CREATIVE HORIZONS

CONNECTING IDEAS, CRAFT & INNOVATION

2026 | Premiere issue

An FDDI Initiative

INDUSTRY CONNECT

The Future of Fashion Is Sustainable, Not Fast

DESIGN & INNOVATION

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FROM THE MANAGING DIRECTOR'S DESK

Dear Readers,

Warm greetings from the Footwear Design & Development Institute (FDDI), an Institution of National Importance (INI), and best wishes for a healthy, productive, and inspiring New Year 2026.

As we usher in the new year, FDDI, established in 1986 and poised to celebrate four decades of excellence, takes pride in launching its quarterly magazine, Creative Horizons. This publication marks an important milestone in our journey and serves as a reflection of FDDI's dynamic academic and creative ecosystem.

Creative Horizons embodies the ethos and vibrant culture of FDDI, showcasing our achievements and aspirations as a premier institution dedicated to design, innovation, and industry relevance across Footwear, Leather Goods & Accessories, Fashion, and Retail. It is a platform that captures the confluence of ideas, craftsmanship, and technological advancement that define our institution.

Available in both print and digital formats, this magazine seeks to connect ideas, craft, and innovation while highlighting the intellectual energy and creative excellence that thrive within FDDI's academic corridors.

The Institute continues to resonate with creativity, continuous innovation, and a deeply human-centric approach to education. Guided by FDDI's Vision 2030, we remain firmly committed to innovation-led learning, sustainability, entrepreneurship, robust industry integration, and global competitiveness.
Creative Horizons stands as a testament to this collective vision and commitment.

I am confident that this magazine will serve as a valuable resource for industry stakeholders, keeping them informed and inspired by the latest developments in fashion trends, design thinking, and emerging technologies.

I extend my heartfelt gratitude to our faculty members, staff, students, alumni, and industry partners for their unwavering support, dedication, and trust, which continue to strengthen FDDI's foundation.

The runway ahead is vast and full of promise. Guided by Vision 2030 and strengthened by the unwavering support and continued faith reposed by our faculty members, staff, students, alumni, and industry partners, FDDI will continue to scale new heights and contribute meaningfully to India's growth story.

Vivek Sharma, IRS
(Managing Director, FDDI)

CREATIVE HORIZONS

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FDDI
CONVOCATION 2025
Hon'ble President of India
Smt. Droupadi Murmu
Confers Degrees at a Landmark Ceremony

FDDI hosted its Convocation 2025 on 1st December 2025 at Bhim Hall, Dr. Ambedkar International Centre, Janpath, New Delhi for 547 graduating students from eight campuses—Noida, Chennai, Kolkata, Rohtak, Guna, Ankleshwar, Chandigarh and Patna.

The grand event was graced by Her Excellency, the Hon'ble President of India, Smt. Droupadi Murmu, Chief Guest; Shri Piyush Goyal, Hon'ble Minister of Commerce & Industry, Government of India and Guest of Honour; Shri Jitin Prasada, Hon'ble Minister of State for Commerce & Industry, Government of India.

On behalf of FDDI, Shri Vivek Sharma, IRS, Managing Director (MD), FDDI welcomed the Chief Guest and all the other delegates during which Col. Pankaj Kumar Sinha, Secretary, FDDI; Ms. Pragya Singh, IRS, Executive Director (ED) - FDDI, Banur campus, Ms. Manju Maan, ED, FDDI Noida/Guna; Ms. Sarita Duhan, ED - FDDI, Rohtak campus, Mr. Neeraj Kumar, ED - FDDI,

Kolkata/Patna campus and the staff & students were also present.
Ms. Nidhi Kesarwani, IAS, Joint Secretary, DPIIT; Mr. Motilal Sethi, Managing Director, M/s. Saroj International, President – Indian Leather Garments Association (ILGA), Mr. Sanjay Gupta, Director, M/s. Sandeep Rubber, President - Indian Footwear Components Manufacturers Association (IFCOMA), industry leaders, academic representatives,

FDDI alumni, proud parents and persons from the print & electronic media also witnessed the institution's moment of pride.

