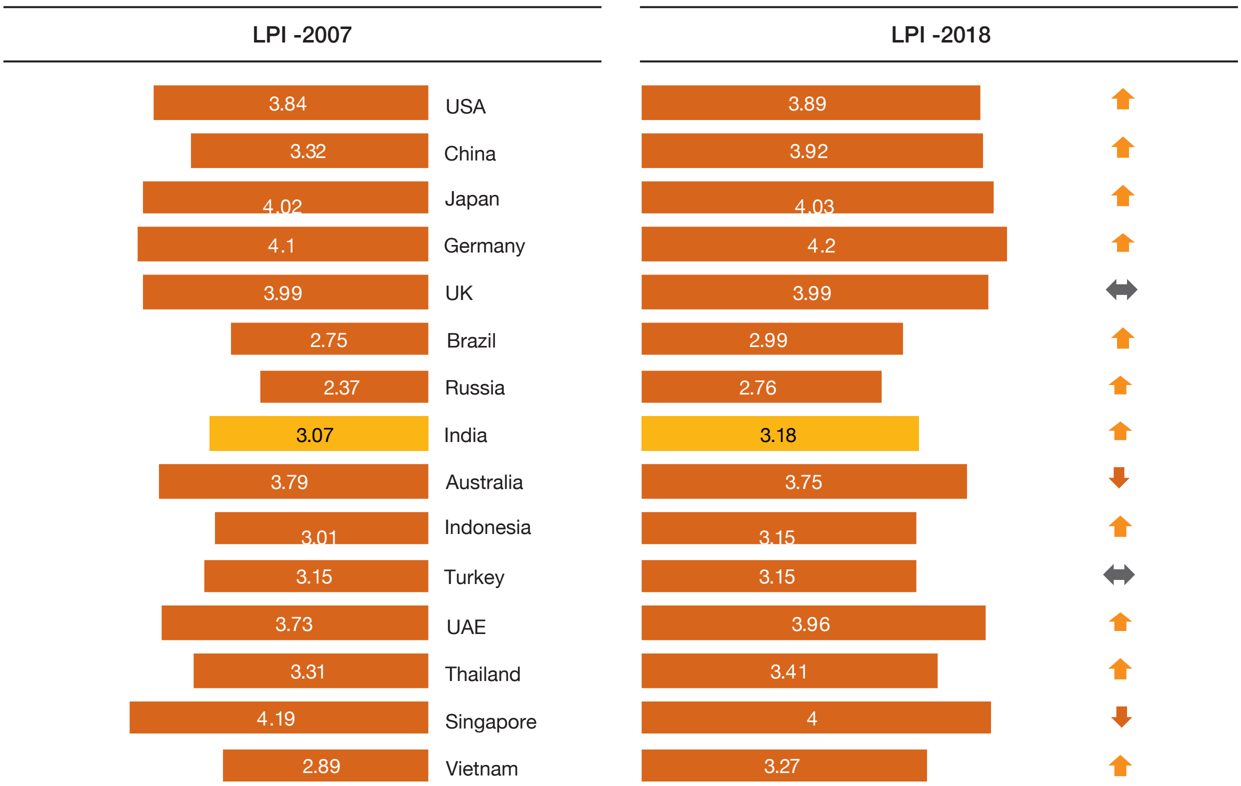
Historically, India's consumer products supply chain has been somewhat of a hindrance to business than an enabler. While inherent challenges around fragmented players in the logistics industry and lackluster infrastructure continue, recent issues such as rising diesel prices have only fueled these challenges. Despite quality levels, India spends 14% of its GDP on logistics as opposed to 6-9% in developed economies.

Specifically for India's Appliances and Consumer Electronics market, an industry worth US$31.48 billion in 2017 and expected to reach US$48.37 billion by 2022, the challenges are even more steep. The supply chain for durables transportation in India is mainly fragmented with small fleets operated by owners. Small fleet owners, who own one to five trucks, constitute 74% of truck owners. Limited 3PL players available in India currently, adds to inefficiencies in the sector. With new regulations brought in by the Ministry of Transportation, the loadability has gone down, increasing the transportation cost per unit. Diesel price has gone up by 27% over the last one year, which has affected the cost for fleet operators. All this, coupled with the limited availability of high cube trucks for the durables industry, leads to delays and high exigency costs during peak season.

However, over the recent past, supply chain in India is undergoing what we would call a phased-transformation journey. With regulatory enablers such as GST, policy initiatives e.g., DFC, logistics parks and the emergence of asset-heavy and evolved 3PLs, India's logistics landscape is undergoing a change in the positive direction.

A look at the Logistics Performance Index below suggests that India's rating has increased steadily over the past decade.

> "The entire logistics cost for the industry is very high and some of the recent changes in regulation are putting lot of pressure on the cost,"
>
> leading appliance manufacturer



In our opinion, there are four futuristic trends that will drive supply chains in the ACE sector:

Infrastructure and ecosystem

Policy initiatives such as GST, infrastructure developments e.g., DFCs, logistics parks and emergence of mature 3PLs investing in infrastructure

Multi-channel strategy

Moving away from one-size-fits-all supply chains to create more flexibility to serve across channels and across product segments

Connected supply chain

An integrated approach to the supply chain making it more responsive to dynamic demand and supply conditions

Automation and technology

Leveraging technology and automation solutions across the supply chain such as analytics platforms, IoT, GPS, ASRS, WH Automation and others

… which also aligns with how leaders view their supply chains based on PwC's Global Supply Chain Survey:

How leaders view their supply chain

Leaders focus on best-in-class delivery, cost and flexibility to meet increasingly demanding customer requirements

Companies that acknowledge supply chain as a strategic asset achieve 70% higher performance

One size does not fit all: leaders tailor their supply chains to the needs of different customer segments

Interest in Next-generation technology and sustainable supply chain is growing

Leaders in mature and emerging markets invest more heavily in differentiating supply chain capabilities

Leaders outsource production and delivery but retain global control of core strategic functions

