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The Corrugator

OFFICIAL MAGAZINE OF FEDERATION OF CORRUGATED BOX MANUFACTURERS OF INDIA

APRIL - JUNE 2023



Corrugantira

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MPCBMA member - Atharva Packaging wins award from MSME award

SICBMA conducted EGM and Taxation Seminar

WICMA successfully completes 2-Day Adv Level Course in Corrugated Packaging



Industry Stalwarts Insights

B&B Triplewall Container Ltd
Confluence of the Agarwals, Bothras, and Guptas

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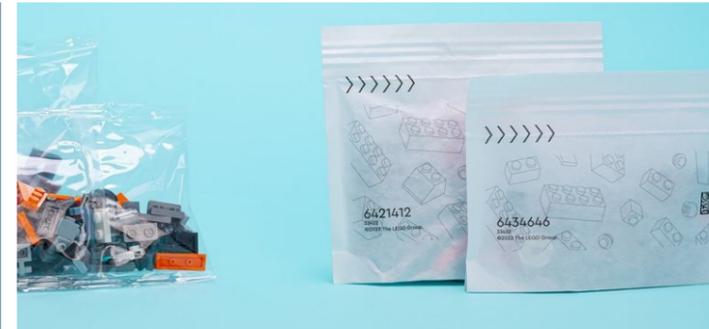
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The Editor's Page



Pulkit Shah



R Suresh



Shlok Kedia

India's FY23 GDP growth likely to surpass 7%, however manufacturing Sector to rebound. For 2023-24, RBI is projecting GDP growth at 6.5% with Q1 is pegged at 7.6%. Amidst this global churning, India is expected to continue its showdown in pursuing a different pathway of zeroing in on drivers of growth, looking for a renewed surge in resilient manufacturing while supporting the services sector to embrace enhanced efficiency, as shared by a report from RBI.

The work behind the curtains is slowly materializing as the conference team at GCBMA is gearing up for hosting FCBM annual conference. Our annual conference which in last half a century has been proved to be a great confluence of professional networking, exhibition, tradition, entertainment, fun parties and more, even inclusive of our families. This year 2023, is no exception for the fun part as GCBMA is hosting it at Go Go Goa !

Yes, CORRUMANTRA, the 51st FCBM annual conference to be held at resort Rio, Goa on January 7-9, 2023 will be one of its kind. With this edition we bring you the theme CORRUMANTRA - "पर्यावरणरक्षणम् परमो धर्मः" urging all corrugators to help preserve and protect our environment by using corrugated box made from recycled kraft paper.

In this edition, we have catered to lean manufacturing, leadership in manufacturing industry and sustainability as the most sought after in our industry. We are thankful to all seven directors of B&B Triplewal Container Ltd for sharing their experience to help further enrich our members in their journey.

SinoCorrugated 2023 scheduled on July 12-14, 2023 in Shanghai, China is eagerly awaited by our members, the Indian Corrugated fraternity and global industry at large.

On May 19, 2023 HPCMB with CII (Confederation of Indian Industries) Himachal Chapter organized the 4th Apple Conclave at Hotel Royal Tulip, Kufri, Shimla.

On May 31 and June 1, 2023 WICMA held a 2-day Advanced Level Course in Corrugated Packaging at the Auto Cluster Development & Research Institute, Chinchwad, Pune with a great response.

Stay tuned for more details for CORRUMANTRA 2023 !

Happy Reading-Learning-Growing !

President's Desk



Dear Friends,

The corrugated board packaging market was valued at USD 172.61 billion in 2021. It is expected to reach USD 212.32 billion by 2027, registering a CAGR of 3.6% from 2022 to 2027.

With paper prices stabilizing in last couple of quarters, and the FY 22-23 closing for corrugated box manufacturers seems to have sustained quiet well. However, shipping and e-commerce demand is slowing and traffic jams at ports are easing. But as supply chains even out, analysts now say a glut is forming in the supply of one material essential to moving goods: cardboard.

Globally, the recyclability and sustainability of the corrugated boxes are being more appreciated and hence utilized over other packaging materials. E-commerce, sustainability, fit-to-product and digital printing are few aspects that are making corrugated boxes lucrative and viable for packaging.

SinoCorrugated 2023 scheduled on July 12-14, 2023 in Shanghai, China is eagerly awaited by our members, the Indian Corrugated fraternity and global industry at large.

The FCBM annual conference host GCBMA's work is in full swing. We will soon be having blueprint of yet another memorable business-cum-bonding mega event at Goa in January 2024. Stay tuned for more details in the upcoming edition.

Jai Hind!

A handwritten signature in black ink, appearing to read 'Vineet Jain'.

Vineet Jain
President
FCBM

Industry Stalwarts Insights

B&B Triplewall Container Ltd

Confluence of the Agarwals, Bothras, and Guptas



Manish Bothra (Executive Director)
Ravi Agarwal (Director cum CFO)
Amit Agarwal (CEO)
Sidharth Agarwal (COO)
Alok Agarwal (Executive Director)
Nishanth Bothra (CTO) and
Manish Gupta (Managing Director)



1. In the three decades, what were the three major challenges that you encountered in taking B&B Triplewall Container to the pedestal it is now? How did you overcome them?

Manish Bothra, Executive Director - B&B Triplewall Container Ltd

In 1992, the Agarwal Family initiated their journey in the packaging industry by establishing Kaushik Products, a semi-automatic setup. This venture grew and expanded into Amit Packs Pvt. Ltd. in 1999 and RD Industries in 2004. Meanwhile, in 1997, the Gupta Family ventured into the packaging business by founding Singla Packaging, and in the same year, the Bothra Family established Sapthagiri Packaging Industries. faly

In 2009, HMK Auto Packs Pvt. Ltd., an automatic plant renowned for manufacturing high-quality corrugated boxes, was established. The year 2011 marked a significant milestone as the Gupta Family and Bothra Family joined forces to form MNM Triplewall Containers Pvt. Ltd. This collaboration brought together their expertise and resources, setting the stage for further growth and success.

Another pivotal moment came in 2015 when HMK and MNM merged, marking a turning point in their journey. The merged company was rebranded as B&B in 2018, representing the combined strengths and expertise of the team in the domain of Box & Board manufacturing. This strategic amalgamation reflected their shared vision and commitment towards becoming a leading player in the industry.

One of the initial challenges was the consolidation and merger of India's only multiple family-owned businesses. The process involved bringing together and synergizing different families, each with their own established companies and unique expertise. Through informal meetings and discussions held at conferences, seminars, and international trips, the families recognized the advantages of pooling their resources, knowledge, and capabilities. With a shared vision of becoming the leading manufacturer in the Indian corrugated boxes and allied products industry, the families overcame the

challenge of merging their businesses of HMK Auto Packs Pvt Ltd & MNM Triplewall Containers Pvt. Ltd. into B&B Triplewall Containers Ltd.

The key to our harmonious collaboration is the recognition of each other's strengths and capabilities

Staying at the forefront of technological advancements was crucial for B&B's success. The challenge lay in adopting the latest technology and manufacturing processes to ensure high-quality production and efficiency. To overcome this challenge, B&B made strategic investments in state-of-the-art machinery and equipment. The company incorporated advanced technologies for manufacturing corrugated boxes, taking advantage of both the FMCG expertise from HMK and the sheet feed model knowledge from MNM. This amalgamation of different models allowed B&B to leverage the synergy between them and gain momentum in the industry.



2. What is the secret sauce for B&B Triplewall Container where seven directors work in unison, synchronizing for the company growth?

Ravi Agarwal, Director cum CFO - B&B Triplewall Container Ltd

The secret sauce for B&B Triplewall Container lies in the synergy and unity among its Seven Directors. We work in unison, synchronizing our efforts for the growth and success of the company. The key to our harmonious collaboration is the recognition of each other's strengths and capabilities.

Since inception, all directors have their roles and responsibilities clearly defined, allowing them to work independently while still being aligned towards a common goal. This clarity enables efficient decision-making and ensures that everyone contributes their expertise in the most effective way.

When it comes to strategic decisions, we come together as a team. We engage in joint discussions, leveraging our collective insights and experiences to make well-informed choices for the company's growth. This collaborative approach allows them to bring out the best ideas and perspectives, ensuring that every step taken is in the best interest of the company.

By fostering a culture of mutual respect, effective communication, and coherent decision-making, we create a harmonious environment that propels the company forward. Our ability to synchronize efforts, leverage individual strengths, and work together as a cohesive team is the secret behind our success and the driving force behind the company's growth.



3. What are your business value systems that gives strength to your business?

Amit Agarwal, CEO - B&B Triplewall Container Ltd

At B&B Triplewall Container, our business value systems play a vital role in strengthening our business and shaping our approach to operations. These value systems, implemented post-merger, reflect our commitment to professionalism and customer-centricity. Here are the key aspects of our business value systems:

Professionalism: We strive to run our organization in a professional manner. This includes adhering to high ethical standards, maintaining transparency in our operations, and promoting a culture of accountability and integrity. By upholding professionalism, we establish trust and credibility with our stakeholders, fostering long-term relationships based on mutual respect.

Continuous Learning: We recognize the importance of continuous learning and development. We actively engage in training programs at all levels of our organization. By investing in the knowledge and skills of our employees, we empower them to excel in their roles and adapt to the evolving needs of the industry. This commitment to ongoing training ensures that our team is equipped with the latest industry insights and best practices.

Customer Experience: We consider our business to be more than just manufacturing; we view it as a service industry. This mindset enables us to prioritize the customer experience and focus on delivering value to our clients. We actively listen to our customers, understand their needs, and strive to exceed their expectations through innovative solutions, timely delivery, and exceptional customer service.

We believe in the importance of engaging with our stakeholders, including customers, suppliers, employees, and industry experts. We actively participate in discussions and forums related to the corrugated industry, seeking insights and understanding the factors that influence the industry's landscape. By involving stakeholders in our decision-making processes, we gain diverse perspectives and ensure that our strategies align with the broader industry trends and requirements.

By adhering to these business value systems, we create a strong foundation for our business, driving our growth, and enabling us to deliver exceptional value to our customers.



4. Did you have any challenges with respect to workforce how did you manage them?

Sidharth Agarwal, COO - B&B Triplewall Container Ltd

The availability of a skilled workforce has been a significant challenge for us in the corrugated box manufacturing industry. Unlike some other sectors, our industry does not have dedicated training institutes within the country. However, we have proactively addressed this challenge through various measures.

We understand the importance of training and skill development for our workforce. We actively engage in training programs at all levels of our operations. From entry-level employees to middle management and even directors, we invest in training initiatives to enhance their knowledge, skills, and capabilities. This includes technical training specific to our industry, leadership coaching, and other relevant skill-building programs. By providing continuous learning opportunities, we empower our workforce to grow and adapt to the evolving demands of the industry.

To bridge the skill gap, we also establish partnerships with external organizations, such as vocational training institutes or industry associations. These collaborations allow us to tap into existing expertise and resources, providing specialized training programs for our employees. By leveraging these external partnerships, we can enhance the skill sets of our workforce and address specific challenges or areas of improvement.

We adopt a strategic approach to recruitment, seeking candidates with relevant skills and experience or those who show potential for growth and development. We prioritize attracting individuals who are willing to learn, adapt, and contribute to our organization's success. Additionally, we provide on-the-job training and mentorship to new employees, ensuring a smooth transition into their roles and fostering a culture of continuous learning.

Retaining skilled employees is equally important. We focus on creating a positive work environment that fosters employee engagement, job satisfaction, and professional growth. We provide opportunities for career advancement, recognize and reward employee contributions, and promote a culture of open communication and collaboration. By nurturing a supportive workplace, we aim to retain skilled talent and foster a sense of loyalty and commitment among our workforce.



5. What is Vision 2027 and how do you strategize to reach the goal?

**Alok Agarwal, Executive Director
- B&B Triplewall Container Ltd**

Vision 2027 is our ambitious goal to reach a manufacturing capacity of 20,000 metric tons. To achieve this vision, we have developed a comprehensive strategy that encompasses several key initiatives.

We are actively expanding our manufacturing capabilities to increase our production capacity. The recent establishment of our automatic box manufacturing facility in Hyderabad has significantly contributed to this expansion. With this new facility, our overall box manufacturing capacity now stands at 9,300 metric tons per month. By strategically investing in our manufacturing infrastructure, we aim to meet the growing demand for corrugated boxes and cater to a larger customer base.

To capitalize on market opportunities and cater to evolving customer needs, we have ventured into E/F flute boxes through our subsidiary company, B&B Colour Cartons Pvt. Ltd. This diversification

allows us to penetrate the primary packaging requirements of our customers and expand our product offerings. By extending our capabilities to serve different segments within the packaging industry, we aim to capture a larger market share and drive growth.