The Convocation Ceremony commenced with the lighting of the ceremonial lamp by the Chief Guest along with other distinguished dignitaries, symbolizing an auspicious beginning. This was followed by the administration of the Graduate Oath by the Managing Director, FDDI, during which students pledged their commitment to professionalism, responsibility, and excellence. The Managing Director then delivered the Welcome Address, acknowledging the gracious presence of the Hon'ble President of India, Hon'ble Ministers, distinguished guests, industry leaders, faculty members, proud parents, and the graduating students.

The Hon'ble President of India, Smt. Droupadi Murmu addressed the august gathering by conferring degrees and medals on meritorious students and recalling that FDDI was declared an Institution of National Importance in 2017, reaffirming its role in nurturing specialised talent for the footwear, leather, fashion and retail sectors.

Highlighting India's position as the world's second-largest producer and consumer of footwear, President remarked that as FDDI graduates advance in their careers and establish new ventures, the nation's exports will rise, employment will strengthen and Atmanirbharta will gain decisive momentum.

The Hon'ble President further emphasised that modern design extends far beyond aesthetics, serving as a tool to solve problems, enhance comfort and safety, conserve resources and improve quality of life.

Encouraging students to remain lifelong learners committed to integrity and environmental responsibility,

President praised FDDI's significant contribution to livelihood generation, noting that the footwear and leather sectors create dignified opportunities for youth, women and first-generation learners while playing a vital role in India's economic growth.

Delivering the inspiring address, the Hon'ble Minister of Commerce & Industry, Government of India, Shri Piyush Goyal, congratulated the graduating students and highlighted their pivotal role in linking India's traditional strengths with modern industry demands.

He emphasised that FDDI graduates are uniquely positioned to connect village artisans, factory engineers and discerning consumers seeking high-quality products. Shri Goyal outlined five guiding principles for the graduating batch as they begin their professional journeys.
First, he urged them to connect deeply with villages and grassroots innovation, citing the example of biodegradable leather alternatives made using banana fibre showcased at Bharat Pradarshani. Second, he encouraged exploring blue-ocean opportunities by identifying untapped global niches such as diabetic-friendly and ergonomically designed footwear. Third, he called upon students to help move India up the global value chain by creating premium, durable and sustainably crafted products. Fourth, he emphasised the need to uphold

uncompromising ethics, safety and quality as the bedrock of India's design and manufacturing ecosystem.

Finally, he appealed to them to embrace Swadeshi and contribute to Atmanirbharta, noting that India's journey toward becoming a $30 trillion economy by 2047 will be powered by domestic talent and innovation.

Shri Jitin Prasada, Hon'ble Minister of State for Commerce & Industry, Government of India delivering the convocation address commended FDDI's expanding national footprint across its 12 campuses and highlighted the institute's unique position at the convergence of design, technology, manufacturing and retail. He noted that FDDI not only learns from industry but also actively contributes to elevating it, helping the sector move up the value chain through skilled talent, innovation and strong industry–academia collaboration.

During the convocation, students from FDDI's displayed their creative and academic excellence through an impressive exhibition of presentations that highlighted their final-year capstone projects, innovative product prototypes, design portfolios and industry-oriented research, reflecting the strong technical training and multidisciplinary skills imparted by the institute.

SUSTAINABLE FOOTWEAR

Opportunities f
Manufacturers in t
Plant-Based Leath

Photo by Kazden Cattaian on Unsplash

The global footwear industry is undergoing a significant transition as sustainability becomes a core business imperative rather than a niche positioning. International brands are increasingly adopting plant-based and bio-derived materials in response to regulatory pressure, evolving consumer preferences, and environmental commitments. In this context, Indian footwear manufacturers are well positioned to capitalise on the expanding global

market for sustainable and organic leather alternatives, as highlighted by Exim Bank.

Over the past decade, leading global brands have demonstrated the commercial viability of sustainable footwear. Marks & Spencer was among the early movers, launching its Footglove Earth range nearly ten years ago. The product line incorporated innovative materials such as fabric linings made from yarn derived from ground coffee beans, along with soles produced using natural rubber and rice husks. This marked an early example of integrating agricultural by-products into commercial footwear manufacturing.