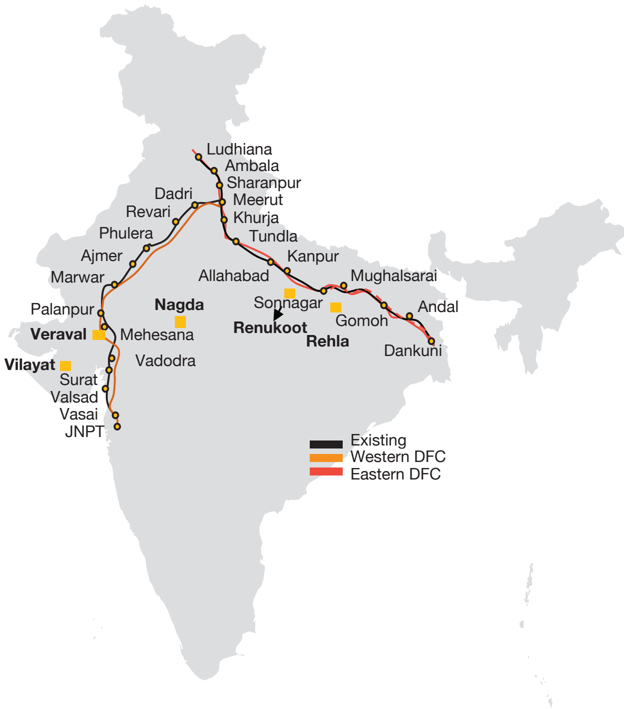
Source: PwC's report – Global Supply Chain Survey

Trend #1: Infrastructure and ecosystem

Infrastructure gaps have had a crippling effect on the logistics network in India and stakeholders have often factored in delays into the movement of goods schedule. With the introduction of GST, the logistics sector getting an infrastructure status, and the subsequent increase in government spending, the supply chain sector provides significant opportunities for collaboration and private sector investments, leading to a more consolidated supply chain ecosystem.

Dedicated Freight Corridors	Eastern (1760 km) and Western (1468 km) DFCs to enhance infrastructure for trains and add benefits to cost and speed
Project Sagarmala	Development of six megaports and 415 projects along the coastline
Project Bharatmala	Development of 51,000 km long expressways with an investment of INR10 trillion
Multi-modal logistics park	Development of 35 multi-modal logistics park with end-to-end supply chain facilities

Feature	Existing	On DFC
Train length	700 m	1,500 m
Train load	5,000 tonnes	13,000 tonnes
Container Stack	Single stack	Double stack
Max Speed	75 Kmph	100 Kmph



While the GST rates applied to certain product categories in the industry have been a cause for concern to drive penetration, the new taxation regime has removed the complex inter-state taxes and made the material movement much easier and faster within the geographical boundaries of the country.

Industry view:

"The entire logistics cost for the industry is very high and some of the recent changes in regulation are putting a lot of pressure on the cost."

Leading appliance manufacturer

"Warehousing is shifting towards manufacturing units or at the point of production. There is a consolidation of warehouses happening as there are no boundaries of the market. Damages are reducing and that is reducing cost."

Leading appliance manufacturer

"Post GST we have reduced the warehouse space by 8-10% due to consolidation occurring across the warehouses which has reduced the overall cost of logistics that is passed directly to the customer."

Leading durables manufacturer

Trend #2: Multi-channel strategy

India, as a market, is more complex than other countries, not only because of the regional nature, the demographic variety and the width and depth but also a multiplicity of channels and penetration across each of these existing channels.

While General Trade distribution business has been the dominant factor in the past, the ACE sector has seen a significant boom from e-commerce and modern trade channels. This, in turn, presents a unique problem for the supply chain given each channel's unique requirements.

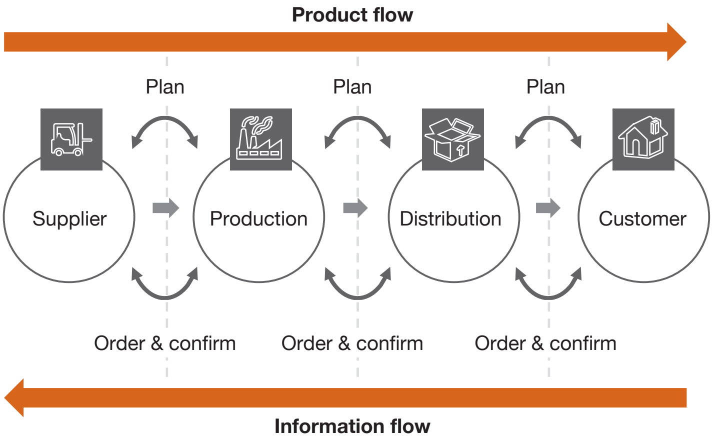
General Trade, where companies possibly spend around 60-70% of their front-line sales bandwidth, contributes to 30-50% of the sales as opposed to key accounts across MT and e-commerce where the returns are disproportionate to the effort. However, customer expectations on service levels from these channels is far higher and hence organisations across the consumer sector, are aiming to create differential supply chains, customised to cater to the needs of that channel from a service level, commercial policy and product segments perspective.

> "Online channel has grown quite significantly by 40-45% but offline channel has de-grown by 4-5%."
>
> Leading durables manufacturer

Companies are addressing this channel by making their supply chains by: i) defining the right balance of push-pull ii) tailored inventory models, iii) integrated sales and operations planning by channel and iv) deploying differential networks to service the needs of different channels across product segments and geographies.

