

# Comfort Times

by ISPF

## UNCOVERING **Mattress Manufacturing**

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**Modern Mattress Retail  
Market Dynamics**

*A Market Research Report on the Indian Mattress Industry by ISPF*

**50**

**Don't Ignore Digital  
Marketing. Explore It.**





## Our Creations

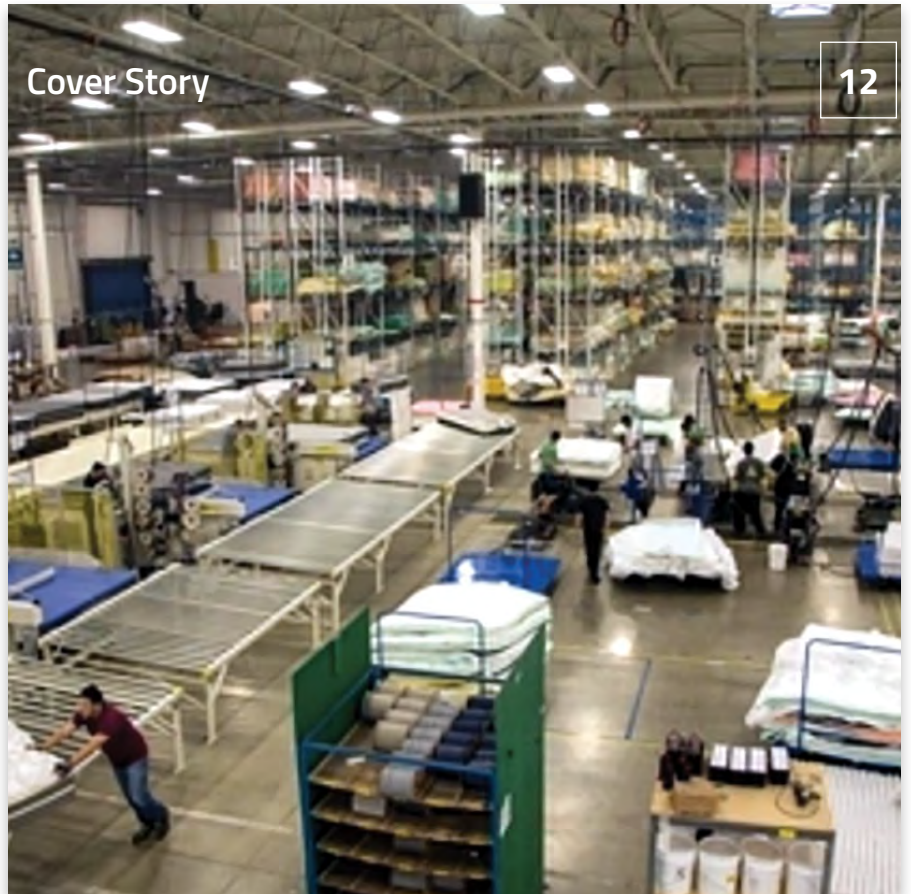
*Our in house designers develop personalized designs daily to our customer's needs.  
An extensive library of more than 300 000 designs is readily  
available to browse together with the customer.*





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**Editor**

S. Sundaresan

**Editorial & Advisory board**

Indian Sleep Products Federation  
A/5, Veerabahu Nagar,  
Pettai, Tirunelveli - 627 004  
India

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**Editorial correspondence  
may be addressed to**

Editor,  
Indian Sleep Products Federation  
A/5, Veerabahu Nagar, Pettai  
Tirunelveli-627004  
India  
OR  
email: [ispf.0813@gmail.com](mailto:ispf.0813@gmail.com)

<https://www.ispf.co.in/>

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# FROM THE EDITOR



Dear Readers,

**A**s we step forward into 2019, with a new issue, we are full of renewed force, refreshed insights and newfound energies about the industry. In this issue we have tried to be both pervasive and penetrative. We have picked topics that are relevant for people who make mattresses, people who stock them, people who sell them, people who buy them and even people who dispose them off. We have endeavoured our best to bring to the fore challenges and changes that are etching a new direction for the industry. A diverse range of perspectives, ideas and issues have empowered this issue, as you will notice for yourself.

When you turn the pages here you will notice that we have delved deeper into a crucial dimension of the industry's health and innovation-barometer – its manufacturing frontier. We have highlighted issues and questions that matter behind the scenes. Turns out that our industry is at the cusp of an old era and a brand-new age in more ways than one when we look at the gaps and strides that dot the factories here.

Then we have also gone into tangents like supply chain or social media that complete the value cycle of any sleep product in small and big ways. This issue also stresses poignantly upon critical problems like lack of sleep-health awareness, sleep-related diseases, the rise of sleep-debt

and neglect of sleep-hygiene. It is high time that we start allowing sleep health its due importance in our busy lives. Raising sleep awareness is a major goalpost for many industry leaders as well, as we discovered during the course of making this April issue.

Other pages in this issue will entertain and equip you with many other peeks into new segments, concepts, concerns and expectations that are defining the industry this year. Enjoy our feature on baby-market, trends, trivia and green mattresses. You will find that the industry is, indeed, undergoing a new shift and this year is going to be salient in determining what stays and what fades away. Industry experts and other sources cement the directions that are going to accelerate and augment the industry. In short, 2019 is going to be a crucial year – both a catalyst and a litmus test for new advancements here. Also I urge all team members to take up digital medium for your benefit.

As always, we are eager to hear your thoughts and ideas. Do let us know how can we amplify this effort and what topics and ideas can we explore in the next set of issues. We would be glad to cover the areas that our valued readers want us to delve into in future. Keep reading, keep guiding and keep rejuvenating your minds by reading Comfort Times and by sleeping well.

Have a good time with this issue.

**S. SUNDARESAN**





INDIAN SLEEP PRODUCTS FEDERATION  
MANAGING COMMITTEE MEMBERS

Sheela Foam Limited



Centuary Fibre Plates Pvt. Limited



Kurlon Enterprise Limited



Tirupati Foam Limited



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# SERVICE

## CONSUMER EXPERIENCE

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## TECHNO

### INDIAN SLEEP PRODUCTS FEDERATION - VISION

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- To promote the sleep products industry by enhancing consumer awareness on quality sleep, while setting benchmarks for its products and services.
- To represent the industry with a commitment to the society and the environment.





## Intelligent Mattresses

Algorithms and Artificial Intelligence (AI) are entering mattresses fast and fiercely. Some mattress manufacturers have started leveraging them for the reckoning design and structure flaws and figuring out effectiveness in the material used. Even sleep-disorders are being diagnosed with AI while use of these technologies for addressing snoring or teeth-grinding is also in swift progress. According to [analyticsindiamag.com](http://analyticsindiamag.com) and [cio.in](http://cio.in) reports suggest that Sheela Foam is exploring AI-enabled cameras installed at the conveyor belts in the manufacturing plant for reading parameters like length, breadth, etc. from the RFID chip embedded in the material. The camera captures deviations and creates alerts. Video analytics for plant safety and hazard prevention are also examples of new implementation strides.

## Lighter Sleep-Weight for the Paramilitary

While some troops who are deployed at altitudes above 9,000 feet in the North-East and 6,000 feet in other areas do have sleeping bags issued, now the benefit could be extended by the government to all troops of the paramilitary forces. These forces will receive sleeping bags and their loads could get lighter by approximately half a kg. They could also serve better protection from the cold, specially important for the harsh regions that the brave soldiers have to survive daily. The weight could be lighter than the two blankets and a pillow, which a troop deployed in lower altitudes, has to carry. Portability and less weight could help in making life at least, in a tiny way, easier.



## India's Single Time Zone and Sleepless Students

We had three-four time zones earlier but despite the country's huge land mass (and the worldwide principle of a new zone every 15 degrees), the country works on a single clock today. Now, a new working paper is reasoning that India's single time zone costs the country billions of dollars a year, and cheats children of the chance at a proper education. Maulik Jagnnani. PhD, Cornell University and the paper's author, explains that children wake up for school at roughly the same time throughout India, but go to bed later in places where

the sun sets later. Consequentially, children growing up in western India get less sleep. This dip in sleep also affects performance in classes and test scores, and, interestingly, also leads to lower wages than for those growing up in the east. All that, because of a single time zone.



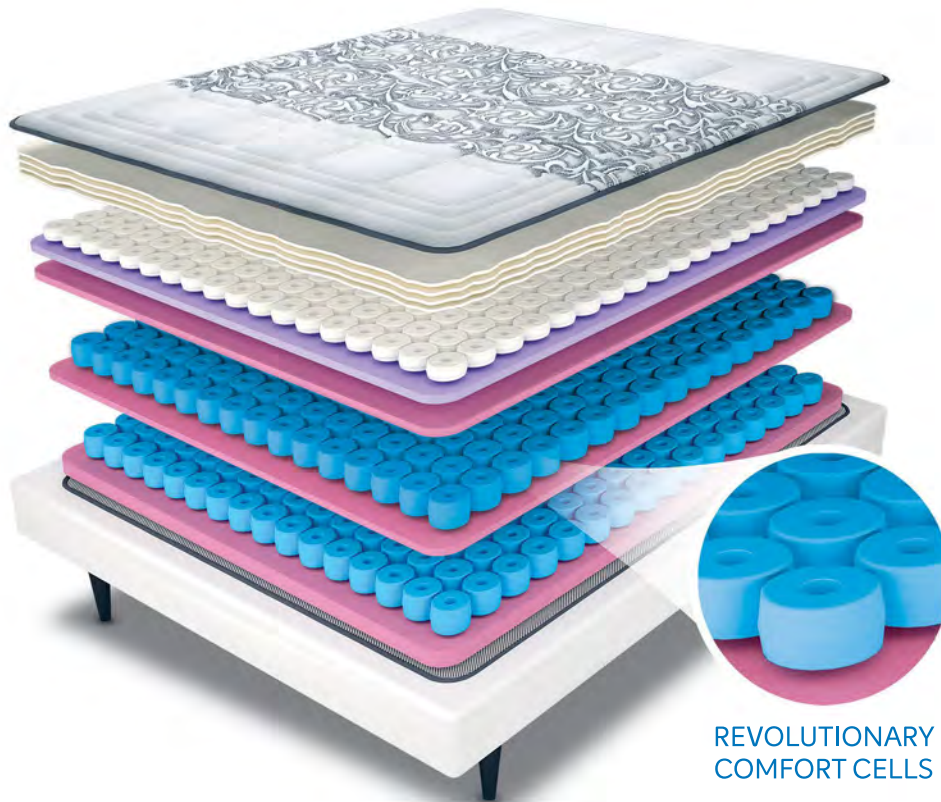
## Less Sleep, More Sleep Apnea

A Philips' annual global survey on 'Better Sleep, Better Health', reveals that over 100 million people suffer from sleep apnea globally. Also, about 80 percent of these people remain undiagnosed. Plus, 30 percent find it difficult to initiate and maintain sleep. It has been, earlier, noted that 7 to 9 percent Indian adult population suffers from sleep apnea. There is a relationship between sleep apnea and

cardiovascular diseases, and people with sleep apnea are more likely to develop congestive heart failure. Note that Chronic Obstructive Pulmonary Disease (COPD) affects more than 251 million people. Philips Respironics claims to work towards a unified approach to COPD care – coordinated, consistent, uninterrupted and centered around the patient.



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Health & Hygiene inspired by Nature and Science

## A Bed That Pre-Empts Divorces

Ford is clever. It has used something that helps drivers stay in their lanes in the car and brought it to beds. Its 'lane-keeping' system, now part of many Ford vehicles is now being put to use for controlling space invasion for couples in beds. Made smartly with help from an independent sleep expert, Dr. Neil Stanley, this solution addresses the human vulnerability of waking up with the slightest unexpected touch. That makes a spouse difficult to have a good sleep when the partner moves on to one's side of the bed. A defense mechanism kicks in and hence breaks a sound sleep. But now sleep and relationships would not be ruined due to this small issue. The car maker has brought in a lane-keeping bed by



putting in place a smart contraption. This technology rolls space-intruders back into their spots and keeps them in their own lanes. That means everyone sleeps on 'their own' side of the bed. Use of pressure sensors assists this bed to pick when and where someone strays from this side and an integrated conveyor belt then returns the intruder to their original side.

## This Bed is not Queen-size but Queen-like

An ultra-luxurious bed awaits passengers at the Regent Seven Seas Splendor, an extravagant cruise ship set to launch in February 2020. Called the most exclusive bed in the world – the Vividus, is a king-sized sleeping mattress that cocoons a user within various layers of the finest cotton, wool, mohair, and horse hair, with

hand-tied bolster strings. Its price tag is, reportedly, about \$200,000, and it is handcrafted (takes 320 hours for expert craftsmen to hand-make just one bed).

The floating sensation is not just in the mind then, especially when surrounded with a pile of posh pillows and linens.



## Bad Sleep Can Mean Faster Brain Mess

Turns out that it takes only three percent of the brain's mass to atrophy for dementia to set in. And just one night of deep-sleep disruption can be enough to increase the amount of amyloid-beta, a protein that clumps into brain cell, killing plaques in people with Alzheimer's. As per the journal Science News, researchers have found that, people in the study who slept poorly for a week also had more of a protein called Tau in their spinal fluid than what they had when they were well rested. It can be attributed to the snarling of Tau into tangles inside brain cells of people with the disease. What matters is not just the overall amount of sleep but the amount of quality sleep as a key variable in the amount of amyloid-beta protein present afterwards. The research highlights Slow Wave Activity (SWA), a period of deep sleep that is much more restful than Rapid Eye Movement (REM). That means even five hours of uninterrupted sleep is better than nine hours of interruptions or broken sleep.

## CES and Sleep

The recent consumer electronics Mecca unveiled a new gamut of innovations and fantasy-close ideas. There were lots of sleep gadgets this year. Like the Sleep Number 360 P6 smart mattress and frame that monitors sleep and makes micro-adjustments to the mattress all night.

There were also FDA-listed wireless trackers (Beddr SleepTuner for example) that fit like a postage stamp on one's head and then record everything - head movement, blood oxygen, breathing patterns etc. Apps like SleepScore tried sonar for tracking sleep stages and noise-masking headphones like Sleepbuds, eyes-nose-masks like Hupnos, connected pillows like Smart Nora or Smart Motion took another attempt at solving the snoring problem with new approaches and intelligent adjustments that do not wake a user up.



# Universal Solutions for Mattress Production

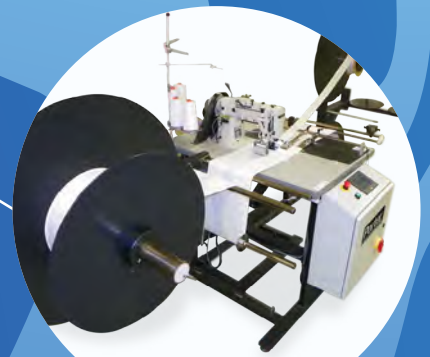
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Whatsup: +971 50 154 5 063. Skype: dannydanny999990

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# Back-end Battles



Let's look at the manufacturing side of the mattress industry. Some new challenges, changes and platforms. And, some old struggles and practical solutions that are being followed

**T**he back-stage is supposed to be, well, in the backyard. Chaos, conflicts, complications and confusion happening here are ultimately making everything smooth and fun beyond the curtains. But sometimes it helps to peep behind these curtains and get a sense of what's actually at work here. Are things too chaotic or is this chaos still adding up to a great experience on the front-stage?



The industry is dealing with a new flux of change.

Mathew Chandy, MD, Duroflex World, nails it splendidly, "Honestly, our manufacturing is quite a disaster. Our factory operations resemble an artisan jewellery workshop (without the margins to support this!)" The Managing Director of Duroflex World dissects the problem areas well. There is a large amount of customised production, short lead-times and highly-manual operations. "Some parts of the supply chain are automated, but these are only a small portion. Old struggles continue, but soon we will find solutions."

Indeed. Gone are the days of legacy and fat manufacturing footprints that are the cause of delay, poor planning and wasted-inventories. The industry is laying the ground of a new manufacturing fabric to weave in all the challenges and demands that the market is throwing hard and high every year.