Luxury brands have since accelerated adoption.

Stella McCartney has committed to transitioning entirely to plant-based materials across its product portfolio, including footwear. Its S-Wave 1 and S-Wave 2 sneakers, made using grape-based alternatives, are positioned as the brand's most sustainable trainers to date, underscoring growing consumer acceptance of non-animal materials even in premium segments.

Similarly, Gucci launched its vegan footwear range in 2021, manufactured in-house using its proprietary vegan leather, Demetra.

The material combines viscose, wood pulp compounds, and recycled steel, reflecting a broader industry shift towards circularity, material innovation, and reduced dependence on animal-based inputs.

In mature markets such as Europe and North America, sustainability is now a mainstream purchasing criterion, supported by tightening environmental regulations and heightened awareness of carbon footprints and supply-chain transparency.

This structural shift presents a significant export opportunity for manufacturing economies capable of supplying high-quality, sustainable footwear at scale.

India holds a strategic advantage in this evolving landscape. The country benefits from a strong and diversified footwear manufacturing base, a large pool of skilled labour, competitive production costs, and an expanding ecosystem of green start-ups focused on material innovation. These strengths position India to emerge as a global manufacturing and export hub for sustainable footwear.

Crucially, India has abundant access to agricultural by-products such as banana fibre, coconut husk, hemp, jute, and sugarcane bagasse. These materials can serve as cost-effective and environmentally friendly raw inputs for plant-based leathers, biodegradable soles, and other footwear components. Leveraging these resources can enable Indian manufacturers to enhance value addition, reduce environmental impact, and align with global sustainability standards.

To fully realise this potential, coordinated efforts will be required across industry, government, and research institutions. Investments in material R&D, scaling of bio-based production technologies, certification and compliance with international sustainability standards, and integration into global supply chains will be critical for positioning India as a preferred sourcing destination for sustainable footwear.

Leather players flag tariffs issues in meeting with Parliamentary Panel.

On January 7, 2026, a delegation from the leather sector met the Parliamentary Standing Committee on Commerce in Chennai.

The delegation included PR Aqeel Ahmed, former Chairman of the Council for Leather Exports (CLE), Abdul Wahab, Regional Chairman of CLE, and R Selvam, Executive Director of the Council.

According to the officials, higher US tariff measures have affected the competitiveness of Indian leather products in the US market, one of the sector's major export destinations.

"The leather sector is labour-intensive and supports a large workforce, including women and marginalised communities," the delegation noted. They warned that prolonged trade disruptions could have serious socio-economic consequences and urged the committee to take up the matter at policy and diplomatic levels, extend support measures to exporters, and promote market diversification.

India's apparel retail market poised to reach ₹16 lakh crore by FY 2030

India's apparel retail market is set for a significant expansion over the next five years, with industry size projected to touch nearly ₹16 lakh crore by 2029-30, driven by rising disposable incomes, rapid digitalisation and strong growth in value fashion and e-commerce, according to a CareEdge Ratings report.

Organised retail currently accounts for approximately 41 per cent of the total market and is expected to grow at a faster pace of 10-13 per cent, supported by increasing consumer preference for branded apparel, the entry of international brands and the expansion of structured retail formats.

A key driver of growth is the value fashion segment, which is benefiting from rising brand awareness and consumer price sensitivity. Value fashion, estimated at ₹3.5 lakh crore in 2023-24, is expected to grow at a CAGR of 7 per cent to reach ₹5.0 lakh crore by 2029-30.

Retailers such as Zudio, Max Fashion, and Reliance's Yousta are aggressively expanding their store networks, particularly across Tier-2 and Tier-3 cities, which are rapidly emerging as key consumption hubs. In parallel, e-commerce continues to act as a major growth engine for the sector.

Online channels currently account for about 22 per cent of organised apparel retail and are projected to increase their share to nearly 25 per cent by 2029-30, translating into a market size of around ₹5.0 lakh crore. Rising internet penetration, growing smartphone adoption, and the strong influence of Gen Z consumers on fashion trends are accelerating the transition toward digital-first and omnichannel retail strategies.