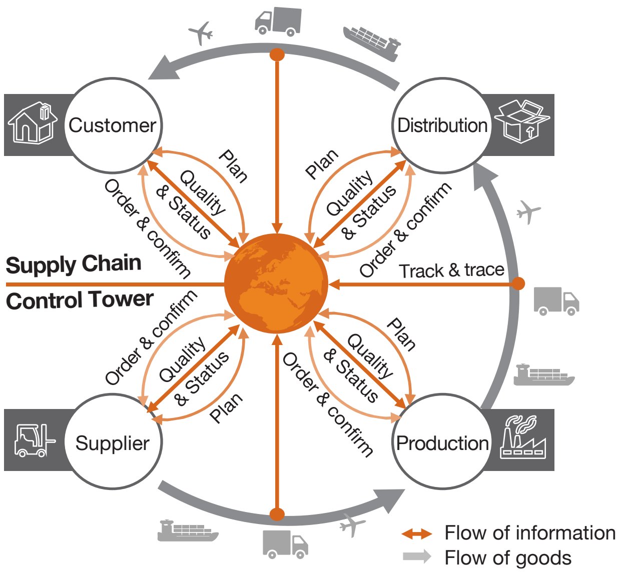
Collaborative supply chain	Lean supply chain	Agile supply chain	Project supply chain	Fully flexible supply chain
For customers valuing reliability and trustworthiness	For price sensitive customers valuing reliability and efficiency	For unprecdictable customers who require speed	For customers working with longer available time	Deployed at the time of crisis where speed and innovation are key parameters

Trend #3: Connected supply chain



Traditionally, supply chains have been more linear where, the flow of information from customer to supplier takes place in a linear path. Therefore, any variance occurring in the process of sales are reflected back to the supplier after some delays.

A connected supply on the other hand, enables a faster response time to dynamic changes in the market via a near real-time capture and flow-through of information across key stakeholders in the supply chain, i.e., suppliers, customers, factories and distribution.



Connected supply chain focusses on enhancing the experience of each of the stakeholders. In this, every node would interact with other nodes of the central control tower and would react in sync to the changing market condition thereby, making the supply chain more efficient and effective in nature.

The journey to such a connected supply chain is a long one for the industry and can be truly enabled only with deployment of the right automation and technology capabilities, which is discussed next.

Trend #4 : Automation and technology

Supply chain has become a complex system with different channels co-existing. Intense competition and changing customer requirements have forced the companies to adopt new technologies in order to reduce inefficiencies existing in their supply chain system.

Advance analytics can assist players in the durables industry to plan demand, manage inventory and assess logistics w.r.t. to the changing market conditions and real-time tracking. While the adoption of these technologies is not rampant, it is surely on the rise with market leaders taking a conscious choice on which elements of supply chain automation to prioritise for the near term and which ones to plan for in the long term.

> "The technologies, over a period of time, will turn into hygiene based on how rapidly these technologies are made more cost effective."
>
> Spokesperson of electronics manufacturer

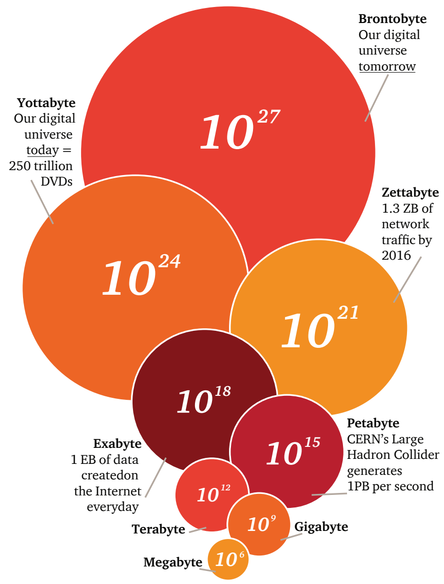
> "Not too many technologies have been adopted by the industry as of now as majority of the technologies are not tested. Industry is slowly adopting and upgrading their technologies."
>
> Leading electronics manufacturer

Internet of Things

It is estimated that 50 billion objects will be connected to the Internet by 2020, producing a massive volume and variety of data at unprecedented velocity.

- IoT can assist industry players in inventory management. It could also assist in providing real time information flow about the inventory position thereby assisting large appliances manufacturing firms in optimising inventory levels.
- The durables industry procures different raw materials from different suppliers. IoT can assist players to ensure that all carriers from shipping containers to trucks carrying the goods are all connected.

Information from IoT devices



Source: PwC Report: Mobile computing, digital and IoT in supply chain

> "Technology is used everywhere, whether it is enabling the movement of the front-liners, providing real time information with analytics or customised dashboards to individuals."
>
> Leading durables manufacturer

Track & Trace – GPS, Bar Coding, RFiD & others

Combination of tracking & tracing technologies have transformed the elements on real-time actions, improved safety levels and most importantly traceability of FG across the value chain including its original components. Companies have carefully chosen to deploy selective technologies, mostly focused on driving better controls and inventory traceability and management.

> "The complete bar coding system in the warehouses has been done which previously was not possible due to small CFAs."

Warehouse automation

Warehouse consolidation post-GST has also advocated the business case for increased automation in the warehouse. Taking the e-commerce giants' cue, the industry and the 3PL players are moving towards facilities with possibilities of Automated Storage and Retrieval System (ASRS), Automatic Guided Vehicles (AGVs), pick by voice, electronic data interchange (EDI) and others.

These automations have led to significant reduction in damages, improved order-to-delivery times, improved accuracy and improved cost structures in the long run with reduced manpower and space requirements.

Key takeaways

#1 India is making slow but steady progress on improving its logistics capabilities and infrastructure.

#2 Some regulatory enablers such as GST and other initiatives around logistics parks are also expected to improve the supply chain cost structures and overall capability in the country.

#3 Multi-channel strategy with a focus on custom-supply chains by channel could yield significant benefits for the industry players.

#4 Adoption of automation and technology are on the rise with a focus on not just a short-term outcome but gearing up the supply chain for the future.