Look at some recent imperatives for change:

- Growing labor costs
- Absence of skills and expertise
- A wide and versatile buffet of product formats and dimensions inflicting pressure on current platforms
- Heavy fulfillment needs from retailers – Faster turnaround of products that already have a variety-challenge associated with them
- Need for tailored products and diversified delivery solutions
- Problems associated with material handling and outdated facilities
- Floor space-optimization burden that is compounded with lack of end-to-end visibility
- Productivity-gaps and waste
- Need for machines – like those used for quilting – to handle nick-of-the-time changes of patterns or weaving styles or panels
- Alignment hurdles between stitching software and hardware
- Lack of quality standards – No set of guidelines for size/thickness/firmness/durability/comfort/ etc.

## The global mattress market has been forecasted to attain the value of \$38,976 Million by 2023: (P&S Intelligence)

### Fast-footed and Well-armed:

The industry has started acknowledging and addressing both challenges and new opportunities well. Investments in new platforms and systems as well as a shift in the mindset are underlining the new direction that many players have started to adopt in the recent past.

Consider the case of Sheela Foam that has injected new strategic aspects on the manufacturing side by joining hands with foreign experts and expanding facilities to regions like Australia. Acquisition of PU (PolyUrethane) Foam and polystyrene product capabilities helped it to carve a new strength. The company also started well in time to embrace the need for the manufacture of higher volume for the customised products, with the expansion of its product suits and improvement in operating margins. New and more-sophisticated grades of technical PU foam helped it to tap new market segments and introduce new product lines. This adds to the manufacturing expanse of the company in India that entails large production-capacity units in North, West and East India, in close proximity to ports. The

company has also invested in Hennecke foaming machines in most of the foam-manufacturing units at the right time. Opting for new compression technology made it possible for the company to transport higher volumes. Plus, its Australian subsidiary, Joyce, amplified its manufacturing competencies as well as research capabilities. What was also notable was the backward integration that the company tried with some of its manufacturing facilities. It gave new product planning outcomes and manufacturing synergies to the company.

Another player, Shree Malani Foams Pvt Ltd has been expanding manufacturing in Odisha to leverage the local ecosystem.

These are indicators that even the most well-entrenched players have started recognizing the value and edge that they can eke out by investing in new manufacturing aspects and ahead-of-the-curve innovations.

### Players are also making way for:

- New research and development tools
- Data-driven product planning
- Automated manufacturing equipment
- Cutting-edge plant equipment and processes
- Maintenance-free/light machines and equipment
- Sensor-equipped plant resources
- Capabilities for just-in-time and near-time order fulfillment
- Machines that can handle a variety

**'To be globally-competitive, in the next five years and beyond, it's imperative that Indian manufacturing companies (both incumbents and new entrants) are well-versed with emerging technology trends driving IoT, commercialise innovative ideas into sustainable businesses and product development, and leverage new business models to drive competitive and profitable growth**

- Smart Factory: A proactive system: Here, employees and systems can anticipate and act before issues or challenges arise, rather than simply reacting to them after they occur. This feature can include identifying anomalies, restocking, replenishing inventory, identifying and predictively addressing quality issues. The ability of the smart factory to predict future outcomes based on historical, and real-time, data can improve yield, uptime and quality; and prevent safety issues
- India is a growing hub for IoT solutions with the market value expected to be \$9 billion by 2020

*A Deloitte-CII Report*

of contours, height changes, types

- Automated tracking and material handling
- The computerised glue control
- Advanced machines with fast learning, and adjustment, curves
- Integration of robotics on plant floors. According to analyticsindiamag.com reports suggest that Sheela Foam is exploring AI-enabled cameras installed at the conveyor belts in the manufacturing plant for reading parameters like length, breadth, etc. from the RFID chip embedded in the material. The camera captures deviations and creates alerts. Video analytics for plant safety and hazard prevention are also examples of new implementation strides.
- Innovations for fast detection of errors, defects and foam contaminations
- Production lines that can cater to small manufacturers too
- Automatic dousing, pouring and mixing of profiles
- Programmable-formulae and parameters for handling a challenging variety of demands
- Mould presses with increased output, lower cycle-times and better ease-of-operation



*Innovation is a constantly-evolving process. We are looking at making necessary investments and hope the customer is more excited and eager to use our products as we move ahead*



*Raghav Menon, CEO, EVP,  
Mattress Division, Sobha Ltd  
underlines*


- Advancements in stations for fast and easy weighing and blowing into cushions
- Custom designs for smart grid changes and operator-friendly equipment
- Collaboration apps that shrink development and production time and pain-points
- User-friendly software for design with simulated fabrics, colours, quilt patterns and moulds
- Arrival of preset mattress mock-ups that work on common zipper, topper and mattress models
- Inclusion of recycling angle in the way mattresses are developed
- Flexible and height-adjustable gantry machines
- Evolution of adhesive-side of manufacturing a mattress: from water-based, hot-melt to heat-activated and infra-red dyeing

options. Manufacturers are moving towards faster dry-times, cost-effectiveness, better-bonding strength, lamination needs and application ease here

- Investments in roll-back, compression, roll-coating and packaging areas
- Use of direct packing of foam into foil with shorter production cycles
- Noise-free and automatic assembly lines that can handle a good diversity of designs and materials and complex structures
- Use of vertical variable foaming-technology

Despite all these shifts and strides, the scenario on manufacturing parts of a mattress is always going to be dotted with new challenges and shifts. We have to gather strategy, investments and readiness for emerging areas like Internet of Things (IoT), Industrial IoT (IIoT), Robotics, Artificial Intelligence (AI) and Smart Factories before the bus passes us by. There is a lot coming into the direction of the back-end of a mattress – it's time for manufacturing systems and professionals to transform with new technologies.

What ultimately matters is the mattress that all this complex dance delivers. The customer and the experience should, invariably, be full of comfort and delight.

Doesn't Beyonce Knowles say it best? "Who I am on stage is very, very different to who I am in real life." 





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# Pipe-Dream Evolution of Supply Chain Elements

Keeping pace with new industry needs and expectations – that’s what will separate the men from the boys in the supply chain ecosphere

If just making a good mattress could suffice, then there would be no need of neat showrooms, tempting shelves and transport services. But there’s more to a great mattress. Being late, being sloppily-displayed, being far away – even the smallest gap can ruin the mattress experience for a customer.

That’s true for the mattress industry as well. The whole vehicle runs when all the cogs in the wheel run smoothly. No spoke is worthless, no part without its purpose- and that’s what makes for a great supply-chain that powers a great mattress.

Over the last few years, the industry has witnessed, and adapted to, a flurry of changes. There is a lot that is redefining the industry and it is crucial for the stakeholders and partners from logistics, operations and factory-ancillary chains to acknowledge these implications too. There is a lot of room and reason for the supply-chain segment to gather pace as the industry accelerates to new frontiers.

## Some Compelling Drivers of Change:

- A big variation exists in the formats, price-labels and Stock Keeping Units (SKUs) of mattresses – all this spurs a lot of confusion, complexity and transparency-issues at the end of the chain
- Inefficiencies lead to huge-mark-ups
- Most supply-chain parts are opaque and not aligned with market demands and speed-imperatives
- High restocking-fees for returns and warranty-related tussles create a rift between brand’s promises and actual customer-experiences
- Poor or inadequate training of sales people and support-staff
- Issues with long-distance deliveries create access problems for markets with potential but without reach – like rural places or never-tapped cities
- Geographically-dispersed manufacturing facilities
- Preponderance of an unorganised market in India
- Heightened level of awareness and information among customers (India Mattress Market Overview, 2016-2022). Also, a shift in demand from Coir or Foam mattresses to Spring Mattresses. The propensity to buy from international brands is also on the rise





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## Current model adopted by key leaders in the industry

Distribution network that entails exclusive distributors, exclusive dealers, multi-brand outlets and own channels (Shoppes and Galleries)

Other delivery channels cater to housing, hospitality and healthcare segments

- A change in the market scenario between offline and online channels - Retail sales of mattresses from dealers/distributors and own franchised-stores etc. are now also making way for options like Flipkart, Amazon, Snapdeal, FabFurnish, Urban Ladder etc. or a company's own personalised website
- A growing demand in the residential segment (due to the rise in housing demand and better purchasing power) is also changing the balance between residential and institutional segments of the market
- Differences in the density, block-dimensions, layers, hardness, proportions and sizes - as demanded in various markets - make it expensive and inefficient to ship mattresses and associated products
- The advent of new products that promise a new level of ergonomic quality, recovery and micro-climate sensitivity also necessitates a concomitant change in the supply chain's ability to cater to these new propositions - like curing and packaging
- Rise of specialist-bedding shops and boutiques indicates an appetite for sophisticated, as well as personalised, offerings and channels
- Quirky marketing and new models as introduced by brands like Purple, Casper, Tuft & Needle etc. are injecting new customer aspirations
- Spike in demand for customisable products and premium-segment mattresses
- The impetus for end-of-life questions of a mattress - increasing



awareness and pressure for making the whole chain sustainable and minimising environmental impact

As we can observe, a number of factors from all sides - manufacturing to transportation to new product formats and changing consumer taste are forcing supply-chains and partners to keep up with these changes. The industry has a long way to go but, thankfully, signs of change are already evident in some ways and pockets.

### How is the Chain Gearing up?

- Players like Saatva have introduced new models to the market - Reverse Logistics. Here, a trial is where the process starts and then the customer can exchange or return the product as per one's satisfaction score
- Omni-channel retail is picking up fast and is creating a new integration points from the factory to the end-point
- Economies of scale being pursued by aligning and augmenting supply-chain parts with the overall strategy and end-to-end visibility
- Streamlining, intelligent tracking, planning and agile-adjustments are injecting a new level of speed and simplicity across the mattress cycle
- Use of special packaging process that are tailored for replacement promises: These efforts have also demonstrated that a clever combination of air-and-ship freight distribution channels can help in transporting mattresses produced

in one part of the world to the other part and also to e-commerce vendors

- Concepts like 'Ship In Own Container' are reducing environmental wastage as well as unnecessary parts of the shipping process
- Optimised logistics is making it easier to experiment with bed-in-a-box formats as well as reduce the shipping-cost, and consequentially, the price-tag of a product

The arrival of Ikea and online challengers in the Indian landscape is going to be the last straw of sorts that will push the industry out of conventional systems and adapt to a new set of challenges and customer-needs. The infrastructure and goodwill that the ecosystem commands so far is not trivial and with the right strategic intervention, players can build up on the experience and depth they have enjoyed all these years. But time is surely ticking. We are on the verge of confronting a fresh tide of innovations like intelligent mattresses, personalized products and technology-equipped sleep experiences. This will insist on a new level and speed of support from the supply chains that fuel the industry. A lot will have to be assessed, adapted and even, discarded for the emerging needs that are changing the market in formidable ways. Investments in skills, technology and transformation are going to be determinants of the new supply chain ahead.

A chain that adds to a great mattress. As always. **CT**



## Sustainable Sleep

# The new green shelf for mattresses

Both producers and consumers are waking up to the duties they have towards a better planet. How much of this intent is being translated into actual mattresses, and the process of making them or then, disposing them? Let's roll that question over

It seldom occurs to us that the mattress we surrender to after a hard day has also travelled through a lot of carbon and environmental burden. Not to forget, the carbon baggage it still holds depending on how it will be disposed or how long it will be used.

The environmental impact of mattresses entail a lot of elements. It is not just about the scale and variety of chemicals that go inside them and around them during production (the fossils and pesticides notwithstanding) but also the overall green cost of their material-sourcing, manufacture, shipping and consumption. To add to that, there are added concerns that weigh heavily on this green impact like - a limited lifecycle and 'conversion of a mattress to a waste product' after a short duration of consumption.

### Mattress and Carbon

A myriad ways exist wherein a simple mattress can wreak seemingly-small but substantial damage on the planet:

- Emission of fumes and chemicals in

the atmosphere

- Harmful materials that go into manufacturing of mattresses
- Health risks arising from petrochemicals, blowing agents and adhesives used in foams, dyes and additives etc.
- Use of toxic VOCs (Volatile Organic Compounds) (from flame-retardants, for example, that many memory-foam mattresses used for a long time)
- Foam-making materials like polyurethane or petroleum that were predominantly used in old-kind of mattresses
- Energy use and emissions from the mattress-making processes that entails both factory emissions and the carbon impact of transportation of materials and goods
- The problem of responsible disposal of mattresses since most products use non-biodegradable materials and a lot of mixed materials (spring, wood, foam, and fabric) that makes it difficult to sort, recycle or environmentally-conclude a product

But times have started changing. As per a Prescient & Strategic (P&S) Intelligence Private Limited report in September 2018, there is an unmistakable surge in demand for eco-friendly mattresses with an increase in public awareness on environmental





issues such as toxic pollution, VOCs emitted from polyurethane-foam mattresses. There is an appetite for natural and organic products which is tilting the market towards eco-friendly mattresses. Consumers are not only becoming aware about, but are also demanding use of eco-friendly materials like organic cotton, natural latex organic wool, hemp, animal hair, organic cotton and wool, natural latex foam and coconut fiber. The way use of renewable and biodegradable materials is rising and the way responsible manufacturing is becoming part of the product's proposition – it's a clear sign that mattresses have been flipped towards a greener tomorrow.

Not to forget, now players are also seriously innovating on various aspects. Consider Kurlon's offerings built on Anti Microbial Technology that prevents growth of bacteria and is resistant to dust mites. Or Sleepwell's Neem Fresh Technology that deters bacteria and dust mite-breeding

### Mattress and Green Innovation

Let's have a quick look in the various ways – both inside and outside a mattress – that sustainability is entering this space:

1. Advent of carefully-designed organic and natural mattress brands that use healthy and non-toxic materials
2. Attention and interest to alternative mattress-materials like natural latex, organic cotton, organic wool and organic bamboo that are devoid of harsh flame retardants or chemicals
3. Decrease in the use of polyurethane, chemical adhesives, dangerous pesticides, and other off-gassing chemicals
4. Use of eco-friendly production practices
5. Inclination towards local production and direct-to-consumer models of logistics that reduce transport-side carbon impact of the mattress industry
6. Innovation and efforts in recycling and down-cycling so that old



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materials/mattresses can be used as new ones

7. Radical formats like inflatable or filling-less mattresses or astronaut-inspired foam works
8. A broader and discernible move towards plant-based materials like cotton, vegetable oils and tree-tapped latex; as companies forgo foam and try options like wool or bamboo

Some examples:

#### Restolex:

Claims to use natural latex for eco-friendly customers. Uses latex with pencil pin-core structure for better ventilation; and high-density latex from 75 to 85 for more comfort. It states that even natural latex mattresses can include a significant percentage of synthetic filler content. The company claims that it uses 100 percent natural latex without resorting to artificial fillers.

#### Dreamzee

Claims use of 100 percent Natural Latex Certified Mattress which is naturally resistant to dust mites, mould and bacteria without the use of any chemicals. It also prides on the use of Dunlop process with pin-core formation and certifications from ISO and ECO INSTITUT.

#### King Koil

Claims use of 100 percent eco-friendly mattress that is made with pure organic

## The average age of a mattress on disposal: 11 years (End of Life Mattress Report - National Bed Federation)

latex block covered with thin-quilted viscose fabric.

#### Latosleep

Is Eco Institut-Certified by lab studies to test many products for VOC levels. Also says it is GOTS-Certified (The Global Organic Textile Standard certifies that wool is organic by examining wool-harvesting and production processes). In addition, it is claimed to be Organic Content Standard (that cotton cover is organic). No use of fillers, layers and lamination for cast-cutting and Manufacturing latex core batch process.

#### Happsy

Claims use of certified organic, sustainably harvested and environmentally-friendly materials. Absence of harsh chemicals, foams and adhesives used by conventional mattress brands.

#### Zenhaven

Tells it uses organic materials with all-natural latex, 100 percent organic

New Zealand wool, and organic cotton with support of Talalay manufacturing process, which is entirely water based and produces minimal amounts of environmentally harmful byproducts.