We foster a culture of continuous improvement and innovation across our organization

We are actively working on setting up a Recycled Kraft Manufacturing line with a capacity of 9,000 metric tons per month, which would be one of its kind in India at this scale. This backward integration initiative will enable us to produce high-quality recycled kraft paper, adding value to our customers and promoting sustainable practices. By leveraging this new facility, we aim to strengthen our supply chain, reduce reliance on external suppliers, and ensure consistent access to raw materials for our box manufacturing operations.

We understand the importance of staying ahead in a competitive industry. We foster a culture of continuous improvement and innovation across our organization. By investing in research and development, exploring new technologies, and embracing industry best practices, we aim to enhance our manufacturing processes, optimize efficiency, and deliver innovative packaging solutions to our customers.

Through these strategic initiatives, we are confident in our ability to reach our Vision 2027 goal of achieving a manufacturing capacity of 20,000 metric tons. We remain committed to driving sustainable growth, meeting customer expectations, and solidifying our position as a leading player in the corrugated box manufacturing industry.



6. Are there any steps being taken by B&B towards sustainability?

Nishanth Bothra, CTO - B&B Triplewall Container Ltd

This year, we have successfully implemented solar power in Unit 1, showcasing our commitment to sustainable practices and contributing our bit towards reducing the carbon footprint. Moving forward, we have plans to install solar power systems in both Unit 3 and Unit 4, further harnessing clean and renewable energy sources.

To reduce our reliance on traditional energy sources, we have also adopted electric forklifts for handling finished goods and dispatches. By replacing diesel-powered equipment with electric alternatives, we contribute to a greener and more environmentally friendly operation.

In line with our focus on energy conservation, the construction of our manufacturing area has been meticulously designed to optimize natural light utilization during daylight hours. This strategic design choice has significantly reduced our overall power consumption, reinforcing our dedication to sustainable manufacturing practices.

By embracing solar power, utilizing electric forklifts, and maximizing natural light, we actively strive to minimize our environmental impact while promoting energy efficiency within our operations.



7. Where do you foresee the corrugated industry in the next 10 years keeping in mind the geopolitical issues, supply chain intricacies, raw material availability, and global competition?

Manish Gupta, Managing Director - B&B Triplewall Container Ltd

With India's aim to become a 5 trillion economy, the packaging industry, including the corrugated sector, is expected to more than double in size. The consumption of kraft paper is projected to increase from the current 8 million tons to 17-18 million tons, indicating substantial growth opportunities.

As the industry progresses, there will be a shift from semi-automatic processes to fully automatic ones. With labour costs rising, automation will play a crucial role in enhancing efficiency and competitiveness. Investments in automation and technological advancements will be inevitable to stay ahead of the game.

Similar to global trends, the Indian corrugated industry is likely to witness consolidation, with major players adopting an integrated approach. Integration allows companies to manufacture both kraft paper and corrugated boxes, catering to customer requirements more effectively.

Advancements in technology, research, and development will be instrumental in the industry's growth story. Emphasis on design engineering and innovation will enable the production of high-quality, lightweight paper and boxes, aligning with market demands.

The availability and quality of paper from reputable mills will be crucial, especially with investments in high-speed box manufacturing machines. Good quality fiber will be essential for manufacturing high-performance kraft paper, enabling lightweighting of boxes.

Geopolitical stability and a stable supply chain are vital factors for the industry's success. While the cost of raw materials may increase due to the rising consumption of recycled fiber in the US and Europe, availability is not expected to be a major concern in Asia.

Compliance with government regulations will play a significant role in the industry. As the government becomes stricter and more digitally focused, companies will need to prioritize transparency and meet compliance requirements. Factoring in the associated costs of compliance will be essential for businesses in the coming years.

Overall, the corrugated industry in the next 10 years is poised for growth and transformation. Embracing automation, technology, integration, and compliance will be key strategies to navigate geopolitical challenges, optimize the supply chain, ensure raw material availability, and remain competitive in the global market.

Consumers prefer paper-based packaging

The 'Trend Tracker Survey 2023', the latest consumer research from Two Sides Europe, seeks to understand changing consumer perceptions towards print, paper, paper-based packaging and tissue products. The survey questioned more than 10,000 consumers in 16 countries across the world, from South America and the U.S. to South Africa and Europe, providing an assessment of consumers' attitudes and beliefs towards the paper industry and its products.

As the number of consumers purchasing goods online continues to grow, awareness of packaging choices and attention to the environmental impacts of the packaging material are increasing too. Results of the 2023 survey show that progressively more consumers believe paper-based packaging is better for the environment than all other packaging materials.

Packaging plays an extremely important part in the purchasing decision as it displays vital product information and is used to preserve, protect and enhance product quality. Packaging comes in a variety of forms and the packaging industry is always innovating to meet the demands of the consumer and value chain. Consumers were asked to choose their preferred packaging material based on a range of environmental, visual and physical attributes. These packaging materials were paper/cardboard, plastic, glass and metal. The survey revealed that out of 15 attributes, paper/cardboard was the favourite for 10. Paper/cardboard was positioned best for environmental factors like home compostable (76%), better for the environment (55%) and easier to recycle (49%).

Consumers are correct to believe that paper is easier to recycle. In Europe, 82% of paper packaging is recycled, the highest recycling rate of any packaging material. Glass has a recycling rate of 76%, metal 76% and plastic just 38%. (Eurostat, 2020)

When looking at the different types of shopping bags available, consumers believe that paper bags have the best attributes for composability (64%),



recyclability (55%) and that they are made with renewable materials (38%).

With consumers, businesses and governments looking for ways to reduce waste and create a more sustainable, circular economy, the use of non-recyclable, single-use packaging and its effects on the environment have come into sharp focus.

The survey showed that consumers believe the government needs to do more to reduce the use of single-use non-recyclable packaging. When consumers were asked to rank who they believe has the most responsibility for reducing the use of non-recyclable packaging, 39% think that governments and local authorities were the most responsible. This is a big change in consumer thinking compared to 2021, when they ranked the individual (your personal choices), as the most responsible at 33%. That said, 19% of consumers still believe that the individual is also responsible for reducing single-use non-recyclable packaging.

Consumers are aware of the impacts that packaging has on our planet, and they increasingly demand that governments, brands and retailers do more to ensure packaging is widely recyclable.

An executive summary of the Trend Tracker Survey 2023 will be published soon and available to industry stakeholders upon request. Visit twosides.info/trend-tracker-2023 to register your interest in receiving this summary.

Source: Packaging Portal

Cheap packaging - is it really cheaper or a false economy?

Reduce packaging costs by up to 30%

Real-world examples of how cheap packaging can often cost more in the long term

Cheap packaging can be a false economy, as focusing purely on unit price can increase costs elsewhere in your business. Cheap packaging can cause slower packing times and diminished staff productivity. Product damage and costly returns can also increase. And cheap packaging can lead to inefficient transit (shipping excess void fill/space inside the packs).

So, whilst you need to get the best prices when sourcing products for your business, cheap packaging can cost you more in the long run.



This guide shows you how to reduce your packaging costs by as much as 30 per cent while (counter-intuitively) not always specifying the lowest-cost cardboard boxes.

It covers:

- How minimising assembly times can dramatically reduce your labour costs.
- Why custom size packaging nearly always works out cheaper.
- What is rationalisation, and how can it save you money.
- Why transit damage is the hidden cost of your packaging.

Discover all this and the most suitable packaging for your business by reading on or downloading the free guide detailing 17 ways to reduce your long-term packaging costs.

Introduction

Why you should be wary of cheap packaging

It is crucial to your business success to get the

best value products.

Everything from industrial machinery through office supplies and stationary, overpaying for the products you need to run your business can have a detrimental effect on your company's performance, particularly over the longer term.

This focus on value is particularly important with the current levels of price rises and inflation evident in the UK and globally.

Your corrugated packaging is no different.

However, there is a crucial question to ask, particularly about cheap packaging. Is it really cheaper? Or is under specifying your packaging a false economy?

Either way, it is essential to get it right.

Why you should look beyond packaging unit costs

The temptation is always to look at the headline figures. Doing so typically results in deciding to go with what looks like the most cost-effective option.

Doing so can be a mistake, however.

Several hidden packaging costs can soon render any gains in unit cost worthless or, even worse, cost you more money in the long term.

When analysing your packaging costs, it is essential to look beyond unit prices and see how it interacts with other aspects of your business.

Identifying these factors is often not straightforward. And even if you know them, not all apply equally to each specific market, product or industry. Your packaging and its challenges can be surprisingly unique to your business.

However, this article describes several real-world examples of how cheap packaging can cost you more. And – crucially – how to take advantage of or mitigate any impact.

Cheap packaging - is it really cheaper or a false economy?

Four cost reduction scenarios

Four different ways in which cheap packaging can end up being more expensive

Whilst there are, in fact, more than the four scenarios laid out in this guide, the following are amongst the most commonly seen across typical users of corrugated packaging.

- Reduce cost by over 15% by minimising packing and assembly times.
- Save up to 25% by utilising custom-size packaging.
- Realise cost savings of approximately 18% through rationalised packaging.
- Reduce costs by almost a third by eliminating transit damage.

The following examples illustrate how you can achieve this in practice.

Assembly times

Reducing costs through minimised assembly times

Assembly of your packaging boxes can be time-consuming – potentially impacting your labour costs. Cheap packaging can exacerbate this.

However, using specialist packaging such as crash lock boxes can not only speed up assembly but also help to reduce the costs of secondary packaging.

In this example, a standard taped box (i.e. sealed with tape on top and bottom) costs £0.25 each. Five staff members, paid £9.50 per hour, can assemble 50 boxes each in this period. So the total labour cost of £47.50 allows for the assembly of 250 boxes.

You can also factor in an approximate £0.07 cost

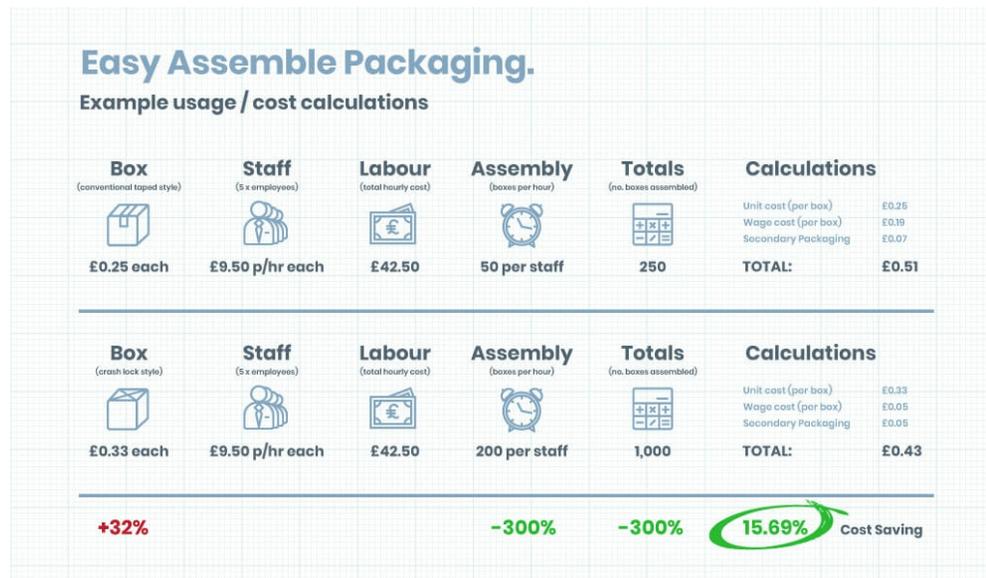
of secondary packaging – mainly tape.

Therefore, the total cost for an assembled box is £0.51 each.

However, a crash lock box costs more per unit – say £0.33 (32% more expensive). The labour costs remain the same at £47.50 in total, but as the boxes fold out and together (eliminating the taping process), each staff member can assemble four times as many. Therefore, your packing team can build 1,000 boxes per hour.

Using less tape also sees secondary packaging costs drop by approximately a third (£0.07 to £0.05).

The labour savings mean even though the unit price of the box is 32% higher, the price of a fully



assembled and ready-to-pack box is 16% lower at £0.43 each.

Custom size packaging

Why bespoke sizes cost your business less

Custom sizes boxes can be one of the simplest ways to reduce your costs.

In this example, the standard “stock” box (which is the form cheap packaging often takes) is not tailored to the size of the product. As such, it has to be larger than required (unless you are fortunate in terms of the fit).

Cheap packaging - is it really cheaper or a false economy?

By sending 5,000 boxes at a unit cost of £0.40, you see a total packaging cost of £2,000. However, only 50 can be put on a single pallet, meaning 100 pallets at the cost of £60 shipping each is required to send every product.

The total cost of packaging and shipping together, therefore, works out at £8,000.