5

Service as a differentiator in the ACE sector

Neo customer service experience

In industrialised societies such as ours, new products are appearing in the marketplace at an ever-increasing pace. Their introduction is either market driven – the result of customers' rising expectations and needs – or technology driven – resulting from advances in technology with increased complexities. Besides have limited opportunities to know about the performance of new products. Two items are becoming more critical in the customer purchase decision process:

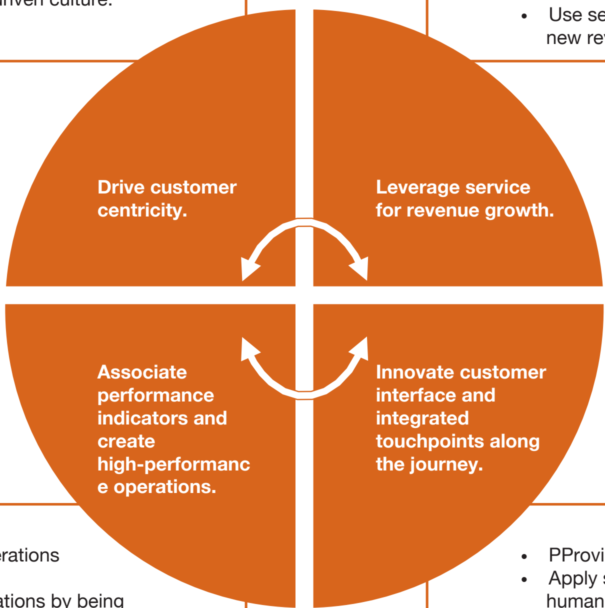
1. Pre-purchase services, including information regarding a product's performance, useful life, cost of operation
2. Post-purchase support services, including training in use of products, availability of spares, maintenance, assistance with problems.

There has been a dramatic rise in competition in the consumer durable products industry due to increasing consumer choices and expectations posing new challenges for creation and maintenance different brands. The customer service function is becoming a major differentiating power. Knowledge of services dominates although it is intangible compared to knowledge pertaining to goods. What is important is that ultimately when consumers purchase goods they are actually purchasing an experience.

We carried out a comprehensive survey to fully understand the demands of the new age customer. Our research uncovered four key parameters for becoming a successful customer service practitioner:

- Know the customer.
- Deliver the promised service value proposition.
- Establish a service-driven culture.

- Remember that customers' experience of improvements impacts revenue.
- Leverage customer data to drive their loyalty.
- Use service proposition to identify new revenue streams



- Create a service operations foundation.
- Enable service operations by being led by technology to create robust measurement frameworks.

- PProvide multiple channels:
- Apply smart automation to balance human and automated interactions.
- Experiment with technological innovations.

Driving customer-centricity

Customer-centricity means starting with customers' expectations instead of ours. When analysing how organisations approach the customer service function, what comes to the fore is their lack of a clear understanding of what they should do. Customer-centricity is about aligning organisations with their customers' needs and preferences across all critical interactions and throughout the lifecycle of projects.

A customer-centric organisation with a focus on enterprise strategy, corporate culture, operational processes, enablement of technology and performance measures delights customers and facilitates:

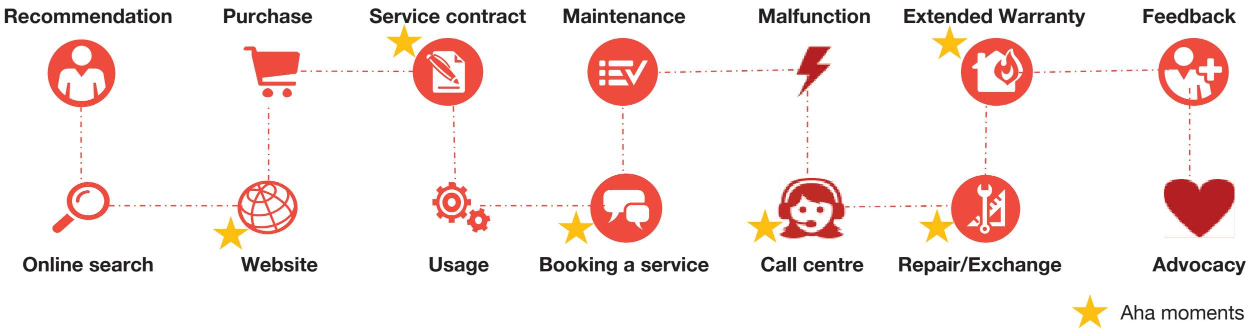
- Provision of an improved customer experience that differentiates itself in the marketplace
- Generation and sustenance of enhanced lifetime value for customers and a growing number of loyal and profitable customers

Such an organisation recognises that a business comprises a portfolio of customers and strategically invests in the following:

- Creation of an understanding of customers and specific customer segments
- Delivery of a consistent and seamless branded customer experience
- Measurement of the value proposition for clients and the financial impact on the organisation

Establishing an outside-in view

Successful companies fully understand their customers' expectations, goals, behaviour and experience by mapping the customer's journey, i.e., the sequence of activities that customers perform to purchase and use a product or service.



This is the key to defining an effective service value proposition including service strategy, structure and channels. This can also help in development of intuitive user interfaces by designing customer touchpoint-related functions in line with customers' expectations. A well-positioned customer service is enabled by the explicit implementation of knowledge from clients and markets by taking an outside-in perspective. In contrast, companies that primarily focus on streamlining their internal processes and realising cost reduction (as is the case in most organisations) fail to identify and align their customer service functions with their customers' needs. How is an outside-in view achieved? Simple—first start listening to your customers and then engage them in a dialogue.

That's exactly what a large consumer durable company we are working for did while developing its self-service customer app. It considered feedback from users at customer or dealer network meetings, during which users were invited on the social media page or website's message boards, and companies' executives listened to users and felt the community's pulse. This provided them with very relevant feedback, particularly if something had gone wrong. With the help of this self-service, customers are able to literally become a company's most valuable unpaid employees.

Leveraging service for revenue growth

To change the perspective of service from a cost centre to a profit centre, companies first need to capture the impact of services separately in their profit and loss (PL) statement and identify the different sources of costs and revenues. For example, in an after-sales business for consumer durables, revenue can accrue from charges such as Annual Maintenance Contract (AMC), installation, extended warranty and incurred costs such as for personnel overheads and spare parts. Service, as a key differentiator, can drive product sales when customer values a service. Increasingly, services are emerging as a profitable offering by themselves. Globally, businesses earn 24% of the revenues and 45% of gross profits from the aftermarket, which is not adequately leveraged in India. In our research, we looked at three aspects of services for revenue growth— the impact on customers' experience, insights from customer-related data to drive loyalty and use of service propositions for identification of new revenue streams.