#### Brentwood

Use of organic materials like organic cotton, natural latex, Joma New Zealand wool; and claimed to be responsibly-made in Los Angeles, following rigorous standards for environmental responsibility and the health of the consumer. The company also states it has partnership with Carbonfund to offset its carbon footprint.

#### Avocado Green mattress

Use of certified-organic cotton, 100 percent natural latex, 100 percent Joma New Zealand wool; and rated the top mattress by consumer reports for 2018. Also, says it provides vegan mattresses.

#### Beware of green-walls and green-washing

Although, it is a good sign that some manufacturers and brands are adopting the word 'green' and 'eco-friendly' with a new-found enthusiasm; let us not get carried away while picking the real winners. Challenges and half-baked efforts still prevail. It is not so easy, for instance, to really down-cycle a mattress. Latex or green foam is better than polyurethane, but it is still not sure-shot green. There is still confusion over synthetic latex, blended latex and



### End-of-Life Destiny of an Average Mattress

1. Deconstruction and material recovery
2. Incineration with energy recovery
3. Disposal to landfill
4. Value recovery  
(Product recovery: i.e. The recovery of a mattress as a whole; Remanufacture and reuse; Material recovery; Energy recovery: The recovery of the energy that is embedded in a mattress through combustion (Energy from Waste (EfW)).



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+91 9312888087

(Mr. Sanjeev Kapoor),

+91 9654067967

(Ms. Anita)

[Indiansilks@gmail.com](mailto:Indiansilks@gmail.com)

[Indiansilks@hotmail.com](mailto:Indiansilks@hotmail.com)

## Barriers to Effective Recycling of Mattresses

1. Sub-contractors not efficient and compliant
2. Other commodities more attractive to recycle for recyclers
3. Cost of insurance and transport
4. Lack of apt facilities
5. Distance to recyclers
6. Concerns about old mattresses contaminating new ones in a delivery van
7. Bulky and un-segregated systems for processing
8. Unattractive markets for recovered material
9. Mattress Design misalignment with recycling ease
10. Absence of a take-back market among households

*(End of Life Mattress Report - National Bed Federation)*

pure latex. This makes it easy for certain brands to piggyback on the green-wave and convince customers into buying something that is not necessarily 'green'.

The yawning gap that stays on lack of standardization on green and natural products as well as absence of competent certification bodies – those are some other factors to worry about. Claims of 'green' products are still made by using just 10 percent plant materials.

Even use of latex can pose a new kind of environmental burden when we relate it to use of plantations and deforestation of rubber areas as seen in regions like Amazon and some forests



in Asia. Synthetic latex can include chemical styrene-butadiene that can be toxic to the lungs, liver and brain. If latex is coming from a rainforest region of southeast Asia, where biodiversity is being harmed or endangered species are being affected, then it is not really so eco-friendly, after all. The shift towards jungle-rubber instead of mono-plantations can re-inject the lost diversity of forests and hence, balance human and wildlife needs well.

Then, let's note the use of wool and cotton. They also release methane in the environment and consume nitrogen fertilizers in a heavy degree.

It is, hence, advisable to watch out for the labels carefully while going for a sustainable mattress. It is not enough to look for a natural material but also observe what percentage of that material has been used and what production process has been employed for it. A look into the inner cross-section of the actual mattress can reveal a lot. Making sure that pesticide

or toxic chemicals are minimal is not only good for the planet but for one's health too.

Ultimately, a bit of the duty also falls upon the customer. While comfort should not be compromised for a green-chase, one can always do some diligence on finding out the actual carbon footprint that includes material sourcing, plantation use, process of manufacturing and water usage. Most importantly, making sure that a mattress is properly recycled and not dumped too early or anywhere – that shows more respect than buying a green mattress. This extra effort will not only save landfill space but will also help in material recovery.

In the assessment of Mathew Chandy, Managing Director, Duroflex World, "Natural, organic and bio-degradable products are a crying need. We don't yet have a good solution to mattress recycling. This is a major pain point for the industry."

The awareness and marketing forces towards greener mattresses are long-due needs of this industry. It is encouraging to see various stakeholders of the industry becoming cognizant about the impact they leave and the impact they 'should' leave. Green mattresses may be still a long way to go; but if companies and consumers keep going on this path, it would be heartening to see 'greener' mattresses for sure. That's one more reason to sleep better and peacefully. **CT**





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# Modern Mattress Retail Market Dynamics

A Market Research Report on the  
Indian Mattress Industry by ISPF



The current market study is based on physical identification of 16,000+ mattress selling outlets in 115 cities and then a detailed survey of 7200 outlets.

The mattress market is a unique and complex space where the strengths and weaknesses of distribution channels can be quite pivotal in the success and performance for any player and in turn for the overall industry.

ISPF plans to track this market periodically to identify market trends with respect to retail channels, product mix and pricing. This will surely help companies to face changes sweeping the marketplace, in terms of new players, concepts, channels and innovations in the market.

#### Retail Market Landscape

Let's start with the universe of retail outlets in different channels that stock modern mattresses.

It is estimated that for every one lakh people, there are 11 mattress-stocking outlets resulting in almost 40,000 such outlets in urban India. Nearly half of them are furniture stores. One cannot ignore the presence of appliance stores (with preponderance in the South Zone) and furnishing stores as well. Towns with population of more than 1 lakh account for 66% of the mattress stocking outlets.

Average footfall at these retail outlets is significantly higher than average mattress sale. Retail players will have to figure out innovative ways of increasing conversion of walk-ins.

If you are excited by this extensive distribution network, dial ISPF for further details and embark on an expansion drive.

#### Inside the Consumer's Mind

Almost half of the consumers buy foam mattresses while the next preferred type is the coir mattress. A large chunk of small town consumers and those in South and East prefer coir mattresses.

What the study unfolds is that most

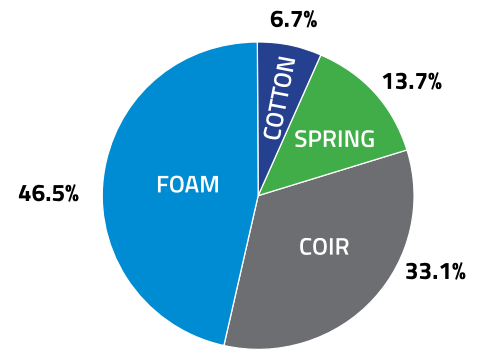


Chart 1: % contribution of different mattresses

customers prefer buying a mattress within a price range of INR 5000 - INR 10000. On an average, they pay INR 9500 for an organized sector brand and INR 6500 for an unbranded one (end consumer price includes GST).

Cash is still king for 73% of the consumers buying mattresses while only 13% pay with plastic money.

#### Annual Sales of Modern Mattresses

Approximately 1.8 million mattresses were sold every month during October - December, 2018 through permanent stores. The annual sale can be assumed as 10 times this volume owing to the seasonality pattern. That is quite a number, isn't it?

Southern region (33 percent) reigns over other regions like West (30 percent) and North (27 percent) in the country. The original metro cities comprising Delhi, Mumbai, Kolkata and Chennai contributed nearly 16 per cent of category sales, with Delhi and Mumbai being the highest contributors.

Sales value growth was pegged at 8% in 2018! This was when most consumer durable companies struggled to get into positive territory.

#### The Pecking Order

So, who is leading the pack in getting the customers fast and furious, after all?

The top names that came up in the study are two leading players namely Sleepwell and Kurlon. These flagship brands jointly account for nearly half the

The unorganized sector continues to contribute the most to overall mattress sales. This is one of the many interesting findings of the market study commissioned by ISPF. Expanse of the distribution network, annual sales of mattresses and performance of different brands across states in India are covered by this study. These findings are quite an eye-opener and have evinced keen interest of the many prominent players in the industry.

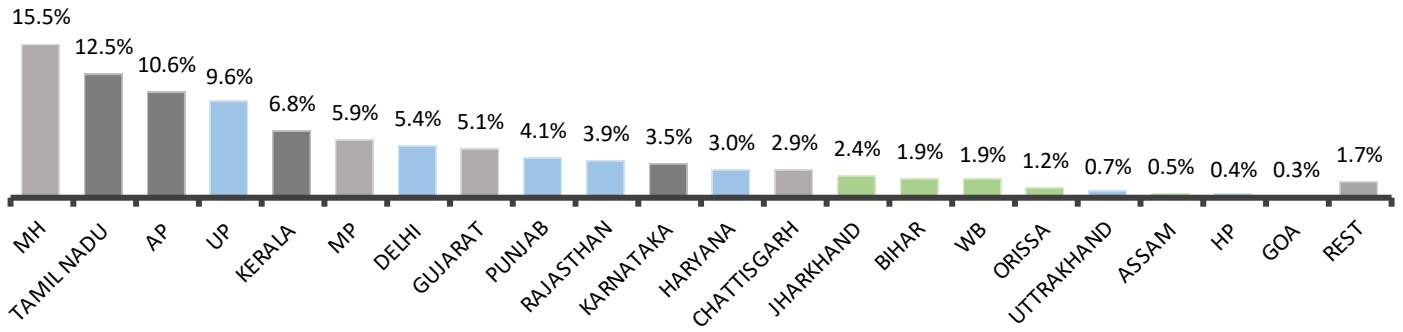


Chart 2: % contribution of states to mattress sales

organized sector market.

Differentiated but consistent business strategy can lead to success. Numeric distribution of Kurlon is significantly higher than for the other brands. Kurlon also seems to command a higher reach in Furniture & Furnishing outlets, while Sleepwell leads in mattress outlets particularly exclusive brand shops.

Duroflex & Centuary are strongest in Appliance stores; Godrej is stronger in Furniture stores while Peps has nearly equal volumes coming from both Furniture and Furnishing stores.

A regional story also comes out quite clearly. Sleepwell is strong in the North and West regions while Kurlon leads in the South and East parts of the country. Godrej has sizeable share in East while Duroflex, Centuary and Peps have substantial presence in South zone

The study's crucial revelation is the grip of unorganized sector despite an organized sector that is moving forward with new formats, channels and innovations. The former still controls 54% of the market. This is even higher in the cities with more than 40 lakh population. Yes, as much as we would like to put the blinkers on, the sale of

mattresses seems to be the highest in the unorganised sector even today. This shows the level of penetration and selling efficiency of the unorganised sector. It's time we start introspecting, learning, unlearning and relearning.

As we can see, there are many layers to a mattress and the same applies to the market, too. These findings are a good chance to pause, sit down, reflect and leverage what the study has unlocked this time – challenges, gaps, hidden advantages, obvious pitfalls and a lot of room to be at the top of the bed. Get started. Now. [CT](#)



To get the complete Market Research Report, contact Mr. S. Sundareshan +91 9840824627



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**Contact Person:**

K.Murugan Kannan - Deputy Manager - Marketing

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## SLEEP-HEALTH CARE

# A new business opportunity

**S**leep disorder, also known as somniphobia, is a medical condition wherein a disorder is generated in the sleep pattern. It can also be defined as a group of disorders that impact the sleep pattern on a regular basis. Presence of sleep disorders can be attributed to various factors including health issues and high stress.

Lack of sleep has a negative impact on the overall health of a person and his/her level of concentration. It leads to tiredness throughout the day.

Common types of sleep disorder include sleep apnea, insomnia, narcolepsy, sleep walking, and restless leg syndrome. The prevalence of sleep disorders has been significantly growing over the years, which is a primary factor driving the market. For instance, in the U.S., over 75 percent of people aged between 20 and 59 years have sleeping difficulties frequently.

According to TMR's report, the sleep disorders market is anticipated to expand in the next couple of years, owing to a significant rise in the prevalence of sleep disorders. According to the American Sleep Association, in 2015, over 21 percent of women in the U.S. were suffering from obstructive sleep apnea and over 34 percent of men were suffering from sleep apnea. The increasing usage of social media and growing addiction of gadgets such as smartphones and laptops augment the stake. In addition, the rise in public and private health coverage, covering the sleep clinics are fueling the market. Furthermore, ongoing research on ill-effects of sleep deprivation and the growing adoption of sleep clinics are boosting the market. However, an increase in patent expirations, emergence of generics, and side-effects associated with sleep disorder drugs may hamper the market in the near future.

Based on treatment, the market

can be segregated into psychiatric treatment, behavioural treatment, cognitive behavioural therapy, medication therapy, and others. Medications include prescription drugs, OTC drugs, and herbal drugs. Along with therapies, certain devices such as sleep apnea devices, sleep laboratories and mattresses, and pillows are employed in the treatment of sleep disorders.

North America accounted for the maximum share of the global market in terms of revenue in 2016 and the trend is anticipated to continue in the coming couple of years. Strong growth of the market in the region can be attributed to well-established health care infrastructure, rise in awareness among people, and increase in the prevalence of sleep disorders. Europe is expected to be the second leading market for sleep disorders. However, sluggish growth of the economy in the region is likely to negatively impact the market in Europe during the forecast period. The market



## Unlocking a broad range of business opportunities in sleep health

Key  
Take  
Aways

An ecosystem of manufacturers, retailers, health service providers, and pharmaceutical companies has formed around sleep health. They offer a growing array of products and services to help Americans treat sleep insufficiency.

The sleep-health industry is collectively estimated to be worth between \$30 billion to \$40 billion and has historically grown by more than 8 percent per year, with few signs of slowing down.

Sleep health presents a variety of opportunities for a wide mix of consumer-facing companies and investors. That's because sleep health can be addressed through three types of solutions: ambience optimization, routine modification, and therapeutic treatment, according to McKinsey report 2017 titled "Investing in the growing sleep-health economy".

Sleep-health vectors and associated products/services

### Ambience optimization

- Bedroom furniture
- Mattresses/pillows
- Bedding
- Curtains/shades
- Lighting
- Sound control
- Temperature control
- Humidifiers

### Routine modification

- Sleep consultants
- Sleep monitors
- Smart alarm clocks
- Sleep apparel
- Dietary considerations
- Bath/personal care
- Books/reading devices
- Meditation

### Therapeutic treatment

- Homeopathic remedies
- Over-the-counter sleep aids
- Prescription sleep aids
- Diagnostic devices
- Apnea treatment devices
- Testing laboratories
- Doctors/clinics
- Surgery

advancements an increasing number of OSA cases, globally.

The medication category is further classified into prescription drugs, over-the-counter drugs and herbal remedies. Among these, prescription drugs held the largest share in the sleeping aids medication market, with 65.7 percent share in 2017. Based on the sleep disorder, the sleeping aids market has been categorized into insomnia, sleep apnea, restless legs syndrome, narcolepsy, sleep walking and others. Among these, insomnia held the largest share in this market, with 31.2 percent contribution in 2017, mainly due to rise in the prevalence of the number of insomnia cases over the years.

During 2018-2023, the sleeping aids market is projected to witness the fastest growth in APAC, with a CAGR of 7.1 percent, owing to the growing geriatric population, increasing prevalence of sleep disorders, and surging awareness about sleeping aids products in the region. According to the World Bank, life expectancy at birth of people in India increased from 67 years in 2010 to 69 years in 2016, representing growth in the geriatric population of the country. With the growing geriatric population, the frequency of sleep disorders is increasing, which further creates demand for these products.

Globally, key players in the sleeping aids industry are developing new devices and products for the treatment of sleeping disorders. Some of the leading players in sleeping aids industry are Drive DeVilbiss Healthcare, Sanofi, Merck KGaA, Koninklijke Philips N.V., Pfizer Inc., SleepMed Inc., Takeda Pharmaceutical Co. Ltd., Cadwell Laboratories Inc., Natus Medical Inc., and Compumedics Limited.

### Sleep Testing Services Market

The sleep testing services market is expected to be valued at \$8,395.7 million by the end of 2021, reflecting a CAGR of 12.9 percent during the forecast period (2016–2021), according to a report by Persistence Market Research (PMR). The global sleep testing services market in 2015 was estimated at

in Asia Pacific is anticipated to register a significantly high CAGR [compound annual growth rate] in the coming next couple of years, owing to factors such as increasing patient population and growing government focus on enhancing health care facilities in the region.