INDUSTRY ROUNDUP

Govt Rolls Out ₹7,295-Crore MSME Credit Support

On 02nd January 2026, the government rolled out two critical components of the ₹ 25,000 crore six-year Export Promotion Mission (EPM) - the long-awaited interest subvention scheme with a corpus of ₹ 5,181 crore and ₹2,114 crore collateral support for export credit.

A base interest subvention (subsidy) of 2.75 per cent, on pre- and post-shipment rupee export credit extended by eligible lending institutions, will be provided to MSME exporters of goods based on a positive list covering 75 per cent of total tariff lines. There is a provision for additional incentive for exports to notified under-represented or emerging markets, according to the Commerce & Industry Ministry.

The interest subvention scheme will be applicable exclusively to MSME exporters. The subvention rate will be floating in nature and benchmarked against the repo rates of India and comparable economies.
The positive list has been prepared using a transparent and data-driven methodology, prioritising labour-intensive and capital-intensive sectors, MSME concentration and value addition, while excluding restricted and prohibited items, waste and scrap, and products covered under overlapping incentive schemes, according to the government.

The earlier interest equalisation scheme, which got replaced by the new version of the scheme, lapsed on December 31, 2024, and exporters had been waiting for its resumption for over a year.

Under the second intervention, a collateral guarantee support for export credit is being introduced in partnership with the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE).

Guarantee coverage of up to 85 per cent will be provided for micro and small exporters and up to 65 per cent for medium exporters, with a maximum outstanding guaranteed exposure of ₹10 crore per exporter in a financial year.

Textile PLI Scheme Deadline Extended to March 31, 2026

The government has further extended the deadline for submission of fresh applications under the Production Linked Incentive (PLI) Scheme for Textiles until March 31, 2026.

The extension comes in response to the strong interest shown by textile companies since the application portal reopened in August 2025. Proposals are being submitted across priority segments, including man-made fibre (MMF) apparel, MMF fabrics, and technical textiles.
The latest extension provides additional time for companies to participate in the flagship scheme, aimed at boosting domestic manufacturing and exports in the textile sector.

The FUTURE of Fashion Is Sustainable, Not Fast.

Photo by Cherie Birkner on Unsplash

The global fashion industry is at a critical turning point. For decades, fast fashion has shaped how products are designed, manufactured, and consumed—prioritizing speed, scale, and affordability. While this model has democratized fashion, it has also resulted in significant environmental impact, resource depletion, and ethical concerns across global supply chains. Today, sustainability is no longer a choice or trend; it is a responsibility that will define the future of fashion.

Sustainable fashion represents a shift in mindset—from short-term consumption to long-term value creation. It focuses on thoughtful design, responsible material selection, ethical manufacturing, and reduced waste. The future lies in quality over quantity, durability over disposability, and purpose over speed. Consumers are increasingly aware of the environmental and social footprint of their choices and expect brands to operate with transparency, accountability, and integrity.

Innovation is a key enabler in this transition. Technological advancements in material science, digital design, and production planning are helping reduce overproduction, lower carbon emissions, and optimize resource use. From recycled and bio-based materials to smarter manufacturing processes, sustainability and innovation are now deeply interconnected. At the same time, circular fashion models such as recycling, resale, and extended product life cycles are reshaping how fashion is created and consumed.

At REPL, we have consciously embraced this transformation by shifting our focus from fast fashion to responsible and conscious production. We are actively working toward ethical sourcing, transparent supply chains, and environmentally responsible manufacturing practices.

By collaborating with trusted vendors who share our values, prioritizing sustainable materials, and minimizing waste at every stage of production, we are committed to creating fashion that respects both people and the planet.

Our approach emphasizes quality craftsmanship, long-term partnerships, and compliance with ethical and environmental standards, ensuring that growth is achieved responsibly and sustainably.

Equally significant is the role of craftsmanship and heritage in building a sustainable future. Traditional techniques, local sourcing, and artisanal skills naturally align with slow and responsible fashion principles. By blending time-honoured crafts with modern design sensibilities and technology, the industry can create products that are culturally meaningful, environmentally conscious, and commercially viable. This balance of tradition and innovation defines the new direction of global fashion.