Improving the customer experience to enhance revenue

Most people intuitively recognise the value of a great customer experience. According to customers, "Brands that deliver experience are the ones that we want to interact with as customers — those that we become loyal to and can recommend to our friends and family". A study conducted by HBR.org, using data collected on the experience and revenue from a global US$1 billion+ transaction-based business, found that not only is it possible to quantify the impact of te customer experience, but the effects are significant. The study scrutinised two elements–customer feedback and future spending by individual customers. Multiple regressions were used to account for factors that might drive these outcomes other than customer experience. It was found that after taking into account other factors that drive repeat purchases in a transaction-based business, customers with the best past experiences spend 140% more compared to those with sub-standard past experience.

(Reference - https://hbr.org/2014/08/the-value-of-customer-experience-quantified)

Leveraging customer data to drive loyalty

It is widely known that customer loyalty leads to an increase in revenue and that this leads to a shift in mindsets, which ushers in a significant change in the fundamental aspects of customer service. Rather than decreasing contact time with customers to reduce cost, organisations are discovering new value by using each contact to generate new consumer insights, build loyalty and leverage such interaction for cross- and up-selling. There are two ways for companies to look at customer satisfaction and loyalty data. They can do so from both quantitative and qualitative perspectives. Both are important and provide in-depth analyses on the overall health of a customer base. Mining of customers' insights and feedback is critical for companies to determine the actions they should take. Quantitative data tells you the "what" of satisfaction and loyalty, but qualitative data asks you "why". It allows you to look at the key drivers and root causes of satisfaction and loyalty and enables you to drill down to the real issues that are either driving loyalty or making a company vulnerable to the competition. Are there particular issues that continually appear when mining customer feedback? It is time to resolve a continuous that your customers complain about? Is the professionalism of and courtesy provided by your organisation posing problems in eliciting negative feedback from your customers? Are you able to slice your data to focus on feedback and comments from your key customer segments that provide your company with the bulk of its revenue and profit? These questions can be answered by mining customer interaction data.¬

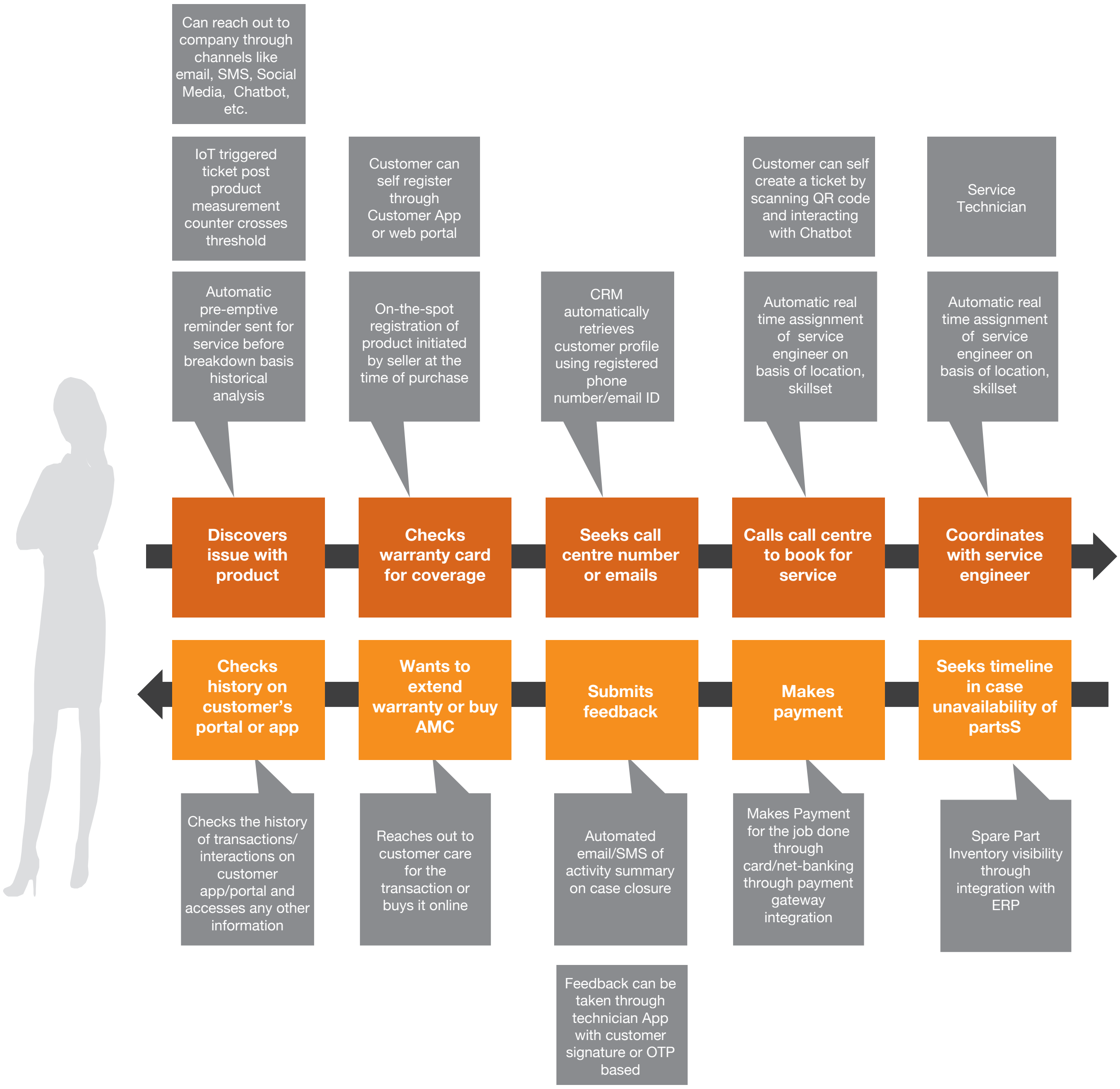
Using service proposition to identify new revenue streams

The main revenue stream of a service business is derived from the service it performs for customers. There may be different models for generation and sustenance of revenue streams, such as selling extended warranty contracts, AMCs, spares, refurbished products, upgrading of policies and subscription-based services. These revenue streams rely on the service proposition and a company's provision and execution of services.