By switching to a custom box, it can be possible to optimise the space and include up to twice as many products per pallet. With the unit cost the same (as the boxes also use less material), only 67 pallets are required to send all the goods. The reduction in pallets saves a third on shipping costs and gives an overall cost of £6,000.

As such, you can see an overall saving of 25 per cent, or £2,000!

Bear in mind this also does not consider the secondary cost of void fill. Standard boxes require more of this than a custom-sized box (which may not require any), further increasing the price disparity.

Packaging rationalisation

How minimising different box sizes can lower costs

If you have many packaging products or lines, simplifying (or “rationalising”) can often lead to cost savings.

These cost savings result from simple economies of scale.

The graphic alongside this text shows a packaging inventory of six lines. Assuming you order these equally, and the total packaging units required is 30K (5K each), a unit cost of £0.40 and tooling charge of £250 per line results in an overall packaging cost of £13,500.

Custom Size Packaging.

Example usage / cost calculations

Box (standard size "stock" box)	Orders (no. items to send)	Pallets (items per pallet)	Transit (total pallets to ship)	Totals (overall shipping costs)	Calculations
 £0.40 each	 5,000	 50	 100	 £6,000	Unit cost (per box) £0.40 Shipping (per box) £1.60 Total (per box) £1.60 Overall TOTAL: £8,000
Box (custom size box)	Orders (no. items to send)	Pallets (items per pallet)	Transit (total pallets to ship)	Totals (overall shipping costs)	Calculations
 £0.40 each	 5,000	 75	 67	 £4,000	Unit cost (per box) £0.40 Shipping (per box) £0.80 Total (per box) £1.20 TOTAL: £6,000
NA%		-50%	-33%	-33%	 25% Cost Saving

Rationalising this inventory so that you only use two boxes reduces the tooling costs by two-thirds immediately (£1,000 saving). The unit costs also drop, as instead of ordering 5k volumes of 6 lines, it is possible to 15K volumes of 2 lines.

The tooling reduction and lower unit cost allow for an overall packaging spend of £11,000 – an 18.5% saving over the six-line inventory.

However, one caveat regarding this process is that a consideration of shipping costs – as in example 2 – must also be factored in.

In effect, rationalising lines can impact transit volume and, therefore, costs, but it is usually possible to find a balance to take advantage of both tactics.

Transit damage reduction

The hidden cost of your packaging

Perhaps the most “profitable” way to reduce the costs associated with your packaging is through minimising or eradicating transit damage.

However, the figures differ depending on two factors. These are the volume of items you ship and the value of the products.

Taking the example here, mid volumes with mid-value products (e.g. LED TVs), the unit cost of a standard box is £1.00. When sending 10,000 items, this results in a total packaging cost of £10,000.

Cheap packaging - is it really cheaper or a false economy?



customer satisfaction or the potential loss of repeat business.

Customers frequently receiving damaged products – caused by cheap packaging – are much less likely to reorder or recommend your company, and ultimately your brand perception suffers.

However, consider that the value of the items you ship is £500. If even one per cent of these (100 products in total) are damaged and returned, this leads to costs of £50,000. Please note that whilst this includes unsellable goods, it excludes the additional transportation and admin costs.

Looking at the overall picture, the total cost of this packaging solution is £60,000.

Using a custom-engineered box that minimises damage can see significant savings, however.

Even though the unit cost is 75% higher at £1.75 per box, if this can reduce the return rate by half a per cent (from 1% to 0.05%), the cost of returned products drops by half too. This improved performance provides a saving of circa £25,000.

So although the upfront packaging costs are £17,500 compared with £10,000, the overall cost when factoring in damaged products sees a 29% saving – or £42,500 vs £60,000 (£17,500 total saving).

As mentioned previously, this figure does not consider additional transit and admin; more importantly, it does not account for

Summary

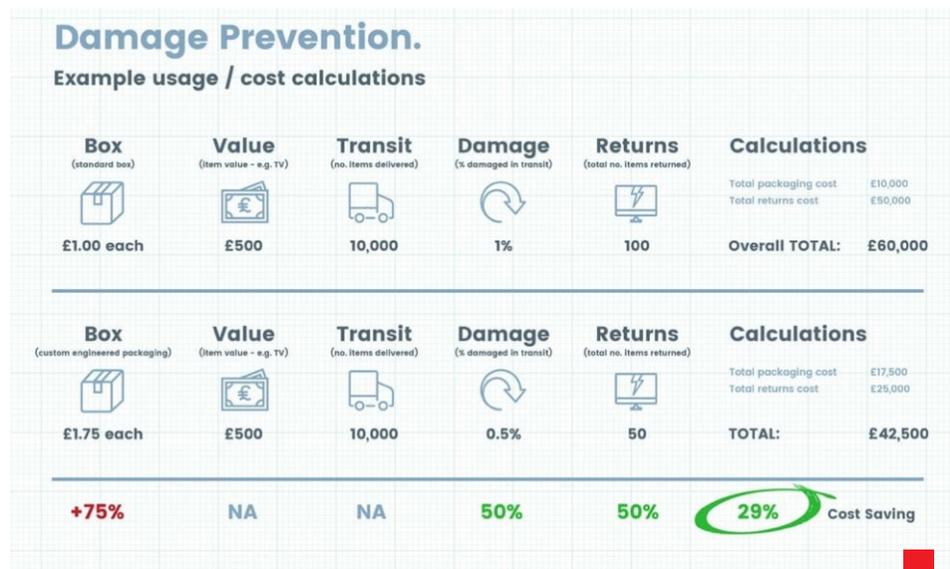
So is cheap packaging really cheaper?

Effectively, cheap packaging isn't always everything it promises to be.

If you spend more to optimise the performance of your packaging or streamline your processes or inventory, a higher upfront cost can soon become a significant saving down the line.

Therefore, taking a holistic view of your corrugated transit boxes is vital and remember that cheap packaging is often a false economy.

Source: GWP Group



How Unnecessary Paper Packaging Creates the Illusion of Sustainability

Summary

As global consumers grow increasingly conscious of the environmental toll of plastic packaging, many brands have taken steps to reduce their use of plastic. But at the same time, some brands have adopted a much less productive approach to the anti-plastic movement: They've begun adding superfluous paper packaging on top of plastic packaging in order to make their products look more environmentally friendly without actually reducing plastic waste.

The authors' research demonstrates that this sort of overpackaging can indeed be effective in boosting consumers' perceptions of sustainability, despite the fact that it is demonstrably worse for the environment (not to mention more expensive for manufacturers). However, they also found that simply adding a "minimal packaging" label to plastic packages can reduce the misperception that overpackaged products are more sustainable, enabling brands to attract environmentally-conscious consumers without creating unnecessary paper waste.

The environmental threat posed by plastic packaging is well known. The popular press and environmental groups alike have long stressed the dangers of plastic products, from their impact on marine wildlife to their buildup in landfills. In contrast, paper is often seen as the sustainable, environmentally friendly alternative — despite the reality that more than six million tons of paper packaging end up in U.S. landfills every year.

Whether due to genuine concern for the environment or the widespread vilification of plastic among consumers, many companies have invested heavily in reducing their use of plastic packaging. Unilever, for instance, has pledged to



halve its use of non-recycled plastic by 2025, while British supermarket chain Tesco launched a sustainable packaging initiative to reduce its annual packaging footprint by 1.5 billion pieces of plastic. And these efforts may indeed have a positive environmental impact. But another trend that's grown out of the anti-plastic movement is a lot less positive: overpackaging. More and more brands have begun adding superfluous paper packaging on top of plastic packaging in order to make their products look more environmentally friendly, without actually reducing plastic waste.

For example, skincare brand Nivea sells plastic bottles of body lotion packaged in cardboard boxes, even though a similar product from the same brand is available in just the plastic bottle. Similarly, Sensodyne toothpaste is commonly sold in plastic tubes that come inside additional paper packaging, although it can also be sold without the paper boxes. This sort of overpackaging is everywhere, across product categories and geographic markets, despite being both more expensive to manufacture and worse for the environment.

Unfortunately, there's a very good reason companies are adopting this clearly problematic approach: It works. Through a series of eight

How Unnecessary Paper Packaging Creates the Illusion of Sustainability

studies with more than 4,000 participants from across the U.S., the UK, and the Netherlands, we found that consumers will perceive a product's packaging as more environmentally friendly if it's plastic with an additional layer of paper than if the product is visibly packaged in identical plastic packaging but without the paper. In other words, simply slapping some paper on top of plastic packaging makes a product seem more environmentally friendly, even if you can still see that it's wrapped in exactly the same amount of plastic. These perceptions in turn make consumers both more likely to buy a product, and willing to pay more for it. In one study, for example, participants were willing to pay an average 15 cents more for a granola bar in the same plastic wrapper if we added additional paper packaging on top.

Interestingly, we further found that these perceptions of sustainability weren't just determined by whether the product had paper packaging or not, but by the relative proportions of plastic versus paper packaging. In one study, we had consumers imagine buying cherry tomatoes that were wrapped in paper and plastic. We kept the amount of plastic the same for all participants, but varied the amount of paper — and we found that their perceptions of environmental friendliness increased in step with the amount of paper used.

Part of what makes this overpackaging trend particularly insidious is that it is most salient for consumers who are most environmentally conscious. Interest in sustainability varies across political affiliations and countries, but we found that people who reported engaging in more eco-friendly behaviors were more likely to view overpackaged products as environmentally friendly. As a result, the very consumers who are most interested in pushing companies to make sustainable choices are likely inadvertently encouraging the environmentally harmful practice of overpackaging.

The good news is, overpackaging isn't the only way to signal sustainability and attract

environmentally conscious consumers. In our studies, we found that instead of additional paper packaging, simply adding a “minimal packaging” sticker to plastic packaging could correct the misperception that overpackaged products are more sustainable. Especially for products for which plastic is necessary to ensure safe transportation and lengthen shelf life, this kind of explicit messaging can help reduce consumers' biases against the responsible use of plastic packaging (without the need for unnecessary paper waste).

This kind of messaging is effective because alongside the common perception that “plastic is evil,” consumers today are increasingly aware of the importance of minimal packaging as a goal in and of itself. Indeed, more than half of respondents in a recent Deloitte survey said they would consider a product sustainable if it used minimal or recyclable packaging, regardless of what that packaging was made of. Many brands are already incorporating this trend into their strategies, explicitly signaling their commitment to responsible packaging through slogans such as Zara's “Our boxes are made of boxes with a past,” an online statement from Kiehl's that the majority of its products don't use “secondary packaging,” or 12 Tides' “compostable packaging” label on its chip bags.

Of course, these marketing efforts must be complemented by genuine investment into sustainability — and “minimal packaging” labels certainly should only be used if a brand has actually ensured that it is using the minimal possible packaging, ideally under the supervision of a trade organization or regulatory body that maintains clear, consistent standards. But for companies looking to package more responsibly while ensuring their products still look environmentally friendly, a simple “minimal packaging” label can offer a much better alternative to the increasingly common (and demonstrably harmful) practice of overpackaging.

Source: Harvard Business Review.

Monsoon moisture matters: Quality Adhesive to the rescue

By Anang Mainkar, Managing Director,
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(M.Com., L.L.B., D.F.M.)

Corrugated paper box is used mainly for shipping / transportation and storage of variety of items for their strength and durability. In the process of making box, paper and gum adhesives are major players which determine strength of the box. More moisture in the box will cause lower compression strength of the box. Lower compression causes collapse of stacked boxes and thus damage to the goods packed inside.

So control of moisture in corrugated box means restricting moisture in box by using low cob paper and by using moisture resistant adhesives.

Controlled moisture in paper.

The major component of paper, cellulose fiber, is hygroscopic in nature and therefore tends to absorb moisture from a damp or humid atmosphere or release moisture in dry atmosphere. When paper gains moisture corrugated box loses its bursting strength (BS) and compression strength (CS).

To overcome excess moisture in corrugated board use of correct paper cob, changing machine speed, use of moisture resistant adhesives, use of preheaters and applying other techniques of manual drying etc. are some of the solutions.

Moisture control through gum adhesives

Gum adhesives play major role in avoiding excess moisture in corrugated box. Low quality of starch used in adhesives, fillers used to reduce cost, wrong modifications to starch and use of hygroscopic chemicals in the gum adhesives are major reasons for causing excess moisture in corrugated board.

a) Gel temperature of gum is important in automated plants and in single facer. High pin adhesion at low temperature gives complete dry liners and board. If gum fails to get gelatinized

instantly when it reaches heaters at the set speed of machine, it fails to develop stronger bond adhesion and develops the tendency of gaining moisture from atmosphere in later stage even after complete drying.



b) Type of starch used and specific modification to starch to develop moisture resistance are very important factors. Usually hydrolysis of starch with the use of acid and then use of strong alkali to get viscous gum is a common process followed and most of the products available in the market are of this category. These type of adhesives are bound to gain moisture in damp atmosphere and humid climatic conditions. Special modification treatments to high quality starch combinations to develop moisture resistance is required.

c) Different fillers are used in gum making to bring down cost and make adhesives cheaper in the market of competition. Very low-cost fillers such as different flours, clay, Urea, salt etc. are commonly used, only to reduce cost/price but affects quality substantially. Flour, clay or urea are more of hygroscopic in nature and cause more and more moisture gain whenever gets opportunity.

d) Chemicals used in gum adhesives such as Sodium Hydroxide (caustic soda) is highly hygroscopic and not only absorbs moisture but carbon dioxide, sulfur dioxide in the air. It is also highly deliquescent and absorbs moisture to form an aqueous solution. More moisture means lesser bursting and compression strength which results in collapse of stacked boxes. If use of caustic soda is inevitable, use of specially modified starch to get moisture resistance is essential.