Education and research institutions play a vital role in shaping this transition. By nurturing future designers, technologists, and leaders with a strong foundation in sustainability, ethics, and innovation, we can ensure that responsible practices become embedded in the industry's DNA. Continuous research, industry collaboration, and knowledge sharing are essential to building a resilient and future-ready fashion ecosystem.

The journey toward sustainable fashion requires collective action, commitment, and long-term vision. While the challenges are complex, the opportunity to create a more responsible, inclusive, and innovative industry is immense. The future of fashion will not be driven by speed alone—it will be driven by purpose, responsibility, and conscious decision-making.

The future of fashion is not fast. It is sustainable.

– **Firozze Kamaal Abbasi** – CEO & Managing Director, Renuka Exports Private Limited (REPL)

The Smart Turn in Fashion: The Rise of Circular and Rental Fashion

The current fashion statement is not about colors, designs, or ramps but awareness. After years of fast fashion, the industry has now swivelled towards a smarter and more sustainable approach called circular fashion. Whether it is designer fashion or mass fashion, all have learned that sustainability is not only in style but makes good business sense.

For years, the fashion cycle went on this way: "Buy, Wear, Discard." But a new way of thinking, embodied in this new mantra of Reuse, Repair, and Rent, is revolutionizing fashion and making a new definition of dressing well. The philosophy of circular fashion centers on clothes being given multiple lives. A Patagonia Worn Wear initiative is a shining example in this area. They take old clothes and make them into "treasures" all over again. They get money in exchange for used articles, repair them, and put them up for sale from where they can save "huge quantities of water, energy, and greenhouse gases."

Photo by Luba Glazunova on Unsplash

That is a circular economy in action, where a product that was considered waste before can now have value. Patagonia's strategy gives consumers a level of loyalty and support in creating jobs in repair efforts, and it also prolongs the life of a product while reducing negative environmental effects. The statistics speak for themselves: over 120,000 used items repurposed and resold, not to mention reduced emissions and a loyal community of environmentally engaged consumers.

Although circular fashion ensures clothes have a longer lifespan, 'rental fashion' emerged as a new way of mindful consumption. The idea of 'rental fashion' gained popularity through online portals such as Rent The Runway and HURR, which introduced 'fashion without ownership.' In India, 'rental fashion' gained pace with local innovators such as Flyrobe, Stage3, and Date The Ramp, which provide affordable designer wear for weddings, parties, and other events – from bridal wear to tuxedos.

Circular and rental fashion are disrupting consumer behaviour in a way that combines sustainability with style. They show that innovation in fashion can definitely benefit consumers without harming the Earth. Instead, it's all about creating a cycle of usage, care, and creativity where both looking good and doing good become in fashion.

Mr. Deepak Attri,
Retail Operations & Business Analysist with 13+ years of experience and certified PMKVY Assessor

India Footwear Industry: A Global Manufacturing Powerhouse Rooted in Sustainability and 'BHA' Fit.

A Science-First Transformation of Indian Footwear

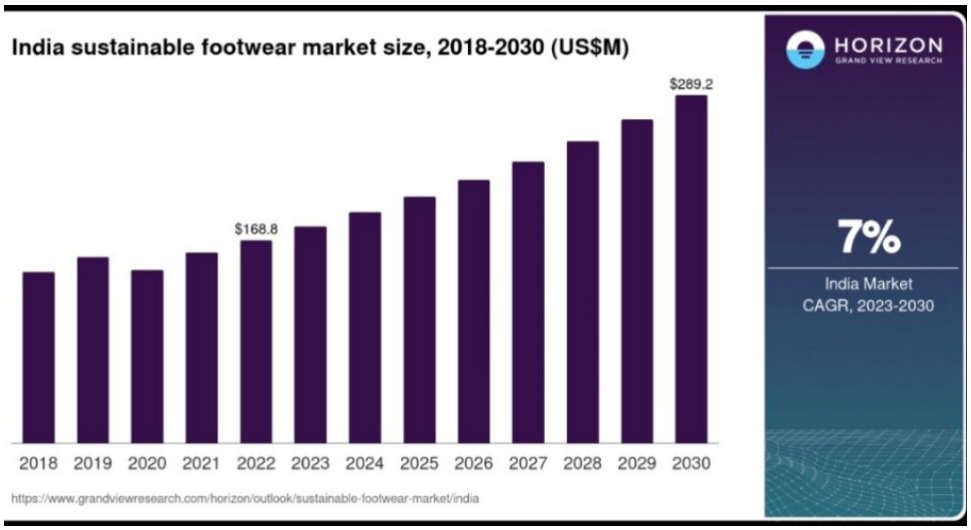
As the global footwear industry undergoes one of its most significant transformations in decades, India is emerging as the epicenter of a new science-first manufacturing era. No longer defined merely by scale or cost competitiveness, the Indian footwear ecosystem is being reshaped by advanced materials, biomechanics-led design, sustainability imperatives, and an indigenous national sizing standard known as 'Bha' (Bharat). By 2030, non-leather footwear encompassing sneakers, athleisure, sports, and performance categories is projected to account for 70–75 percent of total market volume, up from nearly 25 percent a decade ago. This transition reflects a fundamental rethinking of how footwear is designed, manufactured, fitted, and consumed.

