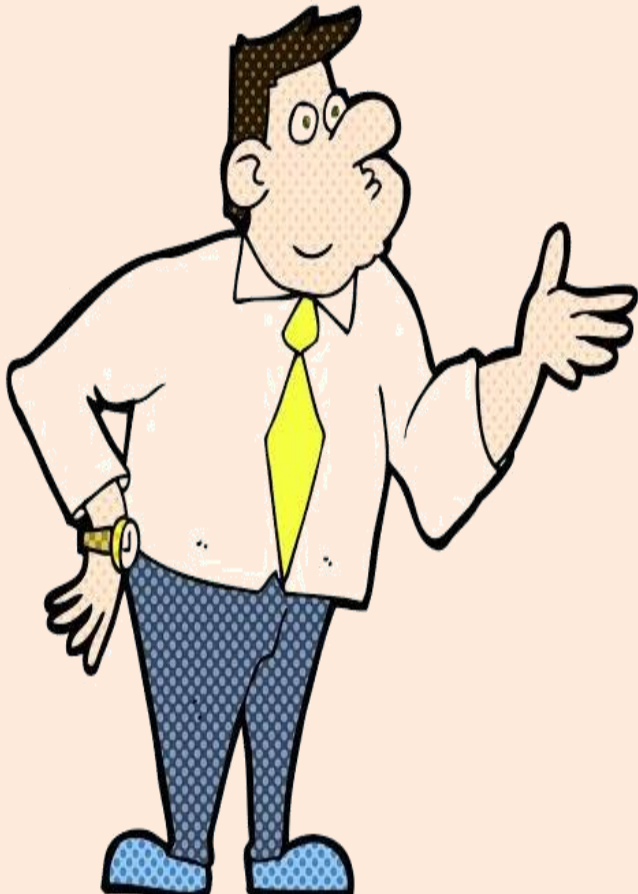


8th Jan 2020



**CORRUGATING
BEYOND THE BOX**



WHY CORRUGATE BEYOND THE BOX ?



Primarily 2 Reasons



- 1) There are more players which eventually has eroded margins due to unhealthy competition
- 2) There's Opportunity out there waiting for us to capitalise.

**CORRUGATING
BEYOND THE BOX**

Paper industry to capture 25% market share of Rs 80,000 crore single-use plastics by 2025

Source: <https://www.businessstoday.in/>

How cos are gearing up for less plastic in their biz

Invest In Waste Mgmt | Use Paper-Based Compostable Packs

John Sarkar & Namrata Singh | [Twitter](#)

New Delhi: The government's appeal to reduce plastic usage has pushed companies ranging from Nestle, McDonald's, Parle Agro to Amul and Filpkart to search for environment-friendly solutions. Swiss food major Nestle, for instance, has incentivised consumers in Delhi and Gujarat by giving them a packet of Maggi for every 10 empty Maggi noodles packets. The company is also trying to solve the challenge of serving hot beverages in 100% paper-based options.

Similarly, the maker of Amul-branded products — Gujarat Cooperative Milk Marketing Federation (GCMMF) — has appointed agencies to pick up multi-layer packaging (MLP) packs of ice-cream sticks that are trashed by consumers. "There is a cost involved in doing this and we will be spending the requisite amount. However, this will not be passed on to consumers," said GCMMF MD R S Sochi.

Parle Agro, maker of soft drink Frosti, said it will spend over Rs 50 crore in the next three years to implement an end-to-end PET plastic waste management programme. All the recycled plastic will be channelled to textiles and other non-allied industry segments, according to the company. Nadia Chauhan, MD and CMO, Parle Agro, said, "Given our 30% growth rate, our 'PET sustainability' investments will most definitely increase every year."

While Filpkart has appointed for a provisional application for patent of recycled paper-based, perforated two-ply corrugated roll for wrapping purpose and apparatus for manufacturing the same, US burger chain McDonald's has stopped using several single-use plastic items in its outlets.

The company's expenses are expected to increase by around 17% due to the transition. "A certain amount of PET bottles may still be recycled as they are in good supply from rag pickers, but 'multi-layer' packaging that is used in the food processing sector to increase shelf life is not-

tion for two of our products — Maggi noodles and Munch. For Maggi packaging, in compliance with the plastic waste management rules, we are currently managing it by either using it as fuel by sending it to cement kilns or by sending it as waste to energy plants," said a Nestle India spokesperson.

Other large consumer goods companies such as HUL, PepsiCo and ITC, which use multi-layer packaging, aim to use 100% of packaging that is reusable, recyclable or compostable within five to 10 years. They have currently launched extensive waste management programmes across the country to collect and recycle different forms of plastic waste. Filpkart claims to have already reduced plastic application by 25% through initiatives in its packaging value chain. The largest public sector lender, State Bank of India, with 22,018 branches (as of March 31, 2019) has proposed to do away with the use of plastic folders and single-use plastic bottles with eco-friendly substitutes across all offices.