According to TMR's report, leading players operating in the global sleep disorders market are GlaxoSmithKline plc, Becton Dickson and Company, Natus Medical Incorporated, Cardinal Health, Koninklijke Philips N.V., Teva Pharmaceutical Industries Ltd., and Takeda Pharmaceutical Company Limited.

### Sleeping Aids Market

Global sleeping aids market is forecasted to attain revenue of \$101.9 billion by 2023, according to P&S Intelligence.

Growing prevalence of insomnia and obstructive sleep apnea (OSA) disorders, rising use of portable sleep apnea devices, increasing government support for start-up companies, growing healthcare facilities, surge in the demand for sleeping pills attributed to stressful modern lifestyle, and increasing geriatric population are the key factors driving the growth of the market.

Based on offering, the sleeping aids market has been categorized into mattress and pillows, sleep laboratory services, medication, sleep apnea devices and others. Sleep apnea devices are predicted to be the fastest growing product category in this market, witnessing CAGR of 7.4 percent during 2018-2023. This growth is characterized by technology

\$4,135.1 million.

Full polysomnography (PSG) sleep testing has strong penetration in in-lab sleep testing services owing to the reliable outcome and diversified scope in terms of disease diagnosis. Moreover, the ready availability of reimbursement and higher awareness level of PSG tests positively impacted the growth of full polysomnography testing segment in 2015.

Reimbursement policies are playing a vital role in sleep disease diagnosis and are also responsible for the commercial success of home-based sleep testing solutions. Preference in the leading market of North America is shifting from laboratory-based sleep testing services to home sleep testing services owing to lower cost and easy availability of services.

An increasing number of individuals diagnosed with sleep disorders is expected to promote the use of services. In-lab sleep testing services sub-segment accounted for 69 percent share of the diagnostic sleep testing services segment share in 2015. However, the segment is expected to witness the reduction in terms of market growth owing to increase in adoption of cost-effective and less time-consuming home sleep testing services over the forecast period.

According to the Sleep Apnea Organization, in 2017, more than 22 million Americans suffered from sleep apnea and 80 percent of moderate to severe sleep apnea cases were undiagnosed; worldwide, over 100 million people suffer from sleep apnea. Thus, the increasing incidence of sleep apnea is one of the factors responsible for the growth of the sleep apnea devices market.

The sleep apnea devices market is highly competitive and consists of several major player, across the world. Further, with rising technological advancements and product innovations, mid-size and small scale companies are increasing their market presence by introducing new devices into the market



### Market Segmentation by Offering

- Mattresses and Pillows
- Sleep Laboratory Services
- Medication
- Prescription Drugs
- OTC Drugs
- Herbal Remedies
- Sleep Apnea Devices
- Positive Airway Pressure (PAP) Devices
- Facial Interfaces
- Oral Appliances
- Adaptive Servo-Ventilators (ASVs)
- Others

Source: Prescient & Strategic Intelligence

with competitive prices. Companies, like Resmed, Fisher & Paykel Healthcare, Natus Medical Inc, Koninklijke Philips NV and Invacare Corporation, hold substantial shares in the market.

### Actigraphy Devices Market


Actigraphy devices (actometer or actimeter) utilize a portable device, which is usually worn on the wrist that records physical movement over an extended period. This technology is being increasingly adopted in clinical settings, as actigraphy has the advantage of providing objective information on the sleep habits in patients' natural sleep environment.

Since actigraphy is less invasive and less expensive than the PSG devices, it

is a promising device for assessing sleep apnea treatment effects. It also can be used for follow-up, once the treatment has begun or to evaluate changes in sleep, over the course of the treatment period. The rising demand for actigraphy devices in sleep apnea is due to its cost effectiveness, as it facilitates non-intrusive 24-hours monitoring at home for extended periods. The sleep-wake is relatively easy and it does not require any installation.

### Opportunities

The broad range of sleep-health products and services creates a plethora of entry points and investment theses for private equity firms to consider, ranging from potential roll-up strategies (e.g., mattresses and bedding) to building a holistic portfolio of sleep-health solutions (e.g., sleep labs, consultants, and monitoring tools). When looking at specific players in the space, it is important to assess them on three key dimensions: brand credibility, differentiation, and growth hooks. Brand credibility is table stakes, as consumers are not looking for gimmicks but rather demanding products and services with proven results. The bedrock of brand credibility is a clear reason to believe (e.g., specific mattress foam, active ingredients, doctors' endorsements) the company's product will deliver on the promised benefit. Second, the business needs to have a clear point of differentiation to separate it from the abundance of competitors in the space.

The differentiation can be a specialized material, a new delivery mechanism, a unique business model, better customer service, or enhanced health claims. Finally, the business needs to prove it has legs beyond one core hero product or service to ensure that there is a pathway to sustain long-term growth. The underlying implication is that sleep health is an attractive place for private equity investment, but the investment opportunities need to be filtered through these three lenses to ensure they have consumer permission to scale long term, according to McKinsey report titled "Investing in the growing sleep-health economy." 

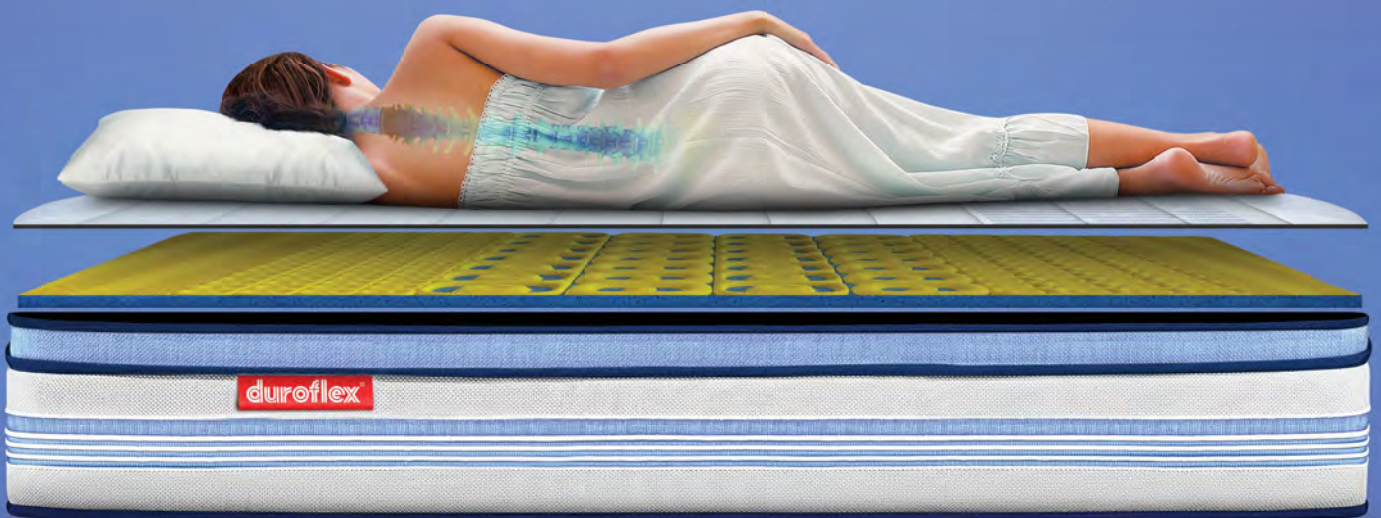


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# Baby Bedding & Accessories A Potential Business

Baby-oriented products and approaches can give the mattress industry a new chance to innovate and create new marketing segments for the future

**W**hen Sania's new-born Izhaan made splashes of headlines in the media, it was also the time for the birth of Beddy-01. This launch from Centuary Mattresses brought to fore new questions and possibilities that were, so far, lying in the womb of suppositions.

It may sound like just another marketing babble but if we lean closer, we can hear the sound of a new product and customer segment that is about to grow fast and happy.

## The Cradle is Crowding

Imagine the possibilities that this almost-untapped market can unleash when leveraged and catered to in the right way.

What Beddy 1 offers is more than a sanitised environment for the protection of an infant's sensitive skin. It is a huge parallel market that behemoths like Johnson & Johnson or Nestle have left open but not many cared to crawl in. The sound of a happy baby and mother is also the sound of revenues, market growth graphs and cross-selling opportunities for the marketer who is smart and well-timed.

As Uttam Malani, Executive Director, Centuary Mattresses had stated during the launch, "Beddy is the result of our detailed research on Baby Sleep and Baby mattress industry internationally. With a strong legacy of 30 years of being the sleep specialists in India, we saw the potential of the product in the growing Indian market."

The company expects to rake in as much as 10-15 percent of contribution to its revenues from this new segment, and its ambitions are taking baby-steps in the right direction – from what media reports project so far.

What it is trying to do in India, others have started doing in foreign markets – and in more formats than one. Consider the arrival of baby-boxes. They have been launched in some regions like Scotland and England as a safe option against standard cots, bassinets etc. They are specially-designed cardboard boxes that come ready to bundle with items like clothes, blankets and mattresses. Despite some doubts and concerns, they were offered free to new parents in Scotland last year. The idea is to prevent the consequences of a baby



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sleeping unsafely, on risky surfaces or around parents who smoke, drink alcohol, or take drugs.

Another good example is Ford that has come up with a product to cater to baby market's unique needs. This one is called 'Max Motor Dreams' – it is a crib that simulates the hum and vibrations of a moving car. The idea is that a night-time drive can keep a baby quiet. The prototype is out and shows that it can simulate the motion of a car as well as the engine-noise and enveloping-lights of a late-night drive reasonably well. The crib also comes with a smart-phone app accessory.

If you thought, these sleeping genies are only indulging babies, wait till you see them wobble into the adult market as well. There is already a Rocking Bed in the market that comes with legs and can be used as a base for a mattress. It can replace a box spring and sit on a bed frame. The purpose – to give a rocking motion, that is controlled by a timer built into the unit. As the frame glides the mattress smoothly back-and-forth, it gives the person sleeping in, the experience of being gently rocked. That's the Georgia-based Rocking Bed. There is also a Sway Bed in the market.

### Hitting the Pulse

Other players jumping on the baby bandwagon are Hunker, Delta Children, Moonlight Slumber, Bed King, Naturalmat, Simmons, Sealy and Essentia. The companies that are rising up to take advantage of the 'baby' segment are playing on the need of safety – in particular - from every angle possible. Is that not what mothers worry about and would happily pay for? If Beddy 1 promises sanitized experience, then there is a high-tech crib that assures to predict when a baby is about to experience a life-threatening emergency. That too, hours before it can actually happen so that nearby people can be alerted well in time.

Something of this kind has equipped a children's hospital in Africa under the

### Key Take Aways:

Or for that matter, the many latent needs and epiphanies that a growing population of working parents, new-age parents and first-time parents are brimming with. Like:

1. Ability to monitor the baby from a distance
2. Remote-equipped or cloud-enabled or data-driven sleeping solutions
3. Products designed for gradual growth-related changes of an infant
4. Adaptive and ergonomic materials
5. Soft, yet safe, products that do not harm the baby in direct or indirect ways
6. Extra-care in use of the right materials and designs that understand the physical constitution as well as psychological nuances of a baby
7. Ability for easy maintenance and handling for the baby's care-takers as well



wings of the Bill & Melinda Gates Foundation, the international nonprofit 'Save the Children' and an Israeli tech company EarlySense.

As the EarlySense device is planted under the mattress, it monitors the baby while it sleeps wirelessly so that there is no need to connect to the baby with unnecessary plumbing. It can pick breathing patterns and cardiac rates. Its use has been specially designed for

detection of asthma with data built up each night on the sensors. Even the slightest change is monitored and acted upon, as per the company's claims. This way severe asthma attacks can be better prepared for. Now, the monitor has started being adaptive for senior citizens too and is being deployed in many medical institutions worldwide across small and large hospital networks. The chances of infection and intrusion also go minimal with such devices.

### Learning to Walk

These marketing approaches and product innovations are also being aligned with new research breakthroughs that are giving new insights and opportunities for conventional sleep industry players. Studies done in Geneva in Switzerland, for instance, corroborate the benefit of rocking.

Reports published in the journal 'Current Biology'; from research teams at the University of Geneva and the University of Lausanne have successfully explored the connection between sleep, rocking movement, and memory consolidation. Scientists like Laurence Bayer and Sophie Schwartz have monitored the brainwaves of 18 healthy young adults where neutral environments, rocking beds and stationary beds were studied.

D r a m a t i c improvements to sleep were observed with rocking. Even the volunteers who were good sleepers were seen to fall asleep more rapidly when rocked. They also had longer periods of deeper sleep associated with fewer arousals during the night. Memory of word-pairs was also better when they had been rocked to sleep. So companies are wise when they use the wisdom of rocking a newborn to sleep.

The possibilities, as we can see, are rife and blossoming - just like a newborn's smile. Mothers like Sania know that best. **CT**



# The Budget Effect

While it is an interim and neutral Budget, reactions indicate that there is a lot that can affect the sleep and wellness industry as dominoes of other sectors and increased consumer-spends slide towards it.

Here are some industry reactions for the interim Budget:



*"Personally we aren't affected with the Budget since we cater to a niche market that considers sleep, and hence a mattress as important as food and water."*

**Sabina Bhanpurawala,**  
CEO, Foam Home (India) Pvt. Ltd.



*"It is one of the most important announcements impacting a large strata of the country, thereby, making higher available money on consumer products. The thrust on Digital India and massive penetration of Mobile internet is something that will propel the consumers to not only visit the e-commerce platforms (thereby increasing the top lines of consumer product companies) but will also enhance the awareness about the product innovation which could meet their needs. This Union Budget has further showcased the government's intent to provide an equal opportunity to small and medium businesses. Its initiatives, like increasing the sourcing to 25 percent from SMEs by Government enterprises, doubling the exemption from GST from Rs. 20 to Rs. 40 lakh and two percent interest rebate on incremental loan of Rs. 1 Crore to GST-registered SME units will continue to benefit this business segment. Since most of the retailers and trade partners fall in this category and stand to gain a lot, this should bode well for the comfort & bedding industry."*

**Purshottam Malani,**  
CMD, Centuary Fibre Plates Pvt. Ltd



*"It is too early to say anything as a lot will stabilise after the new government is formed. But will definitely help is people to have more money in their hands. Government should give relief to the consumer and help with various schemes. Mattress is not the first thing people want to spend money on. The industry would want to see an empowered and interested customer for sure."*

**Raghav Menon,**  
CEO, EVP, Mattress Division,  
Sobha Ltd



*"The impact of 2018 interim Budget is positive for the Agriculture & Food Processing sector, affordable housing sector, health insurance industry and the textile sector. The outlook for the affordable housing sector will be continued growth in the coming years. We will see increased growth in low-income/ small-budget houses in tier 1 cities, and growth in housing in tier 2 and 3 cities. Consequently, the related industries including Mattress, Furniture & Furnishings will also witness growth. The full rebate to those with a taxable income of up to Rs 5 lakh and the second one involving increased standard deduction from Rs 40,000 to Rs 50,000 are good initiatives which will help in increased customer-spends, along with support provided to housing & furniture industry which will also benefit from this."*

**Ashutosh Vaidya,**  
CMO, Kurlon notes. That may mean indirect implications for this industry as well.



# Sleep debt and hygiene

**M**edical evidence suggests that for optimum health and function, the average adult should get seven to nine hours of sleep daily. But more than 60percent of women regularly fall short of that goal. Although each hour of lost slumber goes into the health debit column, we don't get any monthly reminders that we've fallen in arrears, according to Harvard Medical School report.

In fact, the greater the sleep debt, the less capable we are of recognizing it: Once sleep deprivation — with its fuzzy-headedness, irritability, and fatigue — has us in its sway, we can hardly recall what it's like to be fully rested. And as the sleep debt mounts, the health consequences increase, putting us at growing risk for weight gain, diabetes, heart disease, stroke, and memory loss.

In some cases, sleep debt results from insomnia or other underlying conditions that may require medical attention. But most sleep debt is due to burning the candle at both ends

— consistently failing to get to bed on time and stay there until we've slept enough. Fortunately, sleep doesn't charge interest on the unpaid balance, or even demand a one-for-one repayment. It may take some work, but we can repay even a chronic, longstanding sleep debt.