From Leather Legacy to Performance and Lifestyle Footwear

The rapid expansion of non-leather footwear is driven by rising health and fitness awareness, growing demand for lightweight and versatile products, the expansion of sports and everyday comfort categories, and continuous innovation in polymers, foams, and engineered textiles. India's ability to scale these technologies at competitive costs positions it as a strategic hub for both domestic consumption and global supply chains. What was once a predominantly export-oriented leather industry is now evolving into a technology-driven, consumer-centric footwear ecosystem aligned with contemporary lifestyle expectations.

Sustainability as a Design and Manufacturing Imperative

Sustainability has shifted from a consumer preference to a non-negotiable design and manufacturing mandate. The industry is increasingly adopting chrome-free tanning processes, plant-based bio-PU materials, sugarcane-based EVA foams, and uppers produced from recycled PET yarns. Alongside material innovation, consumers are demanding ethical sourcing, traceability, and lower carbon footprints without compromising comfort or durability.



India's agri-based resources, cost-efficient manufacturing infrastructure, and strengthening research and development capabilities enable sustainable footwear production at scale.

Biomechanics, Health & Anatomy Redefining Footwear Purpose

The future success of footwear is no longer dictated by fashion cycles alone but by health, comfort, and long-duration wear performance. By embracing Biomechanics, Health and Anatomy (BHA) as a core design philosophy, the Indian footwear industry is shifting from corrective footwear to preventive everyday wellness solutions and from style-first approaches to science-led comfort and performance. Biomechanical alignment, improved shock absorption, effective load distribution, gait-responsive constructions, and enhanced stability are now integral to footwear design, addressing lifestyle challenges such as fatigue, joint stress, and lower-back discomfort.

Bridging the Fit Gap Through the 'BHA' Sizing Standard

For decades, Indian consumers have relied on UK, EU, and US sizing systems that often fail to accommodate Indian foot morphology, which typically includes wider forefoot dimensions, higher insteps, and different heel-to-ball proportions.
To resolve this long-standing issue, the Government of India, through the CSIR–Central Leather Research Institute, developed the 'Bha' (Bharat) Sizing System.

Built on a nationwide 3D foot-scanning survey, the system consolidates fourteen global sizing variations into eight India-specific size codes and offers region- and gender-specific fit intelligence. This initiative enhances comfort, reduces e-commerce return rates, and strengthens consumer trust and brand loyalty.

Manufacturing-Led Growth and Employment Expansion

The footwear sector is positioned to become one of India's most significant engines of manufacturing-led economic growth. The market is projected to reach USD 90 billion by 2030, representing nearly an eightfold expansion. This growth is expected to generate millions of jobs across manufacturing, components, logistics, research, and retail, with strong expansion in Tier-2 and Tier-3 cities supporting inclusive development. Global brands such as Nike, Adidas, and Crocs are expanding production in India, with Tamil Nadu alone expected to generate approximately 135,000 jobs during 2025–26.