Problems caused due to moisture in corrugated box

Only paper, how superior quality is, without corrugation process can't give stacking strength for storage and transportation of different goods and therefore flute formation and adhesives applied to both the sides of flutes, determines strength of corrugated box. If these gum lines starts absorbing moisture from air, box starts losing its compression and collapses on stacking.

Therefore moisture resistance of gum lines on the paper from both the sides of flute is essential to guarantee unchanged compression strength of corrugated box. Fast drying of corrugated sheet and its moisture resistance are two different concepts. Gum which is drying fast need not have moisture resistance and vice a versa.

Major problems caused due to moisture gain in box

1. Box loses its compression strength and collapses in stacking position
2. Warp (bending of corrugated sheets) due to excess moisture.
3. Chances of fungus on the surface of box as moisture provides dampness and required temperature for development of fungus.
4. Rusting of stitching pins.
5. Corrugator starts using higher grade papers to achieve desired strength which eats profit (which has already narrowed due to tough completion).

Advantages of good quality moisture resistant adhesives

1. Guaranteed permanent compression and bursting strength in any climate conditions and even in export of goods when box travels offshore in deep sea where relative humidity goes very high.
2. Excellent finish, great feel to bare hand and improved aesthetics of box.
3. No chance of fungus as gum adhesive resist moisture and keeps surface dry.
4. No chance of pin rusting as gum adhesive remains dry after complete drying.



5. Bursting and compression strength of box improves substantially. This helps corrugators to save in terms of paper by using lower grades instead of higher-grade papers. Paper cost consists of almost 97% of total box cost. Savings in paper means saving in 97% cost of box. Thus, corrugator gets an opportunity to grab huge hidden profits by using quality gum adhesives. More margins help him to become more competitive in the market and better quality and improved aesthetics of box helps him fetch more orders in open market, which further increases market share with improved margins.

Monsoon moisture matters: Quality Adhesive to the rescue

What is the difference in moisture resistance and water proofing of Boxes?

Moisture resistance of box and waterproofing of box are two different concepts. Moisture resistance is applicable only in damp conditions or humid climate where as water proofing is applicable only when box comes in direct contact with water.

Humid air has a density of approximately 1.225 kg/m³ and density of water is 997 kg/m³. Gum lines of moisture resistant grade powder adhesives can resist moisture due to its very low density but can't resist direct water due to its very high density.

When box comes in direct contact with water not only gum but even paper starts absorbing it and thus collapse. So what is important is moisture resistance and not waterproofing of gum adhesive. Stacked box should stand in any climatic condition and not in water. If at all waterproofing is demanded then coat of waterproof chemical is applied to paper. Always go for moisture resistant grade adhesives though costly as they prove to be highly profitable in actual practice.

Fast Drying and Moisture Resistance are two different concepts

Gum drying fast need not be moisture resistant.

Let us try to understand drying process.

In summer due to dry & hot weather conditions, box dries automatically & very fast. But in rainy & winter season, it takes longer time for complete drying or in most of the cases box regains moisture even after complete drying.

In summer, we wash clothes at our home & clothes get dry within few hours, without doing anything. But in rainy & winter season clothes doesn't get dry so easily. We have to do so many things to dry them completely. We keep wet clothes below ceiling fan & if they still found wet we apply heat by pressing them with iron.

Corrugated box is made of paper which contains wood fibers. Box will not dry automatically in

humid climatic conditions. Same thing we have to do with corrugated boxes to dry them fully if we want faster drying and faster delivery.

Put them either in front of air circulator or in drying chamber to apply heat.

Now the problem starts when box regains moisture even after complete drying. Here role of gum adhesive is very important. If you want to overcome problem of moisture regain always use the gum which is Moisture Resistant.

Use high solids, low viscosity gum made of pure quality starch. Release minimum gum which will promote faster drying.

It means on complete drying -

1. b/s & c/s achieved on drying remain forever in any weather condition & even in refrigeration.
2. Box remains dry & avoids fungus growth.
3. Rusting of pins is avoided.
4. Excellent finish & aesthetic of box is achieved by avoiding warp & wash board.

With the use of low quality chemical based gum, even if you try & dry your boxes, they will gain moisture even after complete drying. But Moisture Resistant adhesives resist moisture and keep your boxes dry forever.

Summary:

To overcome moisture issues in rainy season:

1. Always insist for moisture resistant adhesives.
2. Use Low cob papers.
3. Release minimum gum to roller.
4. Maintain High solids and low viscosity of gum.
5. Make sure that you are getting 100% dry corrugated liners
6. Use different techniques for drying of boxes.

Great Manufacturing Leaders Do These 8 Things

Everyone would agree that manufacturing has changed substantially over the past century. From general working conditions to plant automation, and pension plans to digital technologies, manufacturing has come a very long way.

That doesn't happen without great manufacturing leadership.

While some manufacturers still employ those executive dinosaurs who continue to fight the tide of change and haven't embraced the type of leadership that today's workforce demands, the vast majority of manufacturers have changed with the times. Manufacturers today must:

- Compete for skilled workers and entice tomorrow's leaders to join the industry.
- Operate an increasingly fast-paced and sophisticated supply chain.
- Navigate through tariffs, trade agreements, and political challenges.
- Generate digital strategies that maximize ROI in an increasingly complex environment.
- Predict technological transformations that not only affect the business but also the products developed.

We know that navigating all that change requires leadership, but what makes a great manufacturing leader? Here are our top 8 things that great manufacturing leaders do.

1. Build a Company Culture of Enthusiasm, Teamwork, and a Common Vision

A lot of older executives don't believe in the concept of company culture. To them, it's a mushy sentiment that doesn't belong in the tough world of manufacturing (you've probably met a few of these types of leaders).



Today's manufacturing leaders must not only recognize that company culture matters, but they must also work to actively build their company culture. Plastering your manufacturing plants with signs declaring company values just isn't enough. Manufacturing leaders must find ways to create the right culture within their companies, and prove to employees that it's not just lip service.

Connecting with employees and inspiring passion and creativity is important in lots of industries, but it's especially important in manufacturing because it has a reputation for being repetitive, boring, and soul-sucking. The reality is that modern manufacturing requires people who have passion for the company and products in order to thrive. Passion not only drives company culture but also encourages employees to think big and look for ways to contribute to the common vision of the company.

Great Manufacturing Leaders Do These 8 Things

2. Maintain High Expectations and Hold People Accountable

Setting high (and reasonable) expectations for employees is like creating a blueprint for success, not only for the employee but for the entire company as well. One of the marks of a highly effective manufacturing leader is the ability to deliver consistent feedback, make the tools available, and set high expectations that challenge employees to deliver remarkable results that are well within their capabilities.

On the other side of that ideal is that effective manufacturing leaders must also hold people accountable when they don't meet expectations. Making excuses for employees, or “giving them a pass”, sends the wrong signal to everyone in the organization, damages the leader's credibility, harms company culture, and ultimately hurts the business.

3. Become a Change Agent with an Entrepreneurial Spirit

Great manufacturing leaders are also change agents who want to be innovative. They have a transformative vision of the business that usually focuses on improvements, development, or even new products. They shake things up, in a good way, to propel the business to the next level.

Great manufacturing leaders constantly question the status quo, and move the company away from the “this is how we've always done things” mentality, even when some employees resist the change.

They also use that change agent mentality to focus on problems and opportunities in their industry. They look for customer problems and find solutions that they can bring to their customers. Great manufacturing leaders take every opportunity to spread that entrepreneurial spirit throughout the organization to drive solutions that optimize the business.

4. Exercise Strategic Planning and Fearless Decision Making

Great manufacturing leaders have the ability to

look ahead and anticipate, with some accuracy, where the market is going. They can anticipate trends, and actively work to develop strategic plans based on those market indicators. Great manufacturing leaders build strategic plans around product development, the adoption of new technologies, new plant locations, or even internal changes that will improve their company.

But a leader isn't great just because they've developed great strategic plans. Great manufacturing leaders must also be willing and able to make decisions. They don't succumb to analysis paralysis or fear input from key stakeholders. Once a decision has been carefully considered by all those involved, great manufacturing leaders know when to step up and make the decision. They're also prepared to stand by it.

5. Advocate for Cross-Functional Teams to Tackle Challenges

New opportunities and innovations are steadily becoming available for manufacturers, and many of these innovations have the possibility of opening up new markets and supply chains. It's more important than ever to approach manufacturing opportunities with a strategic mindset. That means involving lots of different departments in the research, decision-making process, and implementation processes.

Great manufacturing leaders encourage cross-functional teams that are made up of departments that haven't always worked together, such as marketing, R & D, finance, and production. They recognize the importance of cross-functional teams to shape the strategic vision of the company and tackle challenges. This multi-departmental view is the only way to get a 360-degree view of challenges and opportunities, and great manufacturing leaders know that's the best way to make strategic plans that really work for the company overall.

6. Embrace Technologies That Make Sense

In manufacturing, we all know that there's always some new kind of technology that's supposed to

Great Manufacturing Leaders Do These 8 Things

revolutionize everything. Sometimes new technologies live up to the hype and sometimes they don't. Great manufacturing leaders know how to wade through all the nonsense and look at new technologies that will really move their company forward in terms of business innovation and product development. They embrace innovation when it makes sense for the business, but don't chase after every new technology that catches their eye.

7. Use Emotional Intelligence to Empower Employees

In general, leadership positions have a higher influence within an organization, but leaders with the highest influence also have high emotional intelligence (EQ). Great manufacturing leaders generally have high EQ, which helps them communicate more effectively, manage emotions within the company (as well as their own emotions), have better social awareness, and do a better job of conflict resolution.

Emotionally intelligent leaders understand and care about the feelings of others, and do a better job of preventing emotions from unduly influencing decisions.

One example of how a great manufacturing leader might use their EQ to influence employees is in the implementation of new technology. A leader with high EQ is prepared for change-resistant employees to actively work to impede the implementation of new technologies in the workplace. They understand that change is difficult for some employees and find ways to make the transition less painful for them.

Emotionally intelligent leaders also use their EQ skills to empower employees. Great manufacturing leaders know how to delegate responsibilities without micromanaging subordinates. They know how to develop trust, provide them with the resources they need, support them, and give them a chance to succeed with more responsibility.

8. Effectively Communicate with Honesty, Integrity, and Transparency

Effective communication is probably the most essential trait of any leader, not just leaders in manufacturing. No leader can be effective in managing their team until they can clearly communicate their vision, goals, and expectations.

Beyond the fact that leaders must be able to communicate effectively, all their communications must have an underlying tone of honesty, integrity, and transparency. Leaders who lack these qualities can't expect others within the company to act with integrity either.

Great manufacturing leaders understand how important honesty and integrity are to any relationship, and they understand that the best way to foster those qualities is through transparency. Openly sharing information, whenever possible, helps others buy into a leader's vision and keeps them engaged.

"The supreme quality of leadership is unquestionably integrity. Without it, no real success is possible, no matter whether it is on a section gang, a football field, in an army, or in an office."

—Dwight.D.Eisenhower

Great manufacturing leaders understand how important honesty and integrity are to any relationship, and they understand that the best way to foster those qualities is through transparency. Openly sharing information, whenever possible, helps others buy into a leader's vision and keeps them engaged.

In the end, really great manufacturing leaders keep their organization engaged and focused in the right direction to achieve that common vision for the company.

Source: Conner Industries.

7 ways to reduce spend through cost effective packaging design

Focus on Cost Effective Packaging

Reasons you should be thinking about working with closely with a packaging designer

It's just a cardboard box.

That's how many people view packaging. Something that couldn't be more simple (or boring – try starting a conversation in the pub about the challenges you are facing with your packaging!).

However, when you start looking at in detail, it is a surprisingly complex subject.

And of course, if your job involves creating, specifying or buying packaging, most likely you are aware of all the variables involved, and the impacts that it can have on your company's effectiveness.

The pricing can vary based on board grades used, the construction, weights, strengths etc. But this has an impact on how well it performs in transit, how quickly it can be assembled, how much of it you can store and so on.