While India's per capita consumption of plastic of 11kg per year is low compared to 109kg per markets such as the US, the problem lies with an inadequate waste management system that sends most plastic into waterways and landfills and eventually into the human food chain. Last week, the government clarified that there is no ban on single-use plastic and the 'Swachhata Hi Seva' campaign launched by PM Modi is about creating awareness and a people's movement to curb its use.



riously difficult to recycle. And there aren't many cost-effective options either," said former Coca-Cola India head Venkatesh Kini, who has co-founded a global online aggregator of startups — Urbartio, focused on developing environment-friendly solutions for industries. Maggi pouches, for instance, fall in the 'multilayer' packaging category along with several other products such as shampoo sachets, which account for 70% of all shampoos sold in India. "We have already started our journey towards transition to mono-material packaging and have initiated produc-

Hotels gear up to remove plastic usage

Measures Go Beyond Single-Use Items Like Straws, Bottles To Hangers And Toiletries

ANIL AB 2 | Times Group.com

New Delhi: A couple of years ago, ITC Hotels conducted a study to map the plastic items in use across hotels. While they had already done away with use of single-use plastic bottles, even then to their surprise, the final list was about 80 plastic items that are used in any hotel. Out of this, 150 items were single-use plastic items. A large number out of that was 'front of the house' or visible and used by guests. The chain realised that the usage of plastic went beyond just water stations and plastic bottles and included a who'some exercise than merely stating they have done away with plastic straws and bottles. From coming up with wooden straws, cutlery and stainless paper cups, bamboo to bamboo straws and cotton buds, silicone shower caps, steel and paper lids for beverages, paper straps for flowers, compostable garbage bags, glass bottles and wood and steel hangers and clips, chains such as ITC are ensuring steps that completely do away with any plastic in the guest area by October 2, and do away with almost 180 plastic items by December.

With PM Modi urging people to do away with single-use plastic items by 2022, hotel chains are also on an overdrive to do away with such usage. Intercontinental Hotels Group has opted for bulk size amenities rather than miniatures, removed plastic straws from all properties and offers bathroom products in refillable ceramic dispensers in select luxury resorts. Accor requests their guests

ENVIRONMENT-FRIENDLY DRIVE

350 Approximate number of plastic items that are used in any hotel, according to a study by ITC Hotels
350 No. of single-use plastic items among them
Oct 2 By this date, hotel chains trying to remove all plastic items from guest areas
Dec Trying to do away with almost 160 plastic items
2022 By this year, PM Narendra Modi has urged people to do away with single-use plastic items

WHAT ARE HOTELS DOING?

- Asking guests to opt for 90 water stations than plastic bottles
- Replacing miniatures with bulk size amenities
- Plastic straws have been replaced with biodegradable paper straws
- Only bamboo straws are being used
- Using bamboo reusable take-away cutlery
- Providing 100% recyclable pens

WHAT ARE THE CHALLENGES?

- Lack of quality alternatives to plastic
- Availability of such products on a mass scale
- Air India is set to ban all plastic cups and cutlery on its flights
- Indian Railways will ban single-use cups and install 2,000 bottle crushing machines across its stations
- FMCGs are working towards using 100% biodegradable materials and cutting out PET bottles and multi-layered plastic
- Dabur has set March 2021 as the deadline to become a plastic waste neutral company
- Hindustan Unilever and Nestle plan to use 100% reusable or recyclable plastic containers for its room by December 2020, replacing the small shampoo and soap plastic bottles with refillable wash-mounted dispensers
- Marriott International, the world's largest hotel chain, said it will stop using plastic containers for its room by December 2020, replacing the small shampoo and soap plastic bottles with refillable wash-mounted dispensers

India's cutting down on plastic, and everyone's chipping in

The country has set itself an ambitious target to go plastic-free by 2022. It's not easy. Just thinking of something as ubiquitous as bottled water. What do you replace the bottles with? But, there is a big move nonetheless to cut back on plastic. Some states have taken the lead, and so have corporates. Here's what they are doing

India has slowly begun to address the plastic menace



Some corporations, too, have already taken positive steps

- Some ITC hotels in Chennai have eliminated single-use plastic bottles, each cutting down by 6,500 plastic bottles a month
- Marriott International, the world's largest hotel chain, said it will stop using plastic containers for its room by December 2020, replacing the small shampoo and soap plastic bottles with refillable wash-mounted dispensers

But plastic industry wants govt to go slow

In a meeting with Union consumer affairs minister Ram Wiss Paswan, industry representatives had said PET bottles, an industry valued at Rs 7.5 trillion and employing about 7 crore people directly and indirectly, should not be classified as a single-use plastic and banned.