Although sleep doesn't trump food and water in the hierarchy of physical needs, we can't live without it. Given the ethical limits on research involving human subjects, scientists have no direct evidence on how extended sleeplessness — that is, beyond a few days — affects human beings. Laboratory rats, however, have been deprived of sleep for long periods, and after a week or two, the results include loss of immune function and death from infections.

In a landmark study of human sleep deprivation, University of Chicago researchers followed a group of student volunteers who slept only four hours nightly for six consecutive days. The volunteers developed higher blood pressure and higher levels of

the stress hormone cortisol, and they produced only half the usual number of antibodies to a flu vaccine. The sleep-deprived students also showed signs of insulin resistance — a condition that is the precursor of type 2 diabetes and metabolic slowdown. All the changes were reversed when the students made up the hours of sleep they had lost. The Chicago research helps to explain why chronic sleep debt raises the risk of obesity, heart disease, stroke, and diabetes.

Sleep loss exacts a toll on the mind as well as the body, as shown by a study done at the University of Pennsylvania and Harvard Medical School. The researchers studied 48 healthy men and women, ages 21 to 38, who had been averaging seven to eight hours of sleep nightly. They assigned three-quarters of the volunteers at random to three different groups that slept either eight, six, or four hours nightly; a fourth group agreed to go without sleep for three days. Every two hours during their waking periods, all the participants completed sleepiness evaluation questionnaires



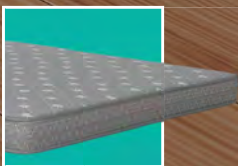


# Better and comfortable morning to you.

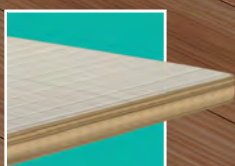
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## Range of mattresses



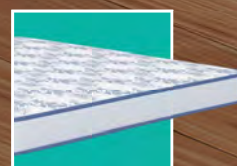
Comfort Range



Dream Range



Posture Support Range



Orthomatic Range

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and took tests of reaction time, memory and cognitive ability.

Over the course of two weeks, reaction times in the group that slept eight hours a night remained about the same, and their scores on the memory and cognitive tasks rose steadily. In contrast, scores for the four-hour and six-hour sleepers drew closer to those of the fourth group, whose scores had plummeted during their three days without sleep. After two weeks, the four-hour sleepers were cognitively in no better shape than the sleepless group after its first night awake. Their memory scores and reaction times were on par with those of the sleepless after their second consecutive all-nighter. The six-hour sleepers performed adequately on the cognitive test but lost ground on reaction time and memory, logging scores that approximated those of the sleepless after their first night awake.

Meanwhile, the six-hour and the four-hour sleepers were failing to gauge reliably how sleepy they had become. At the end of the study, their self-rated sleepiness scores were levelling off, even as their performance scores continued to decline.

### Countering the effects of sleep loss

Women often find it difficult to make up sleep lost while caring for infant children, juggling family and career and weathering the perturbations of menopause. Even those who are fortunate enough to reach midlife fully rested may find themselves gradually slipping into the debit column after age 60.

Too often we regard sleep as an indulgence or luxury. Rather, we should recognize that adequate sleep is just as important for health as diet and exercise are. To that end, the experts offer the following advice:

- **Settle short-term debt.** If you missed 10 hours of sleep over the course of a week, add three to four extra sleep hours on the weekend and an extra hour or two per night the following week until you have repaid the debt fully.

## Guidelines Of Sleep Hygiene

**W**orld Sleep Society has come up with guidelines of Sleep Hygiene to prevent poor quality nocturnal sleep, short duration of sleep, fragmentation of sleep and serious sleep deprivation in adults.

### 10 Commandments of sleep hygiene for adults

1. Fix a bedtime and an awakening time
2. If you are in the habit of taking siestas, do not exceed 45 minutes of daytime sleep
3. Avoid excessive alcohol ingestion 4 hours before bedtime and do not smoke
4. Avoid caffeine 6 hours before bedtime. This includes coffee, tea and many sodas, as well as chocolate
5. Avoid heavy, spicy, or sugary foods 4 hours before bedtime. A light snack before bed is acceptable
6. Exercise regularly, but not right before bed
7. Use comfortable bedding (mattress)
8. Find a comfortable temperature setting for sleeping and keep the room well ventilated
9. Block out all distracting noise and eliminate as much light as possible
10. Reserve the bed for sleep and sex. Don't use the bed as an office, workroom or recreation room

### 10 Commandments of sleep hygiene for children [Ages - Birth To 12 Years]

1. Go to bed at the same time every night, preferably before 9:00 PM
2. Have an age-appropriate nap schedule
3. Establish a consistent bedtime routine and use of comfortable bedding (mattress)
4. Make your child's bedroom sleep conducive – cool, dark, and quiet
5. Encourage your child to fall asleep independently
6. Avoid bright light at bedtime and during the night, and increase light exposure in the morning
7. Avoid heavy meals and vigorous exercise close to bedtime
8. Keep all electronics, including televisions, computers, and cell phones, out of the bedroom and limit the use of electronics before bedtime
9. Avoid caffeine, including many sodas, coffee, and teas (as well as iced tea)
10. Keep a regular daily schedule, including consistent mealtimes

- **Address a long-term debt.** If you've shorted yourself on sleep for decades, you won't be required to put in a Rip Van Winkle-like effort to repay the hours of missed slumber. Nonetheless, it could take a few weeks to recoup your losses. Plan a vacation with a light schedule and few obligations — not a whirlwind tour of the museums of Europe or a daughter's wedding. Then, turn off the alarm clock and just sleep every night until you awake naturally. At the beginning, you may be sleeping 12 hours or more a night; by the end, you'll be getting about the amount you regularly need to awake refreshed.
- **Avoid backsliding into a new debt cycle.** Once you've determined how much sleep you really need, factor it into your daily schedule. Try to go to bed and get up at the same time every day — at the very least, on weekdays. If need be, use weekends to make up for lost sleep. **CT**





## Sleep Health

# An investment for your life

Understanding sleep debt helps us fetch better returns on the most important investment we can make in our lives – health

**T**hey say it's better late than never. It is encouraging to see how people, medical communities, researchers, health practitioners, governments, sleep industry experts and even gadget-makers have started realising the importance of a good night's sleep. Even if this awakening came a bit late, it's still a reassuring sight to see. Sleep is, after all, a serious business and an even-serious health element for modern lifestyles.

There is no way we can ignore it.

More so, with all the sleep-debt that has been piling up for so many years now.

### **EMIs don't work here**

While sleep is as good as a savvy financial investment on many angles, one model that simply does not work here is the assumption that we can compensate for missed-winks later or in small bits. A very recent research cautions strongly that extra-sleep on weekends cannot compensate for lost sleep. Insufficient sleep can still cause metabolic risks and disorders like diabetes and obesity.

## As per a study done by RAND organization

- USA suffers the highest economic losses (up to \$411 billion a year)
- Japan deals with up to \$138 billion a year
- Germany and the UK incur similar losses: between \$50-60 billion
- Canada's financial losses: under 22\$ billion.
- Another study shows Australia: With over \$45 billion

All, thanks to sleep deprivation

Researchers Christopher Depner and Wright have now findings that explain how muscle- and liver-specific insulin sensitivity can get worse in people who had weekend-recovery sleep. So, no doubt that the Sleep Research Society and American Academy of Sleep Medicine strongly recommend seven or more hours of sleep nightly for adults, if one is looking for optimal health. This is now evident in the stream of well-established advice that insufficient sleep is a risk factor for metabolic disorders. Now we also know that 'catch-up' sleep cannot be a solution to chronic sleep loss during the week.

### You may ask why? Good question.

Sleep is a complex biological process. While we are sleeping, we are unconscious, but our brain and body functions are still active. They are doing a number of important jobs that help us to stay healthy and function at our best. So when we don't get enough quality sleep, it does more than just make us feel tired. It can affect our physical and mental health, thinking, and daily functioning.

According to Eunice Kennedy Shriver National Institute of Child Health and Human Development, one of the National Institutes of Health in the United States Department of Health and Human Services, sleep is a period of unconsciousness – this is the phase in which the brain remains highly active.

It is a complex biological process where we process new information, stay healthy and rejuvenate. It leads the brain through five distinctive phases: stage 1, 2, 3, 4, and Rapid Eye Movement (REM) sleep.

Each phase is important to ensure that the mind and body are rested and recharged. Some phases also help us learn information and form memories.

Inadequate sleep, hence, can make learning and processing information difficult in terms of its short-term impact. The long-term health and well-being effects are also quite appalling.

Look at what Stuti Jaiswal and other researchers published in their work titled 'Raising Awareness About Sleep Disorders'. Sleep disorders tend to affect a substantial number of people worldwide and this number and intensity are only on the rise ahead. What's more alarming is that these disorders can go unrecognised and untreated in clinical practice. To add to that, the issue gets ignored in the primary-care landscape.

Some time back, a study showed that sleep problems are climbing fast in developing nations and Asia and Africa are reporting trouble with sleep (Findings from the INDEPTH WHO-SAGE study)

Many studies have argued and corroborated about the links among ageing, sleep deprivation, obesity, depression and risks for Alzheimer's disease. To add to that, when we sleep less we are more prone to anger and errors than what we would normally succumb to. Research by some experts at Michigan State University have noted how small distractions can result in grave consequences (a roughly 15 percent increase in errors) for sleep-deprived people. Also, when researchers from Iowa State University measured propensity towards anger before and after sleep-manipulations by having participants listen to noise products and by creating uncomfortable conditions, the ones in a sleep-restricted group showed 'substantially higher' anger than the ones in the unrestricted

## Ways to embrace sleep hygiene

- Good sleep habits and other lifestyle changes - Healthy diet and exercise
- Cognitive behavioural therapy or relaxation techniques. Efforts to reduce anxiety about getting enough sleep
- CPAP (Continuous Positive Airway Pressure) machine for sleep apnea
- Bright light therapy (this works in the morning)
- Medicines, including sleeping pills, as per a professional's advice. Usually, providers recommend that you use sleeping pills for a short period of time.
- Natural products, such as melatonin, might help some people but again, only a short-term use (medical advice-based) is recommended
- Time and effort spent in choosing a good mattress
- Creation of a good sleeping environment
- Fix short-term debt. If you missed 10 hours of sleep in a particular week, add three to four extra sleep hours on the weekend and try to repay the debt fully.
- Take care of long-term debt. Allow yourself a few weeks to work on your losses. Plan a vacation and start sleeping regularly. Avoid the debt cycle to relapse

sleep group.

So that means there is a lot that can happen with sleep debt - that cumulative effect of not getting enough sleep. Settling for inadequate sleep during a hectic day or the work-week may not be a great idea according to sleep scientists.

Poor sleep practices mean poor sleep hygiene. As per the Centers for Disease Control and Prevention as well,



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adults should get at least seven hours of sleep each night. According to Dr. Eric Szejman, a specialist board certified in sleep medicine at Virtua Medical Group, those in the age bracket 25-72 need seven to nine hours of nightly sleep.

### Debt does not work - But

### Compound Interest Does

The good side of good sleep is multi-pronged and infinite. There is so much that one can earn by investing in the right sleep.

As Maiken Nedergaard, co-director of the Center for Translational

Neuromedicine at the University of Rochester Medical Center (URMC), revealed in a recent study - Sleep is critical to the function of the brain's waste-removal system. That's why the deeper we sleep the better it is. Looks like sleep does more than its bit to rest and rejuvenate our bodies. A good and calm sleep also works as a waste-bin service. Slow and steady brain and cardiopulmonary activity associated with deep non-REM (Rapid Eye Movement) sleep have now been observed to be optimal for the function of the glymphatic system. That's the brain's unique process of removing waste.

In fact, researchers have also found links between our immune systems and sleep. Some studies have also unravelled mysterious links between life's purpose and healthy sleep. People who have a purpose in life show a moderately-better quality of sleep and that is an interesting global sleep disturbance measure.

A 2019 study by researchers at RMIT University in Melbourne, Australia built upon known links between memory and depression.

It may sound like a repetitive suggestion, but we cannot ignore the many simple and complex outcomes that sleep endows us with:

1. Proper functioning of the body and its organs
2. Aid for healing and repair of cells
3. Memory-formation
4. Stress reduction
5. Elimination of toxins
6. Enhancement of brain's capacity to encode new skills, insights, memories and lessons
7. Cleaning the day's slate so that brain cements new memories and is ready for the next day

That said, people need to be aware, educated and equipped about making sleep better and healthier in the face of the stressful and sleep-deprived lifestyles they we are leading. A survey done by the American Alliance for Healthy Sleep (AAHS) has underlined



## Are you a Lion, a Dolphin, a Wolf or a Bear?

If you are a bear, chances are you are generally a good sleeper and your body clock tracks the rise and fall of the sun. So you can start the day early, eat a high-protein breakfast soon after waking, and assign tasks with focus and concentration for mornings. Creative tasks can be done in the afternoon.

If you are a lion, you naturally wake up early but your energy dips mid-workday. So according to Dr. Breus, you can eat and hydrate when you wake up, and then plan the rest of the day. Keep analytical tasks for the

morning and use the afternoon for brainstorming.

Wolves mean night owls, so that means you start your days better late and you hit your mental peak at noon.

But if you are a Dolphin then you may suffer from sleep –trouble. So you can start your morning with good exercise and then get a high-protein breakfast. When the energy picks up in the afternoons, you can go for tasks that take deep concentration. You can also wind down after dinner.

## Signs that we may have a sleep-disorder

- Regularly taking more than 30 minutes each night to fall asleep
- Regularly waking up several times each night. Also, having trouble falling back to sleep, or waking up too early in the morning
- Feeling sleepy during the day, taking frequent naps etc. Or, falling asleep at the wrong times during the day
- Sit up and take notice if your bed partner indicates that when you sleep, you snore loudly, snort, gasp, make choking sounds etc. If you stop breathing for short periods, then it's time to get serious
- Experiencing creeping, tingling, or crawling feelings in legs or arms. These, happen to, get relieved by moving or massaging them, especially in the evening and when trying to fall asleep
- Having one's legs or arms jerk often during sleep
- Vivid, dream-like experiences while falling asleep or dozing
- Sporadic bouts of sudden muscle-weakness during anger or fear or laughter
- Inability to move when one first wakes up

the need for more access to affordable sleep-care and accurate sleep-health information.

This is important when we see its findings – 48 percent showed that their primary care physician has never asked questions about sleep during consultations or physical exams. And, 78 indicated cost affects their decision to seek medical-care. But this is the most salient finding- as many as 54 percent were unaware of whether sleep services are covered by their insurance. Not just patients but primary-care providers and family physicians also are in a dire need for additional sleep education. Plus, there is a need for additional research in exploring alternative or improved therapies for sleep-disorders, especially when patients face failures with traditional therapies.

In fact, the situation is becoming more deplorable and daunting every year and every place as we keep ignoring the value of good sleep hygiene. In a recent nationwide survey conducted by Centuary, it was noticed that 27 percent people don't feel rested when they wake up, 68 percent people experience restless sleep, 58 percent people complain of back problems while sleeping and 53 percent people sleep late due to gadgets or while watching programs or social media feed.

As Stuti's research work emphasized, the spread of western culture, technology, activity habits, diet etc. are ensuring that sleep issues may only continue to increase. We need more efforts in advocacy, research, and education and it is crucial that clinicians utilize their knowledge and current research regarding sleep disorders. We need to recognize these problems in the clinic and treat patients accordingly.


One fun way to get strong and smart about sleep hygiene can be to listen to this quirky tip from sleep doctor Michael Breus who has meticulously divided four different chronotypes and given them an ideal daily routine. Working as per an individual's own chronotype can help to attain better health and productivity.

So you should eat, exercise and sleep as per your type.

It's not as difficult as it sounds. Just make sure that you do not accumulate any debt when it comes to sleep. Practise good sleep hygiene by fixing sleep patterns and putting in some effort in where, how and when you sleep. Stay away from the blue light and surrender yourself to a cozy mattress when it's time.