Innovating the customer interface and integrating touchpoints across a customer's journey

Provision of multiple channels – from multiple channels to omni channels

The multi-channel approach aims to provide access via the maximum number of channels. Companies utilising the multi-channel strategy are adopting two or more channels to engage their consumers, but the most popular include social media and emails. The Omni channel approach interrelates every channel to engage with customers as a whole, to ensure they are having a wonderful overall experience with the brand throughout each and every channel. The focus is on building a stronger relationship between consumers and a brand. In fact, on an average, companies with well-defined Omni-channel customer experience have put in place focused strategies to achieve a 91% higher year-over-year increase in their customer retention rate, compared to those without Omni-channel programmes in place. The figure given below provides a synoptic view of the dynamics of a well-defined Omni-channel customer experience:



Applying smart automation to balance human and automated interaction

As technologies advance and customers' expectations grow, channels of interaction with them have begun to combine. Now it is no longer a dedicated channel on which customers would like to interact with a company. Customers can call call centres to log their complaints, and may log in to the portal to know the status, and finally send emails if they want to escalate any issues.

Customers want flexibility in how they interact with companies through various modes of communication such as calls, SMS, emails, social media, chatting apps, Chatbots and Virtual Reality. In the process of doing this they expect the same experience throughout the journey.

A conversation between an agent and a customer should be warm and should feel as if it is a continued one and not as though it is a new conversation every time the same customer interacts with the customer care centre or helpline. The agent interacting with the client should have all the history and a complete understanding of the customer's concerns so that his or her approach can be empathetic. This will help us achieve client delight and in our approach to aggrieved and irate customers by resolving issues they face.

A dynamic and integrated customer relationship management (CRM) system allows collation of data from these multiple touchpoints and its presentation in a comprehensible manner. This enables Customer Service teams to analyse and utilise the results to improve their customer experience and grievance-handling processes.

Integrating service channel management across all customer touchpoints

Channel-specific technology trends	Service channel	Cross-channel technology trend
• Virtual Reality-based tools • Augmented reality-based tools • Technician App	Customer's onsite	
• Queue Management • Automated service stations (kiosks) • Podcasts (visualized interfaces)	In-store	Joint interaction of agent and customer
• Extended IVR* functionality- • Video contact centre, electronic quality assurance/computer-aided customer feedback	Contact centre	Sharing/Integration of information across channels
• Automated processing of emails • Improved personalisation	Contact centre	Leveraging synergies from cross-channel system integration
• Virtual agents- Web Chat, Chatbots, etc. • Two-way customer communities • Improved search and database features	Email	

Creating high-performance operations

A Customer Service Operations function consists of a team of representatives who deal with customers face-to-face and also determine service policies and analyse reports to determine customers' satisfaction. Customer service organisations need to put in place robust service operations teams as their foundation before moving on to establish superior customer service. A service operation foundation depends on improving or optimisation of existing operations—processes, systems, and staff's qualifications and skill sets. Service designs and operations that are tailored to customers' needs—balancing quality, cost and revenue objectives—jump-start a virtual cycle of increased employee satisfaction, improved service quality and enhanced customer loyalty. The need is to combine creative design capabilities with an analytical approach to understand employees' behaviour and customers' experiences to positively affect the top and bottom lines.

Being technology-led

Technology plays a key role in execution of service operations. Companies can provide services that are seamless and consistent across channels only by leveraging technology. According to a study conducted by Gartner, by 2020, customers will manage 85% of their relationships with enterprises without interacting with a human. This indicates that humans will be solving only 15% of complex service-related issue .

Robust measurement framework

A successful performance management programme supports and promotes accomplishment of a company's mission and goals. It includes four key components:

1. Setting individual and team goals that are aligned with the company's goals
2. Establishing a measurement system that is accepted by users
3. Providing adequate and timely feedback
4. Rewarding and recognising desired performance

A performance management programme will promote a company's customer service goals and improve its performance if each of these components is designed with a visible improvement in customers' experience as its focus. Separate implementation of these four key components (independently) will not improve performance as effectively as when these are examined and coordinated in tandem.

Recommendation

Companies should start with putting in place an outside-in view and be technology-led to improve their existing functions by implementing changes gradually. This will enable them to make the most of their existing capabilities. In the long term, a view of how companies perceive their share of business from service will determine the priority they place on their service business models and on adapting these to provide efficient and individualised services to their customers.

6

Connected devices and emerging technologies for durables

Connected devices in the consumer segment is still in its infancy and is likely to take up years to proliferate in India. However, the installed base is expected to grow at a much faster rate than developed countries. Smart devices, enabled with IoT and Artificial Intelligence (AI) is expected to see a rapid growth of around 32x to reach 1.9 billion units by 2020, from its current base of 60 million.

The advent of IoT and AI in the consumer appliances and electronics segment opens a wide array of possibilities, given the massive size of the domestic electronics market. New trends in the electronics segment is currently being represented by a growing interest in smart connected devices such as Smart TVs, smart fridge, smart wearables, etc. In fact, India is one of the largest growing electronics player in the world. The market is expected to grow at 9% CAGR from 2017-22.