- #### Here are 5 things you can do to cut down on plastic
- Use reusable cloth bags for shopping instead of plastic
 - Shop buying bottled water and carry a reusable water bottle
 - Buy items sold in green packaging, the paper or glass. For example, buying a glass bottle of ketchup is better than a plastic one, as it can be reused or recycled
 - Buy as much as you can in bulk — It helps cut down on the wrong items purchased
 - Make sure to follow your locality's rules on waste disposal — putting waste in the wrong bin can contaminate an entire load of recycling



CORRUGATING BEYOND THE BOX

All major inventions & successes have been from people who thought outside the box. They ventured to go “where no other man has gone before”. But all clichés aside, in order to achieve a goal we will eventually have to step out of our comfort zones.

We have been making Boxes, Cartons & allied packaging products. With the advent of technological research & innovations world wide, there are numerous opportunities for the corrugators to diversify. It is in this perspective this presentation ‘ Corrugating beyond the Box’ is being made.

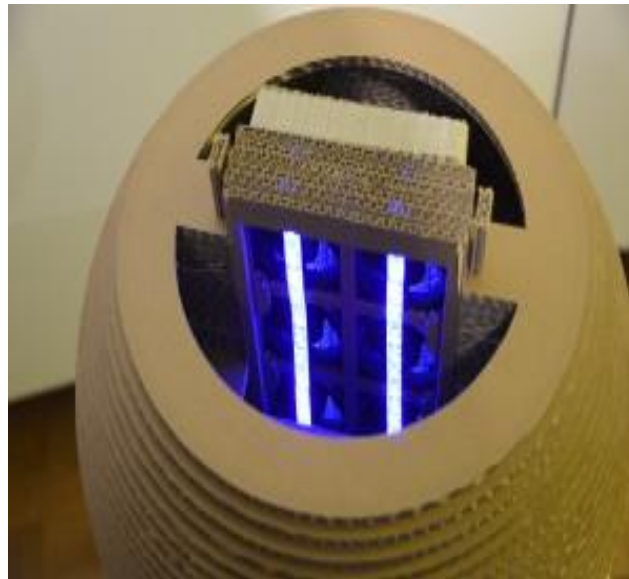
Corrugators can take a plunge in to such new areas, of course through formal technology transfers / collaborations from the respective inventors.





Corrugated Cardboard: Antibacterial Filters for Air Purification

A research study developed & patented by the Milan Polytechnic University shows that filters in corrugated cardboard, which have undergone a proper antibacterial treatment, can purify the air we breathe.





**CORRUGATING
BEYOND THE BOX**

Corrugated Cardboard: DUCTING SYSTEM

An revolutionary, innovative & cost effective product is the future of ductwork systems, made from specially designed Corrugated Cardboard.



Considering advantages, the Corrugated Board Ducting can easily replace the conventional metal ducting system.

80% LIGHTER **100% RECYCLABLE** **LOWER COST**





**CORRUGATING
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Corrugated Cardboard Spools / Reels

Plastic Reel Alternative.

Weight and cost reductions over plastic



- * They offer all the benefits of moulded plastic spools but with a number of additional advantages.**
- * They are particularly lightweight allowing for easy handling yet remain durable, strong & hardwearing.**
- * Suitable for any wound product like cables, hoses, rope etc.**

Sources : <https://www.gwp.co.uk/>
<http://spool.com/>



**CORRUGATING
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Corrugated Rolls for Garment Packing

A revolutionary patented Rollor Technology uses Corrugated Rolls for crease free Garment packing , shipping or crease-free transit .

How Does It Works

It takes away peoples frustrations of having to appear, or having to accept that clothing arrives in a creased condition after transit or upon home delivery.

It allows clothes to be packed in a compact & crease manner. It makes sure fabric is rolled (no folds) & eliminates the possibilities of pressure.



To view live video demo visit <https://www.rollor.com/about-rollor-technology/>

Cardboard Lamp / Light Shade



**CORRUGATING
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Corrugated material being light weight is used in the west for Lamp shades for quite some time now. This can be a good project here too.

Corrugated Lamps change the atmosphere of a space to give it the warm tone of the material.





CORRUGATED PORTRAITS

One of the most adorable artistic use of cardboard is constructing portraits & designs. The project could make a good commercial sense too !

A sheet of cardboard is the canvas, & cutting off the top layer to reveal the inner layer, i.e. liner. It employs a subtractive & additive method to develop a portrait.





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Cardboard TOYS



There are numerous advantages using cardboard for making Toys, to name a few :

Sustainable, Cost effective, Versatile,
Customisable,
Creative flexibility, Easy availability,,
Free of pollutants

The main argument against cardboard is Durability.

But how long does a toy has to last ?

As long as there is interest, which does not last long.





**CORRUGATING
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**The SKY
is not the limit**

your MIND is.



- Marilyn Monroe