And this is even before considering the environmental impact.

There is one element of your packaging that this all feeds back into - and is ultimately defined by - the design of your packaging.

Introduction

More than just packaging design

Another preconception that many have is that packaging design concerns itself with branding, logos, colours, graphics and general marketing and appearance considerations.

While this is critical in many industries and markets (and should always be considered), the structural

design of your packaging can be what makes or breaks its' success.

It can be the difference between your product making it to your customer in one piece.

It can aid the productivity of your packing staff.

It can even help to drive profitability at your business.

But how?

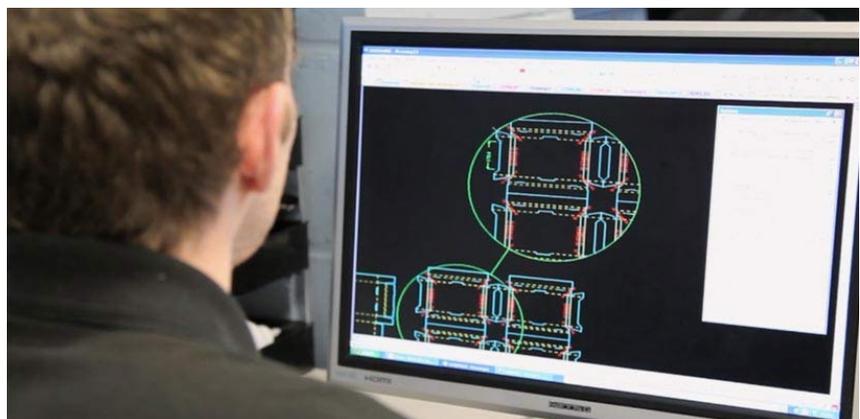
Well, there are a number of ways in which you can reduce your overall costs by taking advantage of thorough corrugated packaging design service, as well as improving other areas of your business too.

01: Seven Strategies

The 7 ways to reduce costs through packaging design

In fact, there are at least seven ways in which leveraging cost effective packaging design can have a significant impact on your costs.

And whilst they will not necessarily be reflected in the unit cost you pay for your packaging, the cost savings can potentially be seen throughout various aspects of your packaging supply chain and wider business.



7 ways to reduce spend through cost effective packaging design

The key areas that you can (and should) look at when attempting to drive cost savings through packaging design are as follows:

- Optimise material usage
- FEFCO styles
- Minimised transit costs
- Minimised void fill
- Easier/quicker assembly
- Rationalisation
- Transit Damage

Please continue reading for further information on how working closely with an experienced design team can realise these savings for you.

Working alongside an experienced, specialist packaging designer can result in significant cost savings (photo caption)

02: Material

Optimise material usage

One of the major component costs of your packaging is that of the materials that makes it.



The problem is, paper prices are seeing significant increases due to lack of supply, increased demand and the weak pound affecting import costs.

This is the reason that you may have received packaging price increase letters from your supplier.

Whilst this is unfortunately inevitable, working with a packaging designer can mitigate this and even reveal additional cost efficiencies.

The first thing to consider is whether you need to be using the specific material grade that you do currently. Whilst this is a topic of discussion all of its own (you can read more by clicking here), any experienced packaging designer should be able to advise on this.

If yours can't, it may be time to look elsewhere.

A good packaging designer will be able to make efficient use of material, minimising costs without sacrificing performance (photo caption)

Secondly, if you cannot reduce the cost or type of corrugated material you are using, it may be possible to reduce the overall amount that you use (and hence, using less, spend less).

This is where custom designed packaging comes in.

A carton sized specifically to your product, for example, is almost certainly going to be smaller than selecting the nearest "stock" equivalent, which will, as a result, use less material.

This is thinking in the most simplistic terms, however. An experienced packaging technologist or engineer should be able to improve yield through the parametric layout (i.e. the design when flat) of your box.

This usually involves maximising the use of material and adjusting the layout so that the "blank" size (the footprint of your pack) is

reduced.

Again, less material equates to less cost, and ultimately, more cost effective packaging.

03: FEFCO

Utilising FEFCO styles

If the above sounds complicated, then that's because it is. It takes an experienced, intelligent

7 ways to reduce spend through cost effective packaging design

(and sometimes innovative) designer to take any carton and reduce the material usage.

There is a somewhat easier alternative however.

Whilst it is not suitable for every application, there is an internationally recognised catalogue of box and packaging layouts.

Called FEFCO (the abbreviation for Fédération Européenne des Fabricants de Carton Ondulé – or European Federation of Corrugated Board Manufacturers in English), the catalogue of designs has been coded and widely accepted by the packaging industry as a whole.

Whilst the benefits of having a standardised catalogue are obvious, each of the designs has been tried, tested and refined over many years. This means each of the layouts are exceptionally material efficient.

So why do you need a packaging designer for using a standard template?

Well, the vast range of styles means it is essential to have experience of what layout will work best for a specific application. It is also still crucial to have the main dimensions of the box scaled to match your product, otherwise any material savings are instantly lost.

Virtually every packaging supplier will know the most commonly used FEFCO codes, but only an experienced designer will be able to use this to drive material and cost efficiencies for your business.

04: Transit

Minimised transit costs

So you can see the benefits of reducing material usage in terms of the impact it can have on the unit cost of your transit packaging.

But did you know that a custom designed box can reduce your costs in other ways?

Perhaps the most obvious of these ought to be that of transit costs.

Put simply, if you are sending oversized boxes, and paying volumetrically for shipping, you are



effectively paying to ship fresh air.

If you send your goods out on pallets, then you will get fewer boxes per pallet, be forced to send more pallets and again incur increased delivery charges.

Minimising your transit costs can be achieved simply by using custom sized packaging (photo caption)

And this is before considering the environmental impact, both of the additional material used in your packaging, but the extra journeys your couriers or freight provider will need to make as well.

Working alongside a packaging designer focusing on producing a cost-effective, size optimised carton will indirectly be helping you reduce your transit costs too.

05: Void Fill

Minimise the use of void fill / secondary packaging

It doesn't stop there though.

If you are using stock boxes which are slightly too large, then it is quite likely that you will be using

7 ways to reduce spend through cost effective packaging design

void fill to prevent your items moving about in transit.

06: Transit Damage



Reducing costly damage caused during transit

Whilst really a separate topic to reducing costs, a value-added service that most competent packaging designers should be able to offer is that of reducing transit damage.

Whilst arguably essential, this is a terrible idea in most cases. It certainly isn't the most cost-effective packaging solution.

It should be possible to analyse your packaging material, structural design, the product to be packaged and the supply chain processes, and identify ways to eliminate damage and returns.

Void fill is another cost you have bear. It is another process for your team of packers (reducing their productivity). You have to pay to ship the additional weight of it. The end customer / user has to dispose of it (at best this is just annoying – at worst difficult).

It doesn't matter how cheap or expensive your packaging is - if it doesn't protect your items in transit, you will always suffer high costs / return rates (photo caption)

Custom size packaging can also reduce the costs and time associated with void fill, which also has environmental benefits (photo caption)

Whilst this may add cost to your packaging initially, the savings made through reducing or

It is also (usually) terrible from an environmental point of view.



However, custom designed boxes will at least minimise the void fill required, and at best completely eliminate it.

eliminating damaged products will usually far outweigh the small increase in your unit cost.

An intelligent designer will be able to produce designs that include integrated cradles or locators that hold you product in place during transit, ensuring it is well protected but also that you can forget about needing to source void fill products for good.

The added benefit is that you will also see an increase in customer satisfaction, which can help with brand perception, repeat sales and lifetime value.

7 ways to reduce spend through cost effective packaging design

Who thought packaging design could do that?

07: Assembly Times

Easier / quicker assembly

Another indirect cost saving is to improve the efficiency of your packing line.

Whilst this is – on the face of it – as simple as changing box styles, it takes an experienced designer to be able to produce an easy assemble (e.g. crash lock) design that will also be tailored to specific requirements of your product and transit methods.

Once this has been achieved, however, you will begin to see increased productivity through more boxes being assembled, packed and shipped in the same amount of time.

This then sees a drop in labour costs (or allows you to give loyal staff a pay increase) which can benefit your overall operations.

08: Rationalisation

Streamlining your inventory

The final added value service that a packaging designer could offer you is that of “rationalisation”.



Also referred to as consolidation, this involves looking at your entire packaging inventory, analyses the sizes used, and attempts to combine as many cartons as possible to give a more streamlined inventory.

So what are the benefits of this you ask?

Well, the main benefit is that it allows you to order

higher volumes of fewer lines.

This basically means you are taking advantage of economies of scale, and allowing for much more efficient manufacture. It minimises machine setup time and costs, the amount of tools required and, also allows for the material to be purchased in higher volumes (again impacting cost)

Put simply, rationalising your packaging can help you to take advantage of economies of scale, whilst also improving staff efficiency (photo caption)

Secondary benefits include having an easier inventory to manage, reducing the amount of POs that are required (and the general admin surrounding ordering), easier stock management and even reduced numbers of deliveries and delivery charges.

Effectively, it can reduce your costs whilst improving your efficiency. A win win.

However, whilst this sounds simple in theory, the job of rationalising a packaging inventory can only really be achieved working hand in hand with an experienced packaging designer.

In Summary

Why cost effective packaging design is important

If you truly want to achieve the maximum value from your packaging (whether that be to reduce your average cost of packaging or solve a specific problem), then you have no choice but to work with a dedicated designer.

Virtually all of the ways you can improve the effectiveness, efficiency and cost of your packaging tie with utilising packaging design expertise, which is why selecting an experienced, knowledgeable individual or team to work with is absolutely critical.

It can be the difference between packaging that does the job, and packaging that drives your business forwards.

Source: GWP Group.

Custom corrugated boxes : The ultimate solution for E-commerce

When you need to create a good impression on your customers, E-Commerce packaging is one of the leading things that you need to concern about. Without investing your time in the packaging, you just cannot quickly grab the attention. It is also very much essential to provide the best materials when you are making a custom corrugated boxes for packaging.



And through the help of the multiple ways of the packaging system, you can make it much more convenient and impressive. And before packaging the corrugated box, you need to give your full attention to so many other aspects to make your clients satisfied and to get positive results from them. There are also some advantages equally available when you are using e-Commerce packaging custom corrugated boxes for your business.

Make sure you are giving equal importance to each one of the things so that it can give the best profit for your business and you can run it for a long time. So let's check out some of the important things regarding the e-commerce corrugated box or Custom Corrugated Boxes packaging requirement.

Importance of packaging in e-commerce

A lot of people are also looking at the importance of packaging in e-commerce to have them, and to clear the knowledge here; we have a few lines for them. To bring success for the brand or business quickly, E-Commerce packaging plays a very vital role. Without giving the authentic touch or making it unique, the customer will not be impressed by the packaging system. And to impress the customers, you need to always think

about their needs and requirements regarding the packaging system or the corrugated box.

Whatever packaging system you are using for your business, make sure you match the expectation of your customers. And nowadays, custom printed corrugated boxes India are very much popular, so you can also use this unique idea for your business.

It can also quickly give you the first impression of your customers. As per the research, it is approved that the customers always keep much more importance on the packaging system over anything else. But sometimes you are selling their products online, sometimes pay less attention to the packaging system, and they get less attention from the customers. When you are making custom corrugated cardboard boxes for your business, you need to take care of it and think about the requirements of the customers.

Advantages of Custom Corrugated Boxes for E-Commerce

Now here in this paragraph, we will individually discuss the advantages of custom corrugated boxes for E-Commerce businesses. If you are looking for the answer to all of the advantages of a corrugated box, then you can find out here in detail.

Custom corrugated boxes : The ultimate solution for E-commerce

1. Keeps Costs Low

Those who are using custom corrugated boxes for their business they can actually save a lot of their money. This is the best part about using the custom corrugated box for any type of business, and all business owners can get the best profit after using this particular corrugated box packaging system. On the other side, if you are using a printed corrugated box packaging system, then you can also imply the custom E-Commerce packaging system.

2. Enhances Brand Value And Perception

At the same time, the business owners can also increase their brand value and perception by giving their whole focus on the E-Commerce packaging system and on the custom packaging system for a corrugated box. It will also help you to remain one step ahead in the business and in the marketing field and will help you to get the best customers for your business.

3. Sets You Apart From The Competition

Initially, the advantage of a custom E-Commerce packaging system will also help all business owners to stay one step ahead of all of their competitors in the market. If you give attention to a corrugated packaging box, then you can surely stay ahead of your competitors in the market. Asian packaging custom corrugated box manufactures company in vapi.

4. Speeds Up Turnaround Times For Consumers

Subsequently, it will also help you to reach all of the products to your customer's doors very quickly, and they can get their all-ordered products. And if you want to get positive reviews from your customer, then you should not miss the chance to use the custom packaging system for your business.