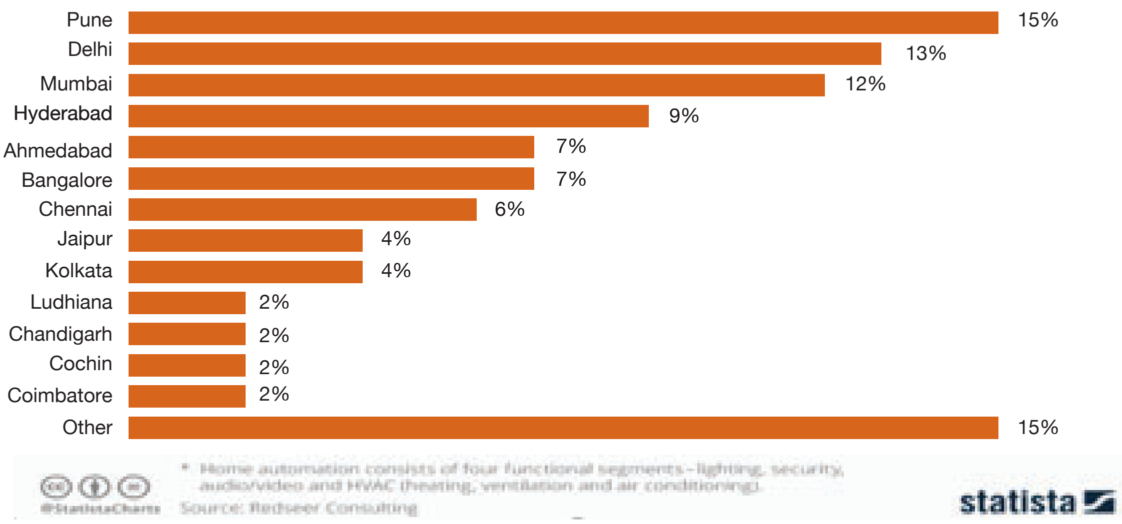
Adoption of connected devices in India

Connected devices for consumers have special focus on connected homes and lifestyles. While the users now are mostly from tier 1 cities, we are bound to witness major adoption in tier 2 and tier 3 cities in near future. The Government's continued focus on 'Digitalisation', 'Increase in Internet penetration and data usage' and 'Increased awareness' in 30-55 age bracket will help proliferate adoption of smart devices.

By fair estimates, another major driver for increase in adoption of connected devices will be Smart city. 'Smart home automation and security solutions' feeding information to the smart city grid will provide economic benefit to the consumer. Home automation takes into account four functional segments such as 'lighting', 'security', audio/video' and heating, ventilation, airconditioning (HVAC).

Home automation in India is more pronounced in the western part of the country.

Share of home automation market in India in 2018



Players in smart home products can expect a rise in annual growth rate (CAGR 2018-22) of 61.4% with volume of US$5901 million. Among the services, smart home automation and smart home security tend to be major areas of focus and growth.

However, the benefits of connected devices can be derived only on high speed bandwidth. Major telcos in our country have started working to maximise on this demand. 5G and LoRaWAN will transform the internet topology and consumer behaviour. Growth of Mobile POS, AEPS, safe water network, rural ATMs etc., were major hits and drove consumer adoption. Moreover, mobile data consumption in India is growing at an unprecedented rate, which eventually will play an important role in shaping the adoption of connected devices.

Lastly, the perception that connected Smart devices is only at the luxury end of consumption is not substantiated by the number of smartphone subscription, smart TVs or speaker systems sold. The connected devices have the potential to become mainstream with the rollout of smart utilities as part of the smart city initiative.

Major impediments in adoption of smart devices

Lack of privacy, security and transparency, lock-in to products and systems are some of the major impediments that will need to be addressed by agencies. Some of these problems come from existing consumer issues being exacerbated by the increased connections in the Smart devices, and some are quite new.

Existing issues can be bucketed as:

a. Lack of transparency on collected data
b. Increasing data volumes
c. Technology outpacing regulations
d. Data security
e. Provider lock-in

We are witnessing new issues that also needs immediate attention:

a. Data ownership expectation mismatch between consumer and regulators
b. Increased cost of opting out of a service

The lack of poor supporting infrastructure is also affecting the uptake. Despite continuous efforts by the Government, India still fares low in quality of roads and availability of electricity. The telecommunication network suffers from low data speeds and unstable connection. Additionally, India's current workforce lacks skills and expertise in new-age technologies such as IoT and advanced analytics.

New opportunities in the connected devices segment

The expansion of connected devices over high speed internet will rapidly enable an array of opportunities spanning across multiple stakeholders.

i. **Opportunity around lifestyle, water and hygiene:** IoT sensors with layers of AI embedded in airpurifier, waterpurifier and HVAC can provide vital statistics on consumer's living condition. The system can also be made intelligent to provide customised alerts on lifestyle changes.

ii. **Opportunity around healthcare:** Specialised detection devices in Smart homes can pick up early signs of abnormal behaviour of a consumer. Connected fridge detects whether a person is eating properly or the food is going out of date. AI layer collects and processes all the data and provides diagnostic report to the caregiver on potential health problem.

iii. **Opportunity in insurance sector:** There are significant opportunities in both life and non-life insurance sector. Smart homes with advanced security features provide data to the insurer on the asset's risk profile. Likewise, wearable technology is a means to collect vital information on consumer's health index.

Industry case study #1: Working with the ecosystem

A large conglomerate, which manufactures RO+UV based 'Water purifier', partnered with 'doctors' and 'life insurance company' to do a pilot project on the water consumption pattern of a consumer. The data point collected over a period of few months gives intelligent analysis on the health index and specific needs of the consumer. The insurance underwriter takes this as a vital input while calculating the premium.

Industry case study #2: Outside-in view of consumers

A large 'non-life' insurance company is doing a pilot with select set of 'high value-high risk customers' using smart home automation and intelligent camera-based security. The AI algorithm calculates the risk index which is fed to the insurer's underwriting formula to calculate the premium.

Recommendation

The benefits of connected devices can only be unleashed by a collaborative approach. Manufacturers of smart devices, companies specialising in interpreting data and developing statistical algorithms, urban planners, medical fraternity, telecom companies should come together and invest in developing specific use cases that provide social and economic benefits on a much larger scale.

While some steps have been taken in the last few years, much wider engagement will be required in maximising the opportunities.

7

Channel spends and challenges on RoI

Importance of the sales channel

The organisations heavily rely on multi-tiered sales network to capture new markets and customer segments while controlling costs. The channel not only helps organisations achieve scalable growth and increased market penetration but also allows them to increase focus on developing new products, assessing demand and improving after sales support. The profitability and growth story of channel partners is one of the key determinant for success of any brand.

> "We can only grow in the same ratio as the success of our channel partners."
>
> A leading ACE manufacturer

Channel partners are not satisfied with the ROI to stay on-board for a long term

The current economic and regulatory environment may act as a detriment for channel partners to generate the required ROI.

What regulatory and economic factors are not supporting channel partners to generate ROI?