It's time to raise and embrace more awareness about the importance of sleep to health, and also the role of

a good mattress in providing better sleep. Look for the perfect mattress; do not let it be a low-priority affair. Lie down, as Purshottam Malani, Chairman & Managing Director, Centuary Fibre Plates Pvt. Ltd recommends it best. "The perfect mattress for any individual is the one which agrees with one's body; so the recommended way to choose a mattress is to lie down on the product and experience the comfort level."

Do not take sleep too lightly. It might leave expensive problems for one's mental and physical health. There is no credit card that you can swipe here. Sleep is cash. Use it and enjoy it today. Sorry, tonight! 

# Industry Outlook

## The shape of the mattress-to-arrive

Premium products, new material-related offerings and new formats – looks like the industry is going to rub its eyes hard as it witnesses what the next few months are bringing in

**T**he sleep and wellness industry has always enjoyed interesting intersections. Developments in science, technology, consumer psychology and lifestyles – nothing gets by without affecting the industry in some way.

The year 2019-20 would also inject some of these cascading effects on how the industry thinks and what it offers.

### Hi-Fliers Enter

One key change that would accost many players is the arrival of a top-of-the-tier segment. Since most mass brands are shifting to organised retail, the purchase of Mid-to High-end mattresses should only get better now. As Sabina Bhanpurawala, CEO, Foam Home (India) Pvt. Ltd. explains, "The presentation and sales explanation in order to sell the better quality premium mattresses is crucial and since that has been addressed through organised retail; I believe this range will see a rise."

"The market is moving more towards organised segment. This is marked by increasing customer preference for customised and mid/high-end mattresses." Ashutosh Vaidya, Chief Marketing Officer (CMO), Kurlon seconds this prediction of premium-offerings shaking up the market in a new way.

The prognosis for premium products is also echoed by Purshottam Malani, CMD, Centuary Fibre Plates Pvt. Ltd "The evolution of retail touch points is something that will spur the growth of the category - particularly in the premium/niche segment."

### More Foam Types

Going parallel with these top-bracket formats would be the impact of acceptance and surge of new material alternatives too. There is lot of demand for bonded foam in the mass market, as Bhanpurawala affirms. Even large international players have been spotted launching a bonded foam range for the Indian market, just so they can get a slice of this growing demand.

Another popular material shift would be that towards latex mattresses. They are popular material thanks to companies marketing them extensively through the online medium, Bhanpurawala points out. "Even though the material has been around for a very long time, its awareness through social media has been on a rise in recent times."

Bhanpurawala cites the introduction of Ergoshell offering. "We recently received 25 Global Patents on our Ergoshell range of mattresses that has been the biggest launch for us in mid-2018. We are certain that the Ergoshell mattresses will be gaining a

lot more popularity in the year ahead since we have introduced an entire range comprising, Latex, Memory Foam, Polyurethane Foam and our special Flomax Foam."

The Ergoshell design has been patented in the USA, Europe, China and Australia. This is the first time that an Indian company has received such recognition for its bedding creation, she states.

### Small Threads, Big Sheets

Among other changes, Ashutosh Vaidya, Chief Marketing Officer (CMO), Kurlon expects demand for sleep and wellness products to grow at over nine to ten percent. "As demand for affordable housing sector is expected to increase, manufacturers are expected to offer simple & basic products, in order to maintain profit and volume share." He also augurs that Retail, Co Retail, Shop-In-Shop (SIS) would be the new mantra for expansion and catching customer at the most frequented places- these will play an important role in the days to come."

In terms of geographical scenarios, demand growth can be expected to be strong from tier II & III towns. Also, B2B / Instructional growth, Household Goods (HHG) segment etc. could see a growth range of 10 to 12 percent.

Overall, in the reckoning of Bhanpurawala, the industry has been more dynamic than ever before. "We see a lot of online models replicating the popular Casper from USA. We are also seeing patented Innovations like the Ergoshell in the luxury segment. The mass market continues to grow with Coir and Bonded Foam."

As Vaidya captures it well, "Wellness in today's context encompasses a complete picture of healthy living characterized by physical, mental, social, and spiritual well-being. Wellness trends have omnipresent influence across sectors, for example in health, retail, infrastructure etc and the term wellness goes beyond just food and personal care industry." **CT**



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Purshottam Malani, CMD, Centuary Fibre Plates Pvt. Ltd

## Lie down and give it a priority

**Purshottam Malani, CMD, Centuary Fibre Plates Pvt. Ltd** shares his views about sleep marketing in India and the innovation in the industry. He also points out the existing fragmentation, oncoming online-challengers and continuing consumer inertia to the importance of sleep.

**Q** What has been the company's journey been like so far? Any highlights, milestones and challenges that you look back on?

Part of Shree Malani Group, Centuary Fibre Plates Pvt Ltd is one of the leading mattress companies in India. It started in 1988, as an OEM (Original Equipment Manufacturer) of rubberized coir for a then-popular mattress brand. By the early 1990s, the company had its own brand and called it Centuary Mattress, which later became a household name in South, East, West and Central India. Over the last two decades, Centuary Mattresses has aggressively expanded its product range and geographical footprint. Today, Centuary Mattresses is present in the country with over 2500 dealers and over 250 exclusive brand-stores. It is the largest exporter of rubberized coir from India, and recently reached the milestone mark of producing its five millionth mattress. Boasting of three facilities across Hyderabad and one in Bhubaneswar, Odisha; Centuary recently roped in Tennis Star Sania Mirza as its brand ambassador. Another important milestone has been our partnership with IKEA for supply of mattresses to the organisation's India & Middle East operations as well.

**Q** Is India poised to take on more potential and reach the scale and innovation that global sleep-products have achieved? Why or why not?

The comfort and bedding industry in India has been witnessing an encouraging and exciting phase with the entry of new players such as IKEA (in the offline world) and increasing focus of Amazon, Flipkart etc. (in the online world) helping the overall market to grow in recent times. There is, certainly, a shift happening from unbranded or cotton-based mattresses towards branded mattresses as the consumers are becoming more inclined towards branded products. Moving away from fragmented and localised players, we expect the share of organized market will increase from the current level of 40 percent. The growth of overall Indian comfort and bedding industry will continue to grow at a healthy rate in 2019. A relatively stable currency will yield a positive outcome not just on our industry, but also on the economy at large.

**Q** What are your plans for the future? What keeps you excited about the next phase of growth of this industry?

The evolution of retail touch-points is something that will spur the growth of the category, particularly, in the premium/niche segment. Centuary's vision for growth is founded on increasing the width of offerings to the consumer through our retail stores in the form of baby and child sleep-products, high-end accessories etc. Centuary's product leadership and innovation will continue to drive its next phase of growth over the coming years. Keeping this in mind, Centuary has recently launched 'Beddy'- a mattress range exclusively designed for babies.

**Q** Any notable changes that you have seen or would like to see on the consumer-side?

Consumer awareness and involvement in the category has been quite low - and this is something that needs to change as the industry evolves. Since a human typically spends 1/3rd of one's life on a mattress - it is very important that one puts in the due effort in identifying and trying out the mattress before making the purchase decision.

The two main things to keep in mind are the correct size of the mattress (depending on the size of the bed frame),





and also the firmness level. Brands like Centuary offer a 'firmness indicator' along with each product - since someone may like a soft mattress but someone else may like an extra-firm mattress.

**Q** Do trends like Mattress-in-a-Box or recyclable products show a new market potential in any way?

Compressed or roll-packed Mattresses-in-a-Box formats have been available around the globe for a decade now, and the potential cost savings in logistics could accrue substantial value to the consumer, and of course- the importance of this is higher for online sales. Globally, there is a conscious effort to increase the re-cycleable content in each & every product. Hence, there is scope for the same in this industry also.

**Q** How significant is sleep-health and sleep-awareness in the times we are living in now?

This is where the role of manufacturers and category leaders is important. In a recent nationwide survey conducted by Centuary, we found that

- 27 percent people don't feel rested when they wake up
- 68 percent people experience restless sleep

- 58 percent people complain of back problems while sleeping
- 53 percent people sleep late due to gadgets; while watching programs or social media feed

Some of these numbers are quite staggering - and can act as a lever to raise more awareness about the importance of sleep for one's health, and also the role of a good mattress in providing better sleep. The perfect mattress for any individual is the one which agrees with one's own body; so the recommended way to choose a mattress is to lie down on the product and experience the comfort level.

**Q** What innovation or technology gets your attention in terms of its potential to augment the industry?

The first thing that comes to mind is developing a healthy substitute for the harmful EPE (which is rampant in low-cost mattresses in India). There is a growing potential for Premium & innovative product offerings at affordable price-points. With the evolving retail landscape, there is also scope for brands to get into niche products such as baby mattress; accessories such as mattress & pillow

protector, toppers; etc. targeted towards health and wellness.

**Q** What are the challenges, changes and improvement areas that the manufacturing side and supply-chain of this industry still faces?

The biggest challenge is the lack of quality standards - No set of guidelines for size/thickness/firmness/durability/comfort/etc. The other challenge is the complexity of logistics & Supply Chain Management - Managing ever changing consumer needs & preferences across different geographies & demographics. Also - there is very little standardisation of bed and mattress sizes in India.

**Q** What does the future look like?

The Mattress Industry in India is still at a stage where the future, size and shape of the industry can be moulded by the manufacturers and hence ISPF.

This presents a tremendous opportunity for ISPF to make the industry strong and a more enjoyable business for all stake-holders. Further, ISPF can contribute significantly to make the consumer feel the importance of a mattress and make this product a high-priority item for the family. **CT**





Don't ignore  
Digital Marketing  
**EXPLORE IT**



## Social Media has ceased to be a thing of novelty. It is now a hygiene factor – for marketers and brands. But only those who know to tap it timely and creatively, gain from this ‘pull’ advantage

There are two ways to communicate and influence a consumer – One is the Push Strategy; another one is the Pull Strategy. Both take time and money but the ‘pull’ strategy takes a lot of effort in the area of actual insights and creativity too. Perhaps, that’s why it delivers better and compelling results – outcomes that stay near to a consumer’s heart and mind instead of brushing around the wallet. May be that’s also why they endure beyond a promotion-window.

For decades, marketers have tried a flurry of tactics and weapons to use this magnet. A new power is now available to them in the form of social media. This is media that is individual-inclined and is often, in proximity to the most critical stages of a consumer-behaviour funnel. This media is the eyes and ears of a savvy marketer when the consumer is struggling with a problem, thinking about a need or actually considering a product.

### No Snooze Button for the Sleep Industry

With the ‘pull’ approach in mind, there is ample room and time for a mattress brand to talk to a consumer about sleep, about sleep-related issues – at the right moment and in an impactful, but fun, way.

A great example is how some sharp and intuitive marketers are using Twitter. One can say something pithy and useful in just 140 characters (no heavy media-space/spot investments needed); and can also gauge the outcome from instant reactions from the audience. Plus, there is something unprecedented possible if a brand cracks it right – the ability to carry on an actual conversation with a prospect/consumer – yes, a conversation in this time-starved and the attention-deprived world of today.

Look at Casper’s always-on Twitter presence which weaves humour and

information in perfect rhythm to a user’s sleeping, and waking needs. It has been trying out conversions of songs into sleep jams that help people stay awake during office at the work desk. It talks about coffee-cravings. It delivers everything from sleep-jokes to lullabies – as and what is needed. It celebrates days that one chooses to stay in bed. It also pampers night-owls with its streams of late-bedtime reading tweets. It even started a new approach this Holiday season – giving hangover-gifts, beer helmets and champagne-bottles to consumers, because that’s what they need to sleep soundly. It also follows up a customer about the ‘quality of sleep’ once a purchase is done. This brand is trying to use this social media for not just talking to a consumer but also to sharpen its social listening. It is putting resources and time to forge a relationship with a consumer. The Twitter following, evidently, has been growing steadily. In short, it must be

doing something right to earn the label of ‘sassy’ from The New York Times for catering to a tired industry in a fresh and fun way.

Casper also launched ‘Woolly’, a 96-page digital and print publication with a lot of sleep content. Staycation Story Hacks – is another way where Casper urged people to share Instagram or Snapchat Stories about sleep vacations. It is not just the likes of Casper or Tuft & Needle abroad but also Sleepwell, Springfit, Original Mattress Sleepzee mattresses in India who are now busy on Twitter.

Simba is using Facebook and Instagram advertising for pumping up awareness and education about its products. What it remembers is not to cut-copy-paste a TV ad on a social platform but to create content that fits to the native strengths and context of a social media platform. A mobile-first approach, with room for captions, attention to aspect-ratio and overall environment, video-audio usage, importance to both active and passive shoppers etc. is what its marketing captains swear by. So it makes sure that its Instagram stories are vertically designed and adjust for people-on-the-move (and with newsfeed audio around) – because that’s how this media works.

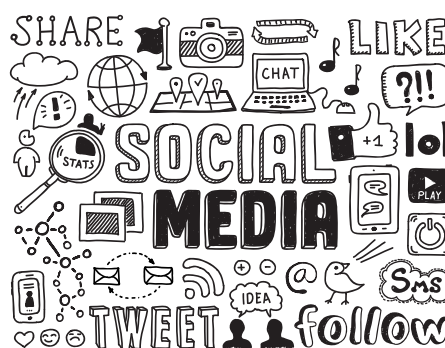
This is a classic example of a brand focused on ‘creating’ demand than just ‘collecting’ demand (so far done through bottom-of-the-funnel search-engine presence). A latest Instagram creative campaign was made for couples who struggle to sleep in the same bed. It showed graphic patterns and a split-screen device with partners enjoying an undisturbed night’s sleep on a Simba mattress.

Nest Bedding, a direct bed-in-a-box brand, is also trying hard to cater to millennials through ‘personality branding’ and the ‘human side’ of a

### Key Takeaways:

You should not ignore digital media: Digital media is essential for increasing your

- Brand Awareness
- Engage with customers
- Improved brand loyalty
- Knowing customer buying habits
- Reputation management of your brand and company
- Increased business





brand. It has brought out 'professional napper' contests and other social-and-digital-first content.

### The right side to 'Pull it' off

While it is tempting and easy-sounding to be on social media, there is a treasure-chest of tips and best-practices to do it right. Just putting in cliché hashtags, sweepstakes, gimmicks for RT (Re Tweets) and boring sales-brochure-compressions will not make the cut with a customer who is already overwhelmed with a lot of smart-phone noise and distractions.

Also, bear in mind, that the speed and sharpness of responses can be tough to handle when a user is not happy or is flooded the wrong way or at the wrong time. Sample these tweets: "I went on 1 mattress website, and now my entire online life is plastered

### A Lion for a good Ad!

One of the Cannes winners of top 10 radio ads in 2017 was a mattress brand 'Flex'. In this spot, a person pretended to be interested in the high-pressure steam cleaner to get the salesman to clean the rugs, curtains... and even the grease from the stove hood. The Voice-over drilled it all in – "And you might ask yourself, how does he manage to sleep at night? Well... on a Flex mattress. Flex – the reparative rest nearly all of us deserve."

in mattress adverts." "Since we ordered a new mattress last week, my Twitter timeline has been flooded with adverts for them. YOU'RE TOO LATE, TWITTER!"

Experts like Dr Jillian Ney (Author of 'The Ultimate Guide to Using Behavioural Insights to Sell Innovation: The case of a Mattress-in-a-Box') strongly advises brands to first take cognizance of consumer behaviour before hopping on to the social-media wagon. Do not strike on the fear motivation if one can use emotions or rational thinking as a driver of favourable behavior. Wipe away complexity – in messages and their packaging – both.

Squeezing data from Twitter, Facebook, Instagram and review sites of some mattress brands, she points out that social conversion happens well when one remembers the psychological reason of a mattress-purchase instead of functional reason. It is, often, a good night's sleep that people are ultimately after.

May be that's why brands like Simba, Casper, Eve and Leesa have focused on words like 'sleep', 'slumber' and 'asleep' in their hashtags and garnered high engagement levels in 2017.