5. Accommodates For Dimensional Weight Pricing

At the same time, this packaging system will also help you to provide the products to your customer's house in a safe and secure way without damaging the product. The strong

packaging system will help to keep the product inside safe, and you will not have to pay any for dimensional weight pricing. Both a corrugated plastic box and a corrugated carton box can also take benefit from this packaging system.

Why are custom packaging boxes (printed boxes) important?

Now it is also very much important to find out why custom corrugated boxes are important for your business, and if you are looking for the answer, then here are all of them for you.

1. You'll stand out more

For business growth, every business owner should focus on the packaging system, and they need to take the help of custom packaging boxes. This packaging system will help all of them to stand out from others, and they can make their name in the market and the customer very quickly. Even you can also use a corrugated plastic box for the packaging for your business.

2. You'll protect products better

On the other hand, this type of packaging system will also help you to protect all of the products in a better and more secure way so that they can reach the client's house without getting damaged. And whenever you take advantage of this custom packaging system, you need not have taken any tension about damage to the products. Corrugated box manufacturers in India have become a very important thing for the packaging system and business owners.

3. You'll be more eco-conscious

Whether you are the supplier or the owner, you can also take positive results from this packaging system, and corrugated box supplier can also see the profitable amount in their hands. Both owner and the supplier can individually see the profit margin in their business after taking the help of this custom packaging system.

4. You'll save money

And ultimate, you can actually save a lot of money, and you will not have to invest a lot of money in the corrugated box packaging system. By saving the

money, you can invest them in other ways to bring success to your business school today. Those who want to buy corrugated boxes can find out multiple ways where they can purchase a lot of boxes.

The Importance of Ecommerce Packaging

After knowing each one of the important things regarding the custom packaging system in the business, now here is the time to the importance of e-commerce packaging.

1. Protection

First of all, it can help you to protect the products inside of the packaging very conveniently, and the customer can get the undamaged product after giving the order. This is the first advantage or importance of using the E-Commerce packaging system for Custom corrugated boxes .

2. Marketing

Besides that, it can also help you to grow the marketing in the business marketing field, and packaging e-commerce systems can help business owners to get the best revenue from the market. It can also help to develop the business person to increase the brand name quickly by taking the help of this packaging.

3. Product Size and Weigh also good

Even these packaging systems can easily take the product size and weight so well that all of the products inside of the boxes can remain well and damaged. Custom corrugated boxes ideas can help your business to grow rapidly in the business marketing field nowadays.

4. Recycling and reuse

Even you can also use the packaging system in a reuse and recycling manner. Hence, it is important of the ecommerce packaging system.

What type of e-Commerce Packaging do you need?

Based on the packaging materials right now, the most popular E-Commerce packaging materials are corrugated box and poly mailers. And among

people, it is one of the most popular types of packaging system just because of its recycle materials. It can protect the product very well and can provide the best result using this packaging system.

What are the different types of packaging Corrugated Boxes?

There different types of packaging are also available, and you can also use all of them for your business and for better customers.

3 ply corrugated box

The very first type of packaging box which you can apply for your business is 3 ply corrugated box. Printed Brown Corrugated Box is also very much demanding and it can also give all the results that you need from your packaging system for your business.

7 ply corrugated box

Another popular packaging type that you can also apply for your business is 7 ply corrugated box. Corrugated rolls also play a very important role in this packaging system, and for the better growth of your business instantly, this type of custom corrugated boxes can also help.

Corrugated sheets plates

Besides that, another type of custom corrugated boxes that you can also apply for your business is corrugated sheets plates. This is also very popular among people. You can also consider the advantage of this packaging system at any time.

Corrugated box partitions

And the last best type of custom Corrugated boxes , which you can also apply for your business growth, is the corrugated box partition. This is another very strong type of packaging that will help to grow your brand name in the market, and your brand name can become India's Top Corrugated Box Manufacturing Company.

Source: Asian Packaging Industries



Manufacturing Leadership: How to Create Ownership Across Your Work Teams

Find out how fostering ownership across teams is essential to being an effective manufacturing leader.

To ensure your factory floor workers are giving you their very best, manufacturing leadership must create a sense of ownership across work teams. To get factory workers to care about outcomes, leaders first need to show they care about employees' ideas and input.

All of this starts with creating effective manufacturing leadership. We have a few tips for managers to create ownership across their work teams.



How to Be an Effective Manufacturing Leader

Being a manufacturing leader isn't just about looking at KPIs and telling people what to do and when to do it.

Effective manufacturing leadership is all about:

- Knowing your KPIs
- Involving people in projects
- Considering all ideas
- Empowering people to enact change

Let's take a look at how manufacturing leaders can foster a sense of leadership and ownership among factory floor workers.

Know (and Understand) Factory KPIs

If leadership isn't clear on why a factory's KPIs are important, it's less likely the KPIs will be met. Manufacturing leaders who just give orders with no explanation leave workers wondering why and feeling they're being shut out of their own job.

For example, if a shift manager just tells their team that they need to improve their throughput without any explanation or discussion, employees don't have a lot to go on. Instead, show workers

that inconsistent throughput means inconsistent deadlines and deliveries, which negatively impacts customer service. Make sure to be clear how important their part is in the customer service ecosystem—if the factory loses customers, leaders must make cost-cutting decisions.

When workers know the importance of KPIs, they're more likely to put more effort into meeting them.

Manufacturing Leadership: How to Create Ownership Across Your Work Teams

Involve People from Every Corner of Your Organization

If workers consistently say things like, “I don’t know, I just work here,” your employee culture may be stuck in the ‘90s. That’s what it feels like when you just come in and “punch a timecard” instead of going to work and doing your best. That’s exactly what happens when decisions are made in vacuums, and people are just given orders.

Involving people from every corner of your organization won’t just make people feel more invested in their jobs—it can also help you discover some great ideas. When employees work with purpose instead of just to punch a timecard, they perform better. You never know what kinds of insights a machine operator may have that could be a game changer when it comes to efficiency.

Remember That No Ideas Are Bad—Some Just Work Better Than Others

Listen—always. Keeping your ears and mind open is what brings on innovation.

When manufacturing leaders create an open environment for employees, they get plenty of ideas and suggestions—and not all of them are going to change the world. But no idea is wrong or bad.

Remember where the idea is coming from: Someone is approaching you with an idea they think will help make the factory a better place to work or a place that works better. They’re creating a sense of leadership among their team, and their dedication to good outcomes shows they feel a sense of ownership. Never blow that off.

When an idea is not viable, validate its intention and encourage the employee to always speak up. Some ideas work better than others, but you’ll never get those game-changing solutions if your workers are apprehensive to speak up because they are afraid of being wrong.

Empower and Inspire Your Workers to Enact Change

Combine everything we’ve covered here, and you get an empowered workforce who isn’t afraid to enact positive change.

If floor supervisors see their managers creating an environment where all voices are heard and where problems are tackled with thought instead of blind orders, they’ll follow the example. Often, when supervisors and floor managers don’t create an open-idea environment that empowers, it’s because they haven’t seen it modeled.

Manufacturing leadership sets the tone for how the entire factory operates, so make sure everyone sees how it’s supposed to be done. If you continually keep teams informed of crucial KPIs, involve them in projects and decisions, and fairly consider all ideas, you’re going to have an empowered team that’s always looking for innovative new solutions.

Leaders can use lean manufacturing principles to help with creating a sense of ownership across their teams. Lean principles focus on how employees and managers work together and have helped countless organizations from all industries streamline and improve performance.

Create a Sense of Ownership to Find Your Digital Champion

When your teams all feel like owners, they’ll feel more invested—and manufacturing leaders will get better results. People love winning, and factory workers are like everyone else in that when they get a taste of success, they want more. You never know what kind of genius your factory floor is hiding or what kind of insights you can get from the most unexpected places.

Find out where your digital champions are on your factory floor.

Source: Worximity.



Sustainable Packaging Is Sometimes Doubling as Easier-to-Open Packaging

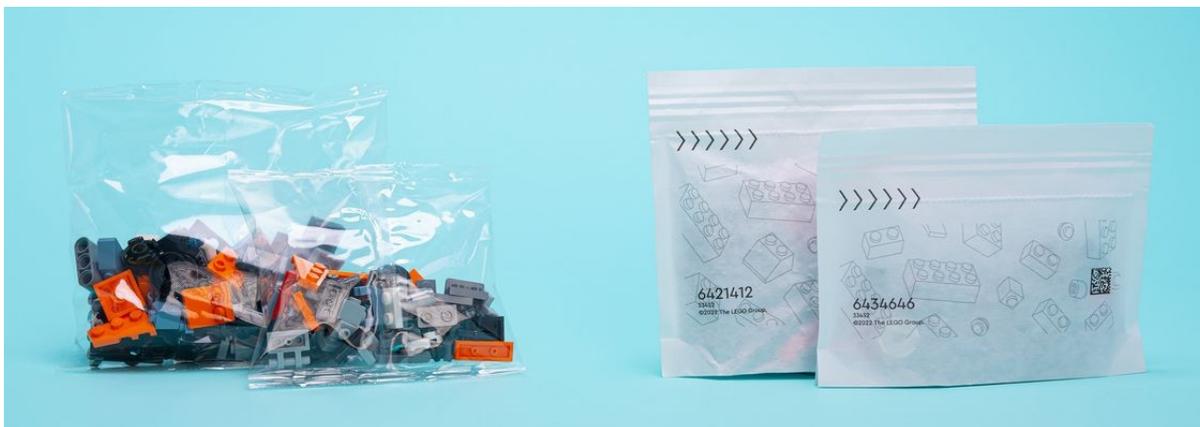
For sustainably-minded companies, stripping back layers of wrapping and scrapping heavy plastic lead to happier unboxing experiences for customers

When Sarah Ryan Hudson, an environmental attorney, purchased the Dr. Jane Goodall Barbie doll to add to her collection of inspiring desk trinkets, she was pleasantly surprised by the unboxing experience.

Unlike the Barbies from her youth that had to be forcefully pried or cut from plastic boxes and ties,

making a sustainable swap, people aren't missing out—it's actually improving the user experience," Ms. Hudson said.

Manufacturers for years more or less ignored consumer complaints about hard-to-open packaging, often prioritizing competing goals such as safely transporting products over further distances or preventing tampering and theft. The



her miniature version of the environmentalist Dr. Jane Goodall came tied with paper string to a cardboard mount in a plastic-free cardboard box—no scissors required.



Sarah Ryan Hudson found the Barbie's Dr. Jane Goodall packaging to be a welcome departure from the hard-to-open versions of her youth. PHOTO: SARAH RYAN HUDSON

"I just thought it was a really good example of how when we're

costs involved in overhauling packaging systems also made them reluctant to change for the benefit of a less-finicky opening experience.

But companies have responded to regulators, shareholders and consumers' pushes for sustainability, campaigns that have been harder to dismiss than requests for better accessibility. Companies say that by reducing plastic packaging, using recyclable materials and using less material overall will help their products stand out and remain competitive among a more environmentally-conscious consumer base, despite the repackaging costs, which most declined to disclose.

But, in doing so they are finally, if at times incidentally, making some products easier to open.

Sustainable Packaging Is Sometimes Doubling as Easier-to-Open Packaging

The easier-to-access Jane Goodall, for example, is part of a broader sustainability push at Mattel Inc., the maker of Barbie, with changes including



removing the plastic window from some boxes and replacing the majority of its plastic straps with elastic staples or paper ties.

Danish toy company the Lego Group had a similar outcome when it adopted a goal of producing all its packaging from sustainably sourced materials by 2025 and took a new look at the plastic brick bags inside its cardboard boxes. The company in 2020 said it would over three years invest up to \$400 million in sustainability and social responsibility initiatives.

Tim Brooks, Lego's vice president of environmental responsibility. PHOTO: THE LEGO GROUP

"One thing I think we found—and I don't think we knew this before—was that kids sometimes couldn't open the plastic bags without scissors or without an adult," said Tim Brooks, the brand's vice president of environmental responsibility.

Lego began introducing paper brick bags coated with a thin plastic lining, designed with tear-off tops and flat bottoms so builders could stand

them upright.

"We use this as an example internally of how when you apply sustainability, it can make [other] things even better," Mr. Brooks said. The company hopes all sets will come with paper bags inside by 2025, a spokeswoman said.

To be sure, shifts toward more sustainable materials haven't made packaging easier to use across the board, and campaigners for widely accessible packaging say companies aren't moving to provide it quickly enough.

And not all companies hit the sweet spot between sustainability and accessibility when redesigning packaging.

General Mills Inc.'s Nature Valley in 2021 introduced a wrapper for its Crunchy granola bars that consumers can take into stores to be recycled. Complaints abounded that the new material was more difficult to open.

"Nature Valley recently switched their packaging to something I cannot open without scissors and if I try it crushes all the bars," one Twitter user wrote.