Increasing **real estate cost**
Higher tax regimes
Increased **regulatory compliance requirements**
E-commerce disruption and the rise of omnichannel retail

> "It is extremely difficult for retailers to sustain business and drive growth."

The small retailers or traders are coming under pressure because of their reducing margins. As a result, they are either switching business or closing down. This, in turn, is paving way for large retailers who are demanding high margins and have more negotiation strength.

The OEMs are compensating for this increased cost by reducing their own margins or introducing schemes to incentivise channel partners. On an average, companies spend 10-12% of their turnover on channel partners by way of incentives and schemes.

All survey respondents concurred to the thought that spend visibility is even more important because OEMs are fighting for the same space and potentially the same partners

Due to lack of proper visibility, inadequate control measures, and rampant malpractices being prevalent in the channel; original equipment manufacturers are unable to derive the true value of their investment in the channel and constantly depend on the sales and inventory levels reported by their partners.

Questions which OEMs are asking themselves increasingly

"Are we able to generate enough return on the channel spend?"

"Are we able to target the incentive schemes to the right audience?"

"Are we doing enough to get appropriate visibility of the channel spend?"

The increasing litigations and reported frauds is also making the sector invest on developing Channel Partner Governance Framework. The emphasis is to develop a robust mechanism at the time of on-boarding of the distributing and instituting a process to trace the product till the last mile.

Channel Partner Governance

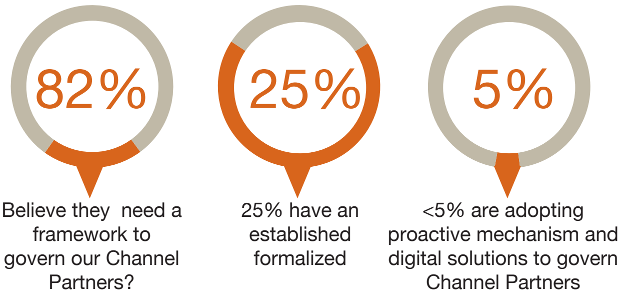


Chart 1: OEMs focusing on setting up Channel Partner Governance Framework

One of the most common pain area identified during our survey related to accuracy of sales and inventory numbers reported by the Channel Partners. Most ACE manufacturers are relying on numbers reported by Channel Partners. There is limited validation of numbers reported.

Areas of concern that the OEMs would like to focus on

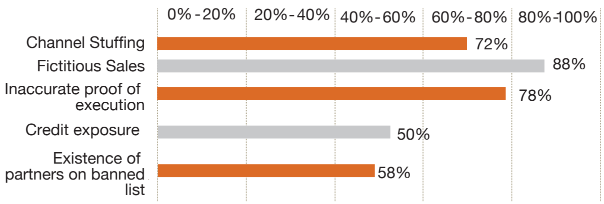


Chart 2: Areas of concern of OEMs

Beyond the convention review mechanism, OEMs are exploring innovative ways to trace their product to the last mile.....

The conventional mechanism of computing the return on investment has largely been using sales growth as the parameter at a macro level. With the Analytics Engine Support the OEMs can target the progress more closely and can even drill down to see the progress with an individual retailer.

Original equipment manufacturers are exploring integrated solutions to effectively manage channel partner investments and provide them visibility of investments till the last mile. One such mechanism is a PwC offered solution centered on the unique product serialization coupled with a smart analytics engine to address the current challenges.

Companies can access information that was previously out of their reach, such as consumer details, product diversions, inventory levels, product freshness index etc. which can be used to draw out strategic insights such as transfer of inventory that is approaching the end of its shelf life to an outlet with high turnover.

Monitoring of the sales force till the last mile

The other challenge with a distributed network is limited visibility of proof of execution of marketing activities and effective execution by fleet on the street. Consumer electronic companies are on their toes to rightly place their products at all times in the market amongst consumers. Marketing and advertising spend forms a chunk of their operational expenses which come with inherent risks. Today, companies are using geo-tagging technology to monitor outdoor advertising as well as the location of their staff.

The sector in the future will enable seamless integration and exchange of information in the channel.

Some of the most common pain areas identified during our survey related to leakages due to excess incentive payouts and stock compensations.

Due to the introduction of subvention plans and zero interest finance schemes; companies often end up financing products that have not yet been sold, or worse yet, that belong to the competition. Current solutions that exist for channel partner monitoring and governance such as partner reviews, audits, physical verification etc. are detective in nature and only offer a partial solution.

The sector is optimistic that with the evolvement of digital solutions the OEMs would have visibility of their products in the last mile on a click of a button.

Conclusion

The ACE sector will play a key role in India's development as the nation becomes more urban and industrialised and is more connected. The Indian economy is at a stage which is looking at an 8% GDP growth rate with high disposable income leading to higher aspirations. With increased affordability, nuclear famililies and changing needs of the consumer, we expect the landscape to be changing faster than expected and in a positive direction.

Through this report our endeavour has been to provide a perspective on the changing landscape of the industry along with some future trends, triggers (both regulatory and non-regulatory) driving the same. Through the interviews we have tried to bring in the industry perspective of the challenges faced as the industry gears up for growth. We have also looked at the changing market condition with the advent of online sales.

With the changes in the tax regime and its impact on supply chain, end product pricing, internal governance, we have suggested possible changes the Government should consider for ease of doing business. The government has made some significant changes especially with GST reducing the cost of supply chain. Overall, it's a promising time for the ACE sector.

About CEAMA

Consumer Electronics and Appliances manufacturers Association (CEAMA) was established in 1978 and is an all – India body representing Consumer Electronics, Home Appliances and Mobile Handset industry whose members include multinationals like Bosch-Siemens, Haier, Hitachi, LG, Samsung, Panasonic, Sony, Whirlpool etc. as well as domestic brands like Godrej, Intex, Onida, Videocon. It also has among its members several OEM manufacturers in appliances, electronics, mobile handsets, set-top boxes and small appliances and a host of small and medium scale entrepreneurs.

CEAMA's primary aim is to enhance the development of the sector it represents through sustainable engagement with stakeholders, among whom the government is key.

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