Simba, for instance, benefited from better targeting of customers on Facebook and Instagram stories. It used engaging visuals to explain the layers of a new mattress but it also split content for active and passive users and tested multiple versions of

## Your Job-Description is to SLEEP!

A Texas Mattress company has just offered a weird but exciting internship offer to applicants who are 18 years or older and – check this out – are 'proficient at napping' any time of the day. These 'snoozeterns' are also helping the company's social media team to bring out product launches and assist customers in bed-selection in a refreshing way. An intern here would be not just testing beds, but would also be creating written and video reviews for the store's website, and offering sleeping tips on Facebook Live streams, along with videos on people's sleeping habits.

ads on small audiences so that it could cater to a wider audience with stronger insights. The brand also worked hard on organic posts on Facebook and Instagram that blended sleep-related insights and user-generated content that are actually useful for someone who is reading or listening to them. This brand also illustrated the importance of keeping the colour, pattern and clutter aspects in mind while making something for social media because a user there is often consuming multiple-feeds at the same time. Standing out here takes work.

The Share-of-Voice and the advocacy that one gets on this medium are unparalleled. If one can communicate sleep as an experience and a conversation-point instead of a product that is aimlessly-pushed; then the rewards come heavy and long in the form of actual consumer interest and loyalty.

As Casper's Twitter handle drills it best: "Don't know the question, but the answer is sleep". And Sleep is something that never comes by pushing it. It has been, and will stay, always a pull thing. At least, some mattress brands know that well now. Read the door. Then open it. It really works.



# How sleep industry can use social media for consumer awareness?



In this era of netizens, the advertising industry has evolved so much such that the traditional mediums have felt the need for re-innovating by means of collaboration with the new media. The future of advertising hence lies in new technologies and mediums that evolve. In order to increase the awareness of sleep and mattress, social media can be a powerful tool in drawing in consumers. Here are some of the interesting ways that form the successful social media trends in the mattress marketing sector.

## Product Porn

Have you heard of the term 'food porn'? Food porn is a concept by which a variety of dishes are presented in pictures or videos and makes the viewers drool over it. In line with the same concept, every product has a scope to offer enticing product porn to woo the consumers to buy. While crafts, makeup and cookery top the list of product porn, now, even

the mattress industry have some to offer. Innovatively shooting bedroom ambiances and displaying interesting sleep products are a fad. Although mostly used inside the showrooms, these videos when promoted on the social media could make up for a drooling viewer experience. This is a visual and the closest form of raising consumer awareness on the products and let them succumb to the temptation of having a dream sleep product.

If that does not suffice, even the customer point of view is now captured for the marketing purpose. How? Unboxing videos of customers opening a package delivered is a fad. It gives the customer the joy of being captured and the pride of opening an excitingly packaged item and serves as a product promotion too when the customers post it in a public forum. Check out the Casper and Purple Mattress unboxing

videos online for visual reference.

## Social Media Handles

Now, it is easier and also a mandate for brands to penetrate through all the mediums of the online market in order to increase visibility and brand awareness. So, every brand has a space to create an official account in one or more of the social media products such as Facebook, Youtube, Instagram, Pinterest, Twitter and Snapchat.

Pages and groups on Facebook play a significant role in grouping people of similar interest and drawing their affinity towards the brand. When you want to reach your target audience with only what you have to offer, a page is a valuable tool. You don't have any distractions or spamming on the page.

A group is many at times used as an indirect medium of promotion. It is

majorly used as a tool to bring together your target audience and maximise the number and then target them directly or indirectly. Your target group will be allowed to post on the group. A Facebook group, brings together like-minded people and allows them to post relevant information. The more people involved in discussing a topic, the more probability of them turning into consumers. When your page caters to the requirements of all the audience, then it would be recommended and keep the consumer flow coming in. Women's Era magazine has a Facebook page that publishes quotes on feminism regularly and continually engaged by users. Now, think of anything about women empowerment, the audience will look up to Women's Era.

### SEO

There are many ways to publicise a page. The most important part of content marketing is the effective placement of keywords that result in Search Engine Optimisation (SEO). Casper is known to have taken a lion's share of the online traffic through search. However, there are paid searches too for keywords and websites. The catch here is not just promoting a brand if you want to top the list of searches in sleep products. Having blogs and other social media pages with general information on sleep and its related information is the key to get pointed at and remembered for all sleep related information. Think mattress, bedsheet, bed or anything, a consumer must remember you. So articulating the content on social media in such a manner matters.

### Blogging

Blogs are used as a less formal space in comparison to a website. A blog can be used to have a frivolous content that are easy to read for a layman. Blogs are the best means of adding value to your SEO. While a website for mattress can be used for sale and product description, a blog can be used for generating elaborate information on the products and related attributes. From free to paid blogs, it is easy to create and use. The more social media handles that a product has, the better it has to reach out to more audience. In order to make it interactive,



there could be an exclusive space for the audience to post their queries. If a competitive keyword is mentioned in a query, your page has the probability to appear on the SEO if someone else keys the same word on the query through a search engine! So be it a question or answer, brand awareness has to cover all the spaces of SEO and if optimally utilized, blogs can serve you great.

### Memes

Did you know that meme creation now is a profession? No kidding! While serious advertisement could make you more serious and worrisome in gaining a response, a frivolous and light hearted ad will yield successful results. People engage in posts that connect with them and make them happy. A meme is a best means to make that connection with your audience.

Indirectly, it raises brand awareness than direct marketing. If consumers can remember you when in need of a mattress, what more do you need? The purpose of a meme is to connect with your audience by using wit as a tool. The Amul advertisements that has its signature characters mocking each other or carrying social messages continues to be a great hit and a catalyst to buy Amul products.

### Referral Marketing

Here's the traditional word-of-mouth revamped online! Referral marketing is yet another way to make customers

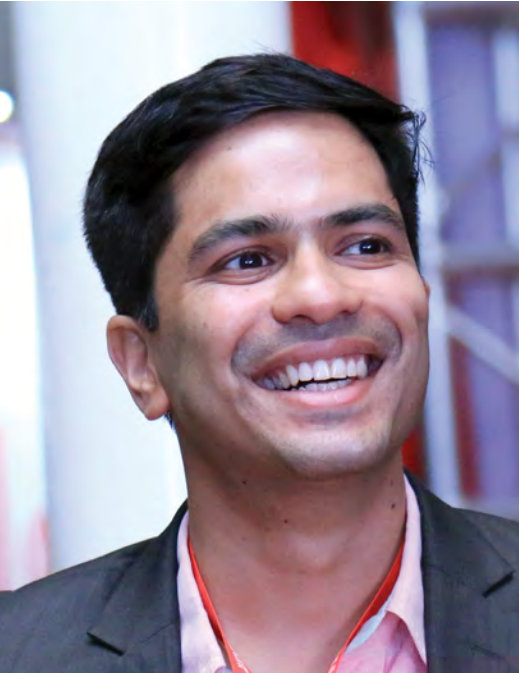
persuade other consumers to buy your product. By offering discounts and attractive offers for consumers to buy your product, you draw in new consumers. When it is encouraged and incentivised to be posted on social networking sites, the brand's credibility increases, thus building consumer trust. Use the power of social media optimally and there comes unending traffic and benefits in marketing. Payment app such as Google Pay practice this to make more people download the apps.

### Online Contests

Ever indulged in an online contest? Answer something simple and win exciting prizes is what a promising online ad looks like. In a social media website, online contests help in keeping a page active and thereby increasing consumer activity and actions in revisiting further information about their desired brand. Last year, Oppo mobile came up with online contests that had questions such as "How important is a smart phone for you" and "Share the best way your smartphone helped you." It announced a contest wooing users to share their experiences and promised to reward the best answers.

Overall, witty and pithy content that quickly puts forth a message is what a good marketing strategy demands. Using the newest technologies is the key to a successful advertising and branding activity. **CT**





Mathew Chandy, Managing Director, Duroflex

## Flexing its muscles - DUROFLEX

**Mathew Chandy, MD, Duroflex**

spoke at length with **Comfort Times** about how Duroflex is trying to capture the market

**Q** How far has Duroflex come? What kind of milestones and turning-points has the company been through?

Duroflex is now 55 years' old. The company was started by my grandfather on the banks of the backwaters of lush Alleppey, Kerala. I joined the business in 2012, after having spent many years working as a lawyer, banker and entrepreneur in London. It was a challenging environment as we were immersed in legacy and essentially family-managed. In the last few years, we have successfully transitioned the business into a dynamic and professionally-managed business. Despite many hurdles caused by Demonetisation, GST (Goods and Services Tax) etc.; we have grown consistently - achieving a 25 percent CAGR (Compounded Annual Growth Rate) for the last three to four years.

**Q** How did you accomplish this major transformation to a disruptive and new-age player?

We struck some great brand-partnerships. Like the one with the Royal Challengers of Bangalore, the Chennai Super Kings and Milind Soman. Our product-design partnerships with Foley Designs have resulted in highly-innovative new mattresses under the #Energise and #Duropedic ranges. Our

good work has attracted the attention of the financial markets and in 2018 we attracted PE investor Lighthouse Funds. Lighthouse holds several marquee consumer investments like FabIndia, Nykaa, Cera and Bikaji. There was a time when the mattress industry was considered quite unorganised and unexciting, but we are proud to have attracted great professional talent and great professional investors.

**Q** How do you view India's position when stacked against global products - especially in the areas of scale and innovation?

When it comes to scale, we are many years behind international standards. Our organised industry is 1/20th the

**Our organised industry is 1/20th the size of the US markets despite having three times the population. Even the Chinese market is 15-20 times the size of the organised Indian market. We have miles to go before we sleep!**

size of the US markets despite having three times the population. Even the Chinese market is 15-20 times the size of the organised Indian market. We have miles to go before we sleep!

**Q** What holds us back?

This state is probably because of a much lower per-capita income in India. We are hovering around the \$2000 mark, while China has reached \$12,000. That said, we are likely to see a consistent and steep growth curve in the next 10 years.

However, on innovation, I think we are doing quite well. Our mattresses now look, feel and perform up to global standards. Our #Energise mattresses look like they have been designed by Nike. And our Natural Livin range would not be out of place in a boutique store in Hollywood.

**Q** So how do you plan to step into the new challenges of future? What keeps you excited and awake?

We have 1300 million Indians, but the entire organised industry only sells five million mattresses every year! I feel that we are on the cusp of a great run, just like paints did 10 years ago. That said, I have a constant sense of 'paranoid optimism' about the future. The



opportunity is massive, but disruption is also imminent. Only a few, nimble and innovative players will ride the wave.

**Q** What is happening on the consumer-side, in that vein? What's your reckoning of trends like Mattress-in-a-Box?

Yes definitely! Mattress-in-a-Box is a fantastic innovation. The logistics savings are great and the quality is not compromised at all. I happily own and sleep on a Sleepy Head mattress. We spun off a start-up and created Sleepy Head. Soon Sleepy Head mattresses will be sold on Korean e-commerce platforms.

**Q** Sleep health and sleep awareness – how serious, how significant?

Sleep health is so under-estimated. Great sleep give us energy, helps our body function better, aids memory, helps with depression and makes us look better! Great sleep makes us better in every way! I wish that we could make more people realise this. Awareness is low, and that is our industry's big opportunity.

**Q** How should users choose sleep products? Any shopping advice for mattress customers?

T.E.S.T. Test the product well and not just

for the product's features but for your own alignment with it. Every individual is different. Some people sleep on their backs. Some don't. Some snore. Some don't. Some get up frequently at night. Others don't. Some have apnea. Some don't. So how can the mattresses picked be the same for everyone? Do test a product well and settle into it. Take your time. No one size fits all. Our industry also needs to innovate strongly on giving better testing environments and opportunities to customers. We are working on that in a strong way. Because that is the future.

**Q** If you were to pick an innovation or technology that gets your attention – what would that be?

Internet of Things (IoT) in our Products and VR (Virtual Reality) in our retail stores.

**Q** Is technology helping people with better sleep or is it doing the opposite? Wearables that track sleep vs. screens that hijack our time? What's your take?

It depends on how anyone uses technology. Anything closer to sleep-time is not too good. These days new rules are emerging and they are here for a reason – no phones in the bedroom, no screen time before sleeping etc. It is

good to have these health rules so that our eyes can settle for a sleep phase and plus, our mind is spared the information-overload. Screen light and too much information interrupts good sleep, for sure. That said some good tracking devices can actually help in picking patterns around sleep health, breathing quality, apnea, heart health etc. They are not being used in a big way now but the quality of data gathered from there can actually shape a good sleep-health future. We still need to figure out how to make them less intrusive and more helpful.

**Q** Any exciting update that has happened in the last few weeks at the company?

On Woman's day this year, we were thrilled to appoint Anshul Jain (Vice President at Lighthouse Funds), as our newest Board Member. We are pleased and proud to have such an accomplished, professional and empathetic female board member. I think that this is a big and important step for our industry.

**Q** Anything else you want to mention?

It is good to see a quality and insightful publication like Comfort Times come out. It is a sign of an industry starting to mature. Keep it up, and speed us on.





# SLEEP

## Are Millennials Worried About It?

**E**nough sleep is just as important for good health as nutrition and exercise. Clearly, this sums up the importance of sleep for overall good health and well-being. Sleep is rightly called the third pillar of health. Unfortunately, sleep disorders are becoming the order of the day. It is estimated that on an average, 1 out of 5 Indians suffer from sleep disorder or deprivation or apnea. The importance of Sleep and the harmful effects, lack of sleep brings to one's health is quite known.

### Sleep – Are Millennials Worried About It?

Let's understand what millennials are speaking about the same

#### Towards healthy Lifestyle in 2019 –

In the last week of December, there was sudden spike in the number of conversations, tweets, as many people wanted good health & Sleep as a part of new year resolution.

**#New Year New Aims** - you will find people speaking about 8+8+8 (Work, Sleep, Family) for a balanced life.

**Bloggers** are focusing on how you can

get slimmer with sleep, how you can improve in your relationship & health with sleep.

**NBC says** that sleep is prime for learning & memory. Poor sleep makes us moody and getting less sleep makes us sick.


**Sleep Industry** – According to reports, 60% of the Indians feel that Sleep is not important, and 32% feels that technology is a major sleep disaster.

Further, good sleep is essential for health because:

- It raises your blood pressure. Sleep has a direct bearing on one's blood pressure. Research indicates that people who sleep 5 hours or less may be a higher risk of increased blood pressure.
- Weight gain and susceptibility to diabetes. Sleep and eating patterns are linked and go hand-in-hand. Sleep deprivations can lead to carvings for eating.
- It dulls your mood. According to the National Sleep Foundation, USA, the link between sleep and mood has been observed over and over by researchers. People with insomnia have greater levels of depression

and anxiety than those who sleep normally.

- It impairs your judgement and encourages risky behavior. Sleep deprivation is outright dangerous to yourself and others. The effect of sleep deprivation can, often times, be felt while driving; or while at work.
- It harms your relationships. Sleep deprivations can affect your overall performance, including your ability to think clearly, react quickly, and form memories, irritability and tendency to snap at others.

To sum up, an Irish proverb, beautifully synthesizes the importance of sleep and its effect on good health "A GOOD LAUGH AND A LONG SLEEP ARE THE BEST CURES FOR ANYTHING" 

### Ashutosh Vaidya

– Chief Marketing Officer  
– Kurlon Enterprise Ltd.

(Thoughts & information above are the personal opinion of Mr. Ashutosh Vaidya & Kurlon assumes no responsibility towards it.)

# The world sleep algorithm

The average world sleeps during the night. But they sleep differently. A survey taken by the National Sleep Foundation (NSF) in 2013 reveals that Europeans sleep less during the working days in comparison to the time they sleep during holidays. Their average sleeping hours during the weekdays showed less than seven hours. On weekends they reported sleeping an extra 45 minutes, showing a relaxed pattern.

Europeans in general use lesser sheets for sleep. They sleep over a duvet or comforter that can be easily removed and washed. This makes for lesser sheets usage during summer. The sleep culture in each country draws roots to their behaviour and beliefs. Let's look at the country-wise practices to know the sleep saga of the world.