"We always knew this new technology would require some trial and error," said David Chmura, senior research and development packaging



manager at General Mills. The company is committed to continuing to improve the packaging, he added.

Vertical farming company Upward Farms had

Sustainable Packaging Is Sometimes Doubling as Easier-to-Open Packaging

better luck. In November it began selling its microgreens in a resealable film package made from recyclable plastic. Previously they had been sold in hinged plastic clamshell boxes, Chief Executive Jason Green said. The switch reduced the amount of plastic in each box by 38%, increased the shelf life of opened microgreens and reduced the force needed to reopen the container, Mr. Green said.

“It wasn’t like opening the pickle jar,” he said, “but for someone with dexterity challenges or less hand strength, that clamshell was a harder package to open than our new package.”

Gillette sells 80% of its refillable razors in cardboard packaging, moving away from plastic blister packs that some customers said were frustrating to get into. PHOTO: GILLETTE/P&G

Other companies are phasing out plastic vacuum, blister or clamshell packaging, not only to cut down on their use of thick plastic but to also save consumers the pain of breaking into such a design.

“Consumers would go right to, ‘Your packaging is so plastic’, and then usually in the next breath they would say, ‘And it’s so hard to open,’” said Kara Buckley, head of global grooming communications at Procter & Gamble Co. The company’s Gillette razor brand in 2021 began selling some razors in cardboard packaging with a pulp tray, rather than in plastic blister packs and trays. Around 80% of its refillable razors globally are now sold in the new packaging, Ms. Buckley said.

Spirits company Bacardi Ltd. in December similarly announced that it would no longer use plastic in its new gift packs as part of its mission to be plastic-free by 2030. The company is swapping thermoform plastic moldings for easier-to-open pulp- or cardboard-based



versions at retail stores, many of which still require products to have a certain level of bulkiness to prevent theft, said Sergio Arellano, Bacardi’s senior director of global packaging development.

Colgate in 2019 introduced a tube that can be recycled-but later found its ability to hold its form made dispensing easier. PHOTO: COLGATE-PALMOLIVE

Sometimes improved consumer friendliness is unexpected. Colgate-Palmolive Co. in 2019 introduced a recyclable Colgate toothpaste tube, using a high-density polyethylene material without aluminum, said Greg Corra, Colgate-Palmolive’s worldwide director of global packaging and sustainability. One side effect was that the new design eliminated the crinkled, twisted-up look of a tube at the end of its life, which often unbalances the typical stand-up design, he said.

“They now hold their shape better, so they can always stand on the stand-up caps, and the toothpaste congregates at the head,” which makes dispensing easier, Mr. Corra said.

“That was not our objective, but people seem to like it,” he said.

Source: The Wall Street Journal.

The impact of cloud computing on the packaging industry

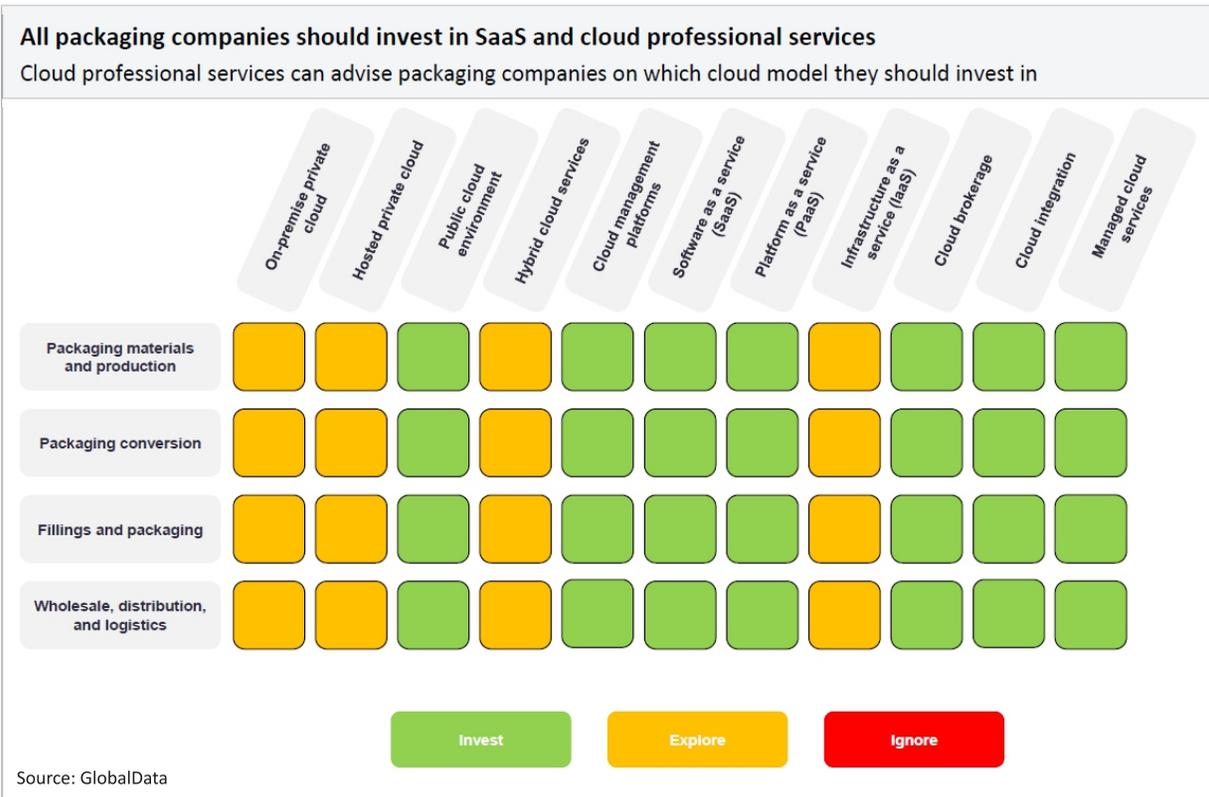
Packaging companies rely on various software applications, from ERP systems such as supply chain management modules to engineering applications such as digital twin platforms. None of these applications can run without the relevant IT infrastructure supporting them, including storage, networking, and operating systems. Cloud computing is a medium for delivering these applications and infrastructure elements. Importantly, it is more flexible, resource-efficient, and cost-effective than traditional IT delivery systems.

Rather than paying large up-front costs for hardware and software licenses, packaging companies using the cloud pay a regular fee based on the computing power they consume. Data and applications hosted on the public cloud can be accessed anywhere in the world, providing a flexible and convenient computing model

invest in technologies shaded in green, explore the prospect of investing in technologies shaded in yellow, and ignore areas shaded in red.

Pharma companies must invest significantly in cloud computing across their value chains. Cloud computing provides various benefits, from securing R&A collaborations between research teams and capturing big data sets from clinical trials to accelerating regulatory submission procedures and improving sales data collection.

As well as investing in specialised SaaS solutions, pharma companies can invest in PaaS to develop software tailored to their specific R&D or business goals. Larger pharma companies can also consider investment in IaaS to develop proprietary platforms in collaboration with a cloud vendor, upon which their



for large packaging operations. Packaging companies can also customise hybrid or multi-cloud deployments according to their needs and the specifications of legacy systems. These features are what make cloud computing an essential technology for packaging companies.

The matrix below details the areas in cloud computing where packaging companies should focus their time and resources. We suggest that packaging companies

own software can be created.

Pharma companies face the same pressures as healthcare providers and payors regarding patient data privacy and sovereignty. On-premises private clouds will suit large pharma with vast operations, but hosted private clouds will be more cost-effective and provide easier management. Public clouds offer the most cost-effective solution, while multi-cloud environments are increasingly popular in the industry.

The impact of cloud computing on the packaging industry

How cloud computing helps resolve the challenge of supply chains

Numerous cloud-based applications can improve the efficiency and resilience of a packaging company's supply chain. Firstly, many leading supply chain management applications are delivered via the cloud, including products from Oracle, SAP, and Logility.

These applications enable packaging companies to optimise supply chains and automate their management. Typical features include automated freight sourcing, route optimisation, and real-time updates on location and delays. Packaging companies can use these cloud-based applications to gain better visibility over their entire supply chain and optimise logistics accordingly.

Secondly, cloud-based engineering applications such as digital twin platforms give packaging companies greater insight into the machines and physical assets that underpin their production facilities.

By collecting and analysing data from these assets and developing digital twins, packaging companies can maintain industrial machinery in a proactive rather than reactive manner, preventing unplanned downtime and, by extension, ensuring their broader supply chains face fewer disruptions.

How cloud computing helps resolve the challenge of quality control

Cloud computing can facilitate the storage and analysis of data for packaging companies. Quality control in packaging relies on consistency in both the performance of packaging machinery and the properties and dimensions of packaging products.

Monitoring these indicators requires collecting a lot of data and the subsequent analysis and conversion of this data into actionable insights. This is precisely what the cloud allows providers to do.

For example, Elopak commissioned the services of HAI, a software-as-a-service (SaaS) provider, to improve its quality control processes. HAI's software solution analysed quality control-related data, including packaging seal strength measurements and automated product and apparatus inspections.

An Elopak operator using HAI's software will receive alerts if analysis suggests that packaging quality will fall below acceptable standards. This gives the operator time to prevent this by proactively tweaking production processes.

How cloud computing helps resolve the challenge of Covid-19

Cloud-based productivity and collaboration software underpin remote working. Microsoft 365 and Google Sheets enable multiple remote workers to access and edit documents simultaneously, and collaboration tools such as Zoom and Cisco Webex allow remote

workers to attend meetings virtually.

Should governments reimpose social distancing measures due to surges in Covid-19 infections or new variants, the ability to work remotely will enable employees to continue to provide value to packaging companies.

Other cloud-based applications, such as supply chain management software and digital twin platforms, enable packaging companies to optimise their supply chains and prevent unplanned downtime in production facilities by predictively maintaining equipment.

These abilities enable packaging companies to handle the numerous supply chain-related challenges currently facing them and which Covid-19 continues to exacerbate.

How cloud computing helps resolve the challenge of ESG

Cloud computing technology can help monitor energy use. Some service providers, such as Microsoft, Google, SAP, and Salesforce, offer carbon emission monitoring as part of their cloud packages.

Cloud computing can also improve efficiencies in ways that both save packaging companies money and reduce their environmental impact.

For instance, by optimising its logistics operations with Oracle's Transportation Management, Tetra Pak reduced the carbon emissions produced by distribution vehicles. In addition, improving the efficiency of production processes with cloud-supported data analysis can reduce energy and resource usage.

How cloud computing helps resolve the challenge of handling new materials

Demand for more sustainable packaging will force packaging production lines to accommodate new materials such as biodegradable polymers, plant-based packaging, and materials with a higher recycled content.

Accommodating these materials will necessitate new machinery and, more importantly, changes in quality control procedures. These will have to account for the new materials' tensile strengths, converting procedures, optimum temperatures, moisture contents (to prevent premature biodegradation), and other physical and chemical properties.

Ensuring packaging lines do not push new materials beyond their physical or chemical limits will require extensive and continuous data collection and analysis for quality control purposes. Cloud databases are already used for production line quality control purposes: HAI and InfinityQS are both providers of cloud-based quality control software for the packaging industry.

Source: Inside Packaging

Upgrading the 'basic box' to deliver luxury packaging without the price-tag

Studies have shown that aesthetic design decisions increase the chance of creating an engaging packaging experience for any business or brand. However, whilst luxury brands typically prefer the option of a premium or luxury box, a higher budget put towards the packaging of the product can make certain brands hesitant.

So what happens if you simply do not have the budget to design and produce more expensive premium packaging, but are still looking for a packaging solution which presents a luxury appeal to consumers?

“It's about creating perceived value,” says IPL Head of Design, LB Odendaal. “This plays heavily into the unboxing experience and the impression your packaging makes on your customers.”

“There are ways to create affordable yet premium packaging without necessarily utilising more costly materials, processes or fitments.”

“Normally, options such as embellished, paper-wrapped rigid board or MDF boxes typically require more expensive setup costs, more design and development time, rounds of sampling, as well as skilled labour, to develop them for optimal results. Though production costs vary depending on the structure and material of your box, it is these factors that impact higher pricing for certain packaging substrates,” explains Odendaal.

How does one take a 'basic box' and present it to appear more luxurious – without implementing additional costs?