## Spain

Siesta – as feisty as it sounds, the word

is fanciful for a mid-day nap in Spain. Not just Spain, but also other countries that are hotter for a major time of the year also follow this as a solution to restore freshness during scorching summers. Although afternoon nap might not be recommended for youngsters, the climatic conditions also influence this health condition. While in moderate weather, the generic health advice applies, in extreme weathers, these considerations too would be taken for health benefits.

## Afghanistan

In a poor country like Afghanistan where a large population cannot afford luxurious homes, a single room is used for multipurpose – bedroom, hall and dining. This also brings into light, the importance of multipurpose, compact, foldable and convertible mattresses.

## United Kingdom

UK is popularly known for its sleep in

the buff. According to NSF, 30% of UK citizens sleep naked at night. If you had not heard of the benefits of sleeping nude at night, now you should. A data from Forbes elicits that sleeping nude can reduce stress, help you connect better with your partner and develop confidence.

The body free from clothes has a better scope of being loosened up thus keeping the blood circulation active. Imagine those elastic wears around your waist and body keeping you uptight even during sleep. How could that even help relaxation? A good night's sleep must let your body be airy and easy to breathe. That is exactly what the British have exemplified.

## The United States of America

Americans sleep with their best friend. The Harris Poll, a popular survey reveals that 71 percent Americans allow their dog to sleep with them at night. What's





more interesting is the emergence of dog beds to compliment the man's best friend with equal luxuries. Some mattress companies even have 100 dog days trial period for them, what more could you ask for!

### South America

In a parenting book titled *How Eskimos Keep Their Babies Warm*, author Mei Ling Hopgood reveals that parents in Argentina indulge with their kids until the evening and put them to sleep around 10 pm. When they stretch to a late bedtime, they also have a delayed wake-up time, the book says.

### North America

Guatemala, a place in North America has the culture of people sleeping with worry dolls. Made of wood or wire, they are dressed in traditional Mayan wears. Akin the native dream catchers, these worry dolls are believed to keep your sleep and dream worry-free. As a charm, they are placed under the pillow for a safe bedtime. In modern times, people around the world hug a pillow or a teddy bear to snuggle up and feel secured. Worry dolls are wooden or wired miniatures of your stuffed buddies.

### Scandinavia

Everybody takes vaccination in childhood against some deadly diseases. In Scandinavian countries such as Norway and Sweden, parents prefer to give children natural vaccination by letting them sleep outside the home even in cold temperatures. It is believed to increase their immunity levels. Even daycare centres have a demarcated time to let children sleep outside, thus helping them develop immunity against sickness. Scandinavia sure knows the art of germ protection.

### Indonesia

Todoet Poeles refers to stress sleeping. When in stress, get into a deep sleep is what people in Bali, Indonesia believe and exercise. Also referred to as meditative sleep, Balinese believe in resting the brain from conscious overthinking and thereby allowing it to declutter in sleep. It makes you calm and takes you to a peaceful condition, enabling to handle problems better.

## The average sleeping hours during the weekdays is less than 7 hours. The sleep culture in each country draws roots to their behaviour and beliefs



A good way to close down constant mental disturbances, isn't it?

### Japan

Have you ever dozed off at a public place? Well, if you were embarrassed when someone caught you in the act, here's something that you must know. The Japanese appreciate sleeping on the go! Sleeping while travelling or other times is looked upon respectfully in Japan and is considered as an act of a productive person. It is called *inemuri*, meaning – sleeping on duty or sleeping while present. What more of a high regard could it reflect on a person who shows up in his busy schedule and dozes than not showing up and ticks you out from the priority list?

### Australia

Australians believe in snuggling up with people and sleep for a safe and secured night. Co-sleeping is commonly exercised in Australia. This habit roots from the aboriginal times when people slept together for farming and other group livelihood activities, during which they found safety from the environment and attackers at night by being together.

### Botswana

How many times have you heard voices waking you up or an annoying alarm clock that wouldn't shut up without a

snoozer? Botswana breaks the rules by not having a standard sleep timing. Be it the day or night, people here do not stick to a common sleep timing and fall asleep whenever they are tired. This ensures timely rest for the body than having to wait longer even when tired.

### Mexico

Prayer before bed is a common habit in Mexico. Perfectly designed culture in terms of inducing positivity before sleep, it materializes the incredible power of the subconscious mind by giving valuable tasks to it to process over sleep. When you pray, you make goals, ask for directions to attain it and charter your troubles having faith in the invisible healing power. When you do this before bed time, the solutions effectively get executed. Scientifically, praying in half sleep is termed as alpha meditation. While prayer before sleep is done in a fully awakened state, it still passes on the message to the subconscious mind about your desires and thus helping it to work through you.

### China

Great tea and acupuncture are considered as remedies to induce sleep in China. The Chinese also believe that getting to bed on time acts as a healing power in resolving body conditions by activating organ repair in sleep. Their average sleep time is around 10.30 pm to 11 pm.

### Africa

Africa is a country where many parts are plagued with mosquitoes probably because of the existence of forest and a thick ungroomed vegetation in various places. These mosquitoes are sure enemies to sleep for many obvious reasons – their annoying buzzing noise, hazardous bites and carriers of contagious diseases. Thus, Africans prefer a netted bed totally protected from the surrounding. These sleep cultures reveal more about the ethnicity and the situations that people sleep in various countries. A good night's sleep is an essential part of a balanced and healthy life. If you have issues with sleep, then figure out the cause and pay attention to get it eradicated. **CT**

# Technology & Organised Sectors Enhance Mattress Sales: Mattresstech Expo 2018 Testifies

Coming together to explore and explain the benefits of integrating technology in mattresses, India Mattresstech Expo 2018 was held at Chennai Trade Centre, Chennai, from July 12 to 14, 2018.

The three-day exhibition and conference focused on technology, machinery and supplies for mattress and upholstery production. Around 2640 industry experts and 102 exhibitors took part in the event that saw more than 3000 business professionals and exhibitors. Spread around 4400 sqm, the exhibition had 6 exhibitors from India, China and Korea displaying operational machinery. Totally, there were 30 foreign exhibitors.

Exhibitors expressed satisfaction over the fact that India Mattresstech Expo is an ideal show for generating leads, closing business deals and building lasting relationships in the mattress industry and eagerly await the next edition.

The exhibitors were from a versatile background of mattresses such as mattress production machinery & supplies, mattress finishing machinery & supplies, production tools & equipment, upholstery production technology, machinery and supplies bed systems and new materials.

This event was supported by the Indian Polyurethane Association (IPUA) and Indian Sleep Products Federation (ISPF). The ISPF in addition to having Stand at India Mattresstech Expo had also organized a 2 day Seminar Programme with lectures on various aspects of Mattress Production.

On the first day, Dr Mahesh Gopalsamudram, Chairman, Indian Polyurethane Association and Mr. Ashok Puri, EC Member of IPUA presented the effective use of PU foam in the mattress industry. Mrs. Sangeetha R. S. Indian Manager & Mr. Zhongyao Lai, Overseas Manager, Hengchang Machinery Factory, gave a presentation

on technologies and innovations in mattress quilting machines; Mr. Laurent Philippe, Director, GTA Textiles, India, gave a presentation on the role of fabric quality on the performance and aesthetics of a mattress and Mr. Muthukumar, Ex-Huntsman International gave a presentation on fire & safety in manufacturing plant.

On the second day lectures about designing new materials for sound sleep was delivered by Mr. Govind Gupta, Marketing Manager, DOW Chemicals, India. Mr. Kishor Manji Butani, Director Sales and Customer Relations, Robatech AG, Switzerland, presented about gluing solutions for mattress manufacturing. Mr. Chandra Sekar, Senior Officer, Coir Board, Cochin gave presented about Coir Vikas Yojana and Mr. Isaac Emmanuel, Head – Industrial Marketing & Advocacy, Covestro (India) Pvt Ltd presented about soft landing – mattress product stewardship in Australia. Overall, it was deduced that the technology show on mattress is making an impact and the markets are moving towards organised sector. **CT**

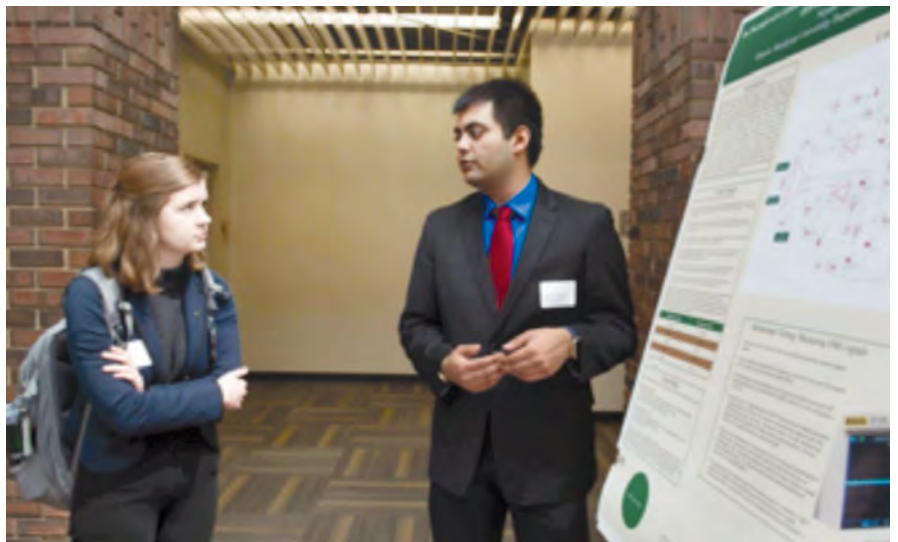




# Here is what is affecting, or being affected by, the world and the industry of sleep and wellness

## No stress about a sleep centre

A student at the Illinois Wesleyan University, Niyant Vora, is working towards the patent for an interesting invention: An in-home polysomnogram (PSG) device. This is basically a wireless version of the machine that sleep-centres use to conduct detailed sleep studies. With this machine, the cost and time of the studies will come down and so will the stress of patients that visit a sleep centre. This idea also intends to change the approach of sleep studies. Vora had a grandfather who had struggled with an unidentified brain trauma and consequent health complications like narcolepsy, where a person randomly falls asleep.



*IWU's 2018 John Wesley Powell Research Conference where Niyant Vora '19 presented his in-home PSG device invention*

With this device, one does not necessarily have to go to a sleep-centre and spend all the time and money. The same thing can be done

at home. A demonstration of the PSG device prototype has been accomplished at the 2018 John

Wesley Powell Research Conference. The invention is inching closer to a provisional patent.

## The Diary for Dreams

Dreamboard is an online forum that allows dreamers log their slumbering reveries, both good and bad. An observation by Victoria Pae noted that the aggression experienced in a nightmare may seep into a person's next dream within a week. This was found in a study under Boston University's Undergraduate Research Opportunities Program (UROP).

This indicates that the dreams immediately before nightmares with aggressive acts can foreshadow serious anxiety of the coming nightmare. Anxiety levels can also distinguish nightmares from merely unpleasant dreams (which, as per Pae, is a distinction Dreamboard's dreamers don't make). So the before-and-after dreams bookending an unpleasant dream are tainted by the unpleasantness, as per what the researchers found. This makes it important and insightful to study the content of sleepers' dreams as regular nightmares can be a barometer of certain disorders. Another surprising finding is that only one-quarter of the dreamers with nightmares in the study reported waking up after their nightmares. So maybe we don't always wake up and sweat after a bad dream.

## Start-ups can shake up

In India, a host of new players are ushering in new concepts like orthopaedic mattresses (SleepyCat), foam embedded with cooling crystals and mattresses with removable covers for better hygiene. They are also aiming at addressing the shift in the way mattresses are purchased and decided upon with 100-day trials and box formats (Wink & Nod). There are even pillow players now in the fray with unique propositions like adjustable thickness. Attention to water-resistance properties, intensive and deep feedback (Wakefit) based on actual usage, fitness-orientation etc. seem to be the new hallmarks of this industry's next generation.

## A classroom while you are sleeping

If you have been skipping sleep because you think you will sleep aplenty after you die or because you cannot do anything productive when you are sleeping, there are researchers at the University of Bern all ready to challenge you. They are now able to evidently argue that we can learn a language when we are sleeping. We can acquire the vocabulary of a new language during distinct phases of slow-wave sleep and that the sleep-learned vocabulary is possible to be retrieved unconsciously following waking. The premise is that memory formation gets mediated by the same brain structures which are involved in wake vocabulary learning.

In other words, the time spent on sleeping can actually be used to learn a new language. We know that wake-learned information undergoes a recapitulation by replay in the sleeping brain. This sleep-replay cements what we learn and helps to make newly-acquired knowledge find its new shelf in the library of our brain. But now researchers are exploring something

bigger – the first-play itself where initial processing of new information happens. Can that happen during sleep? Katharina Henke, Marc Züst und Simon Ruch of the Institute of Psychology and of the Interfaculty Research Cooperation 'Decoding Sleep' at the University of Bern, Switzerland are busy investigating that very question.

Their initial work shows that new foreign words and their translation words can be associated during a midday-nap due to associations stored into wakefulness. Looks like a person can form new semantic associations between played foreign-words and translation-words during the brain cells' active states, or 'up-states'. Maybe because, the brain cells are commonly active for a brief period of time before jointly entering into a state of brief inactivity. There is a lovely dance between the two states - the active state or 'up-state' and the inactive state or 'down-state'- they alternate about every half-second and together determine what we learn and what we store.



It was found that after waking, participants could reactivate the sleep-formed associations to access word meanings that represented with the sleep-played foreign-words put earlier. It has been found that the hippocampus, a brain structure essential for wake associative learning, can help in the retrieval of sleep-formed associations. It also helps to challenge the notion that memory-formation requires consciousness or that sleep is an encapsulated mental state.

## Sleep Anywhere

The founder of Sleeperoo, Karen Löhnert is making sure that you can sleep comfortably in



the most unusual places. She is introducing the world to a 'design sleep cube' that can allow a user to spend the night in exotic places such as a museum, a bunker, or a pier in the Baltic Sea. The capsule, which has been nominated for German Innovation Award 2019, is a 1.60 m wide and 2 m long mattress, wherein three large panoramic windows and the roof endow the user with a view of the surroundings and the sky - anywhere.

## Left-Right-Left: Brains and Sleep

Critically-ill patients who have higher levels of wakefulness can be separated from a mechanical ventilator - With both their right and left brains experiencing the same depth of sleep, as per a research "Sleep and Pathological Wakefulness at Time of Liberation from Mechanical Ventilation". The authors used polysomnography, or a sleep study, and a novel index with Odds Ratio Product (ORP) that provides a continuous digital score from 0 (very deep sleep) to 2.5 (full wakefulness). It was published in the American Thoracic Society's American Journal of Respiratory and Critical Care Medicine. The idea is to determine if the ORP had any likelihood that a patient could be successfully removed from mechanical ventilation. This was of interest as patients under mechanical ventilation in intensive care units have been observed

to suffer from severe sleep-deprivation. And ventilators can cause lung damage, infections and other health problems. Separation from mechanical ventilation relates to a number of physiological systems that can be determined by sleep-deprivation. It was found that classical sleep stages as determined by conventional sleep-scoring guidelines were not associated with success or failure of the Spontaneous Breathing Trial (SBT). Also, longer durations of full wakefulness as measured by ORP (>2.2) were highly correlated with a successful SBT and extubation. Looks like, sleep-deprivation produces a brainwave pattern that resembles pathological wakefulness. Even clinically "awake" patients can be "obtunded," i.e. not fully awake. This can be the flip side of sleep deprivation, according to the study's authors.



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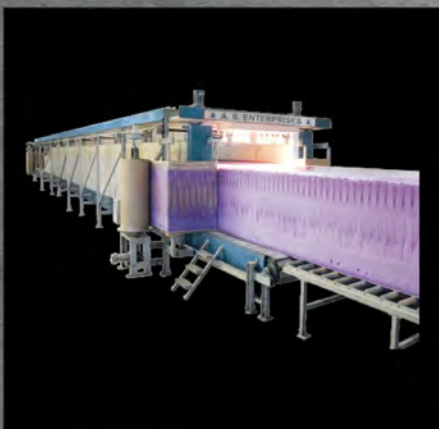
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