A pack created using carefully selected mixed materials, a fabric simulating paper wrap, paper wrap, foil detail, selective spot varnish and wood bottle fitments. @iplpackaging

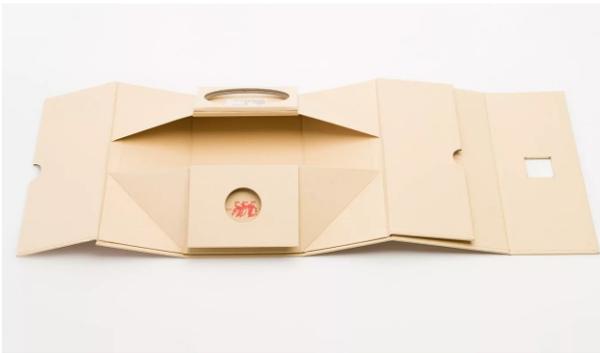
“However, if you're a small-medium sized brand looking for customised packaging, and with a smaller budget than your competitors, you're not



confined to the routes mentioned above,” he says. “You could instead opt for less costly materials such as folded cartons, corrugate cardboard, or reduced material options in greyboard and wood. These still offer an array of structural design options, an ability to customise style and structure, as well as numerous printing and finishing capabilities – and all at a lower price point.”

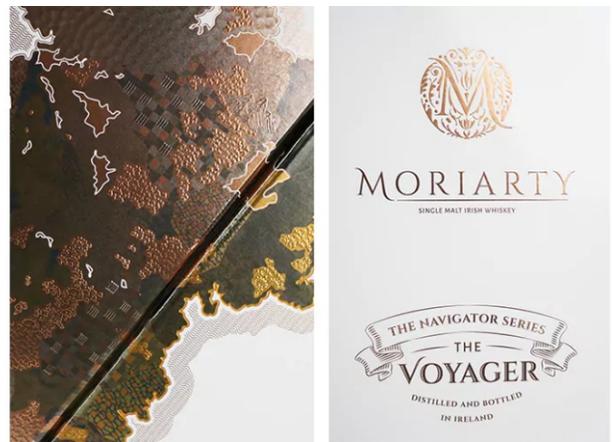
“Not only are there sometimes more affordable options that can be 'upgraded' with the right design choice or clever decorative finishes, but they are often also more eco-friendly and can be stored with more ease due to foldable or flat-packable features,” he says.

Upgrading the 'basic box' to deliver luxury packaging without the price-tag



The sustainable, flat-packable Aber Falls whisky pack. Minimal colour and print application achieved through soybean ink and embossing. @iplpackaging

including an embossed feature or another tactile element, you further engage the consumer's senses.



“Once the substrate and design of the outer pack have been selected you can address other factors such as:

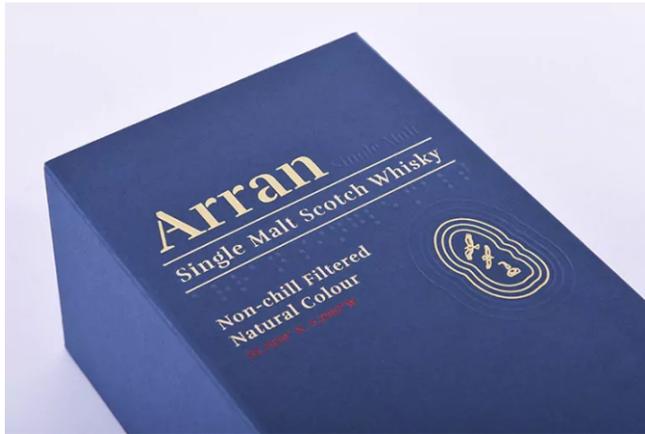
- Minimising the materials and processes to significantly reduce overall costs...(and, if a single material can be used to produce the entire pack you have struck gold!)
- Use of graphics, printing methods, paper choices and embossing and debossing as cost-effective decorative and detail elements.
- Adding spot coatings, integrated closures, removing magnets and adding unique die-cuts are the final touches in creating premium but cost-effective packaging.
- Opting for other treatments that can help enhance, highlight, and lift the design. By

- Selective foil use is another element that can increase the perceived value of a pack and the way that light interacts with the box design.
- Selective foil usage introducing a luxury



element to this series of packs. @iplpackaging

- Whilst print techniques, and paper choices that simulate materials such as wood-grain,

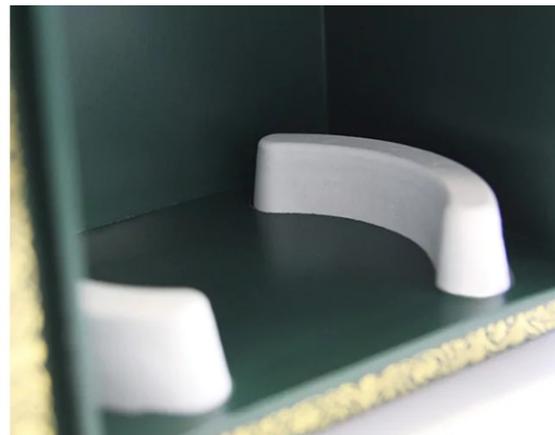
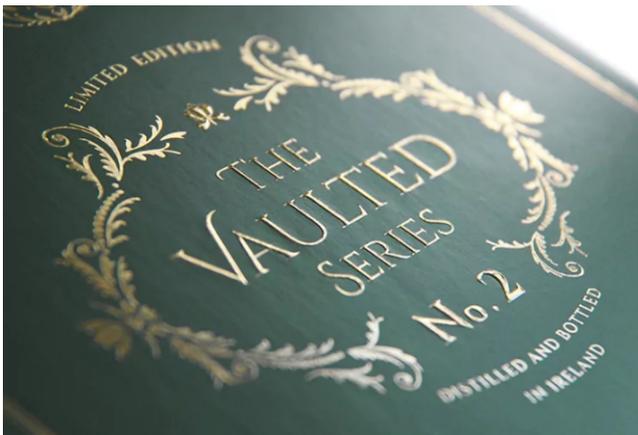


leather and cork replace more expensive materials and yet still convey a luxury appeal.”

Cork veneer laminated onto a paper backing and wrapped onto a rigid board box. @iplpackaging

“A further way in which to minimise costs but still retain an upmarket, high-end pack appeal is to

“Luxury brands don't often require loud and vibrant colours or images to compete for attention. By keeping the packaging design simple but paying attention to the fit and finish (it's all in the detail), it's possible to do something special,” states Odendaal. “Just look at iPhone packaging, it's simple but stylish and effective and consumers love it!”



reduce, or simplify the fitments that hold the product (be it a bottle, wristwatch or special coin). Aesthetic choices can be made in fitment design for little or no extra cost which, if well considered, could add greatly to the perceived value of the product.”

Different fitment designs create interesting and varied aesthetic appeals and can upgrade a box in a subtle, effective manner. @iplpackaging.com

“With luxury packaging, often the most effective design strategy is to keep it simple or, as Dieter Rams said, 'good design is as little design as possible.'”

“As brand owners increasingly aim to entice consumers with the 'everyday luxury' of premium and luxury packaging, they must also pay careful attention to the latest trends such as sustainability and minimalistic design. In this way, they strengthen their market share by capitalising on 'just-right' packaging materials and design formats. Sometimes this means stripping things back to basics to create clever, cost-effective luxury packaging that remains memorable but resourceful – and even reusable.”

FCBM Test series Volume 3 Released (Linear Meterage)



A program with an objective to get linear Meterage of the reel with weight was successfully conducted by FCBM at Om Sree Papertek Pvt Ltd. This will in turn help plan the production process better. Over a period of time the Unit of Measurement can gradually shift from Kgs to Meters. GSM tolerance will apply to Meterage as well.



Shri Haresh Mehta won 9 awards at INDIASTAR

On 14 April, 2023, Shri Haresh Mehta, Director - Jayna Packaging, a WICMA member was awarded 9 awards at INDIASTAR AWARDS held at NEC, Mumbai.

His name has now become a synonymous with Innovation fetching him around 300+ various prestigious National and International awards.



HPCBMA with 4th CII Himachal chapter organised APPLE CONCLAVE



HPCBMA attended and participated in the CII Apple Conclave in Kufri where approximately 500 Apple growers participated.



MPCBMA member - Atharva Packaging wins award from MSME award



On June 19, 2023, Smt. Mamta Sharma, Atharva Packaging Pvt. Ltd, Indore, an MPCBMA member won an award under a special category “Best Woman Entrepreneur” from the Madhya Pradesh State MSME Dept at the hands of the CM of Madhya Pradesh Shri Shivraj Singh Chouhan.



SICBMA conducted EGM and Taxation Seminar



On March 18, 2023 SICBMA organized a seminar on Taxation including GST and Income Tax at Hotel Rose Water, Anna Nagar, Chennai. SICBMA also conducted its EGM on the same day.

V. Sampath Kumar, senior tax consultant clarified most common doubts raised by SICBMA members regarding GST implementations with regards to the Corrugation Industry. Mr. B. Venkatachalam delivered a presentation on GST related Income Tax issues. All the participating SICBMA members with the advent of the new financial year appreciated the program on taxation.

Understanding and abiding the Govt. norms with regard to IT taxation and GST procedures will empower our SICBMA members to solve most of the taxation related issues in turn benefiting the SICBMA formed for the members - by the members.

From SICBMA, 40+ delegated had enthusiastically attended the INTERPACK Trade Fair 2023, DUSSELDORF GERMANY held on May 4-13, 2023 combined with

Business and Leisure tours to understand the new technological developments in all types of Machineries related to various packing segments, that were displayed in the trade fair.



Figure 1 - 40+ SICBMA members attended the INTERPACK Trade Fair 2023, Dusseldorf, Germany as delegates

WICMA successfully completes 2-Day Adv Level Course in Corrugated Packaging



The course was held on 31st May & 1st June 2023 at the Auto Cluster Development & Research Institute, Chinchwad, Pune. Shri Ramkumar Sunkara

and Dr. Ipshita Guha were the faculty members. There were 89 participants. The participants were provided with a reference book of the topics covered in the course.



A MANAGEMENT AND TECHNICAL DEVELOPMENT PROGRAMME

Two-Day Advanced Level Course in Corrugated Packaging

Master the Art of Corrugated Packaging : Unlock the Potential of Sustainable and Cost-Effective Solutions

WESTERN INDIA CORRUGATED BOX MANUFACTURERS' ASSOCIATION
138, Mittal Indl. Estate No. 3, M. Vasanji Road, Andheri (E), Mumbai 400059
Tel: (022) 28500687 / 4523 • E-mail: wicmaoffice@gmail.com • url: wicma.com

TOPICS

- 1) Recap of level 1.0 course
- 2) BF Vs RCT – BS Vs ECT – Cost vs Strength
- 3) SCT Vs RCT and its relation to ECT and BCT
- 4) Formulas relating various strength parameters of boxes.
- 5) Weight Ratio for achieving correct balance between liners and medium.
- 6) Compression Strength estimation of multi cornered boxes.
- 7) Compression Strength estimation of corrugated material inserts
- 8) Score line cracking – Root cause analysis
- 9) Score line cracking – Possible solutions
- 10) How much heat is required for corrugated board making.
- 11) How much adhesive is required for corrugated board making.
- 12) Keeping the business alive – Focus on simple management of capital, workforce and resources.
- 13) Management of materials
- 14) Resources
 - a. FEFCO International fiber board case code and styles.
 - b. International standards for corrugated boxes.
 - c. International rules for corrugated boxes.
 - d. Global Packaging requirements and laws.
 - e. Units of Measurements and Conversion

Faculty Team:
1) Mr. Ram Kumar Sunkara
2) Dr. Ipshita Guha

31st May & 1st June 2023, Pune Maharashtra



Upcoming Events



PackPlus 2023

Aug 10-12, 2023

Pragati Maidan, New Delhi, India

PackPlus is India's biggest event for packaging, converting and supply chain. Over the years, PackPlus has established itself as a great business conducting platform for the packaging industry in India.



Delhi Machine Tool Expo 2023

Aug 24-27, 2023

Pragati Maidan, New Delhi, India

Delhi Machine Tool Expo 2023 is a B2B exhibition that would have the presence of industry delegations representing various sectors such as automobile auto components, aerospace, general engineering capital good and many more.



PackEx India 2023

Sept 7-9, 2023

Bombay Exhibition Center (BEC), Mumbai, India

International Exhibition on Packaging Material and Technology. With growing exhibitor and visitor numbers year on year, PackEx India has established itself as the most valuable platform for packaging materials and machinery suppliers and packaging users.



ProPak India 2023

Sept 17-19, 2023

Bombay Exhibition Centre (BEC), Mumbai, India

ProPak India 2023 is an international processing and packaging trade event for India, and the perfect platform to access a robust and expanding industry and market growing at high GDP growth rates.



India Corr 2023

Sept 28-30, 2023

India Exposition Mart, Greater Noida, India

IndiaCorr Expo is a platform to grow your business 10x by building the right network, sourcing top-notch technologies, and by learning the latest corrugated packaging and folding carton industry trends.



India Folding Carton

Sept 28-30, 2023

India Exposition Mart, Greater Noida, India

India Folding Carton is a unique show with special focus on the folding carton industry. Showcasing the best solutions involved in the process from manufacturers to dealers of pre-press equipment, carton making machinery, printing machinery and post-print equipment.