Digital Factory-to-Consumer Transformation

The rise of direct-to-consumer models and digital marketplaces is reshaping the footwear value chain. These platforms are evolving into data-driven ecosystems that provide real-time consumer insights, enabling manufacturers to reduce waste, optimize inventories, and accelerate speed-to-market. This digital integration is strengthening India's competitiveness by aligning production more closely with consumer demand.

FDDI as a National Knowledge and Innovation Hub

FDDI plays a pivotal role in the sector's transformation, evolving from a skills-training institution into a national knowledge and innovation hub.

Through leadership in materials research, biomechanics, sustainability, and the Bha sizing system, along with the integration of artificial intelligence for trend forecasting, rapid prototyping, and mass customization, FDDI is supporting industry competitiveness. Its industry–academia collaborations are also contributing to policy formulation, standardization, and long-term sectoral growth.

Conclusion:
Born in India, Built for the World

By 2030, India will no longer be perceived merely as a global manufacturing base but as a global footwear innovation and brand leader. Through the convergence of sustainability, biomechanics, artificial intelligence, and indigenous fit intelligence, India is shaping a new footwear identity that is rooted in science, designed for health, and engineered for the world.

Mr. Niraj Shah
Footwear Industry Consultant |
45 years experience |
Product, Sales & Marketing

Sustaining Tradition:
Rajasthani Leather Craft Reimagined through Biodegradable Materials

Rajasthan's leather craft traditions reflect a deep relationship between material, environment, and cultural expression, shaped by generations of artisanal knowledge and regional identity. Historically, leather products from the region were created using naturally treated materials and processes that respected ecological cycles while allowing rich surface ornamentation through embroidery and hand-finishing. As environmental concerns grow and the availability of traditional resources declines, the future of these crafts depends on thoughtful innovation that can sustain both cultural integrity and environmental responsibility.

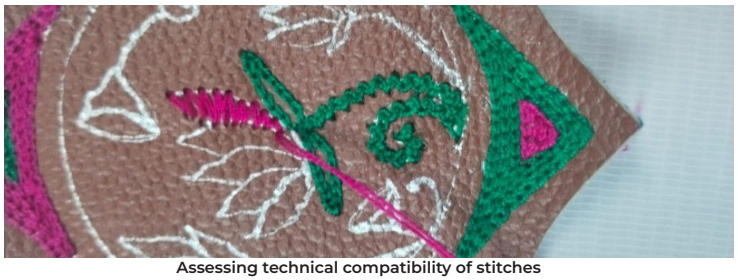
In this context, the development of biodegradable, plant-based leather through the collaborative efforts of the Indian Council of Agricultural Research (ICAR) and the Footwear Design and Development Institute (FDDI) marks a significant step toward sustainable craft practices. Combining agricultural research with footwear and leather product expertise, this collaboration has resulted in a material designed to replicate the flexibility, strength, surface finish, and tactile qualities of conventional leather while remaining biodegradable and environmentally benign. The material offers artisans a viable alternative that aligns with traditional working methods rather than replacing them.


Biodegradable material


Traditional Embroidery


Finished Product

Biodegradable leather developed by the ICAR when developed into products by FDDI Kolkata CoE, is found to be compatible with established craft techniques such as cutting, stitching, folding, and hand-finishing, allowing artisans to continue working within familiar frameworks. Its edges respond effectively to colour absorption, edge coloring, and dense embroidery, ensuring that the visual depth and tactile richness associated with Rajasthani leather products are preserved. This compatibility is essential for maintaining the cultural authenticity of embroidered leather goods while transitioning toward sustainable materials.


Assessing technical compatibility of stitches

True sustainability in leather products extends beyond the outer surface to include internal reinforcements and linings. Natural interfacings made from cotton, jute, flax, banana fibre, and recycled cellulosic textiles provide structural stability while remaining breathable and biodegradable.

These materials help distribute embroidery tension evenly, reducing stress on the biodegradable leather and enhancing durability. Wool-based cushioning, traditionally abundant in Rajasthan, is reintroduced as a natural padding material, offering shock absorption, moisture regulation, and long-term comfort without the environmental cost of synthetic foams.

Plant-derived and natural linings such as organic cotton, handloom fabrics, bamboo-based textiles, and plant-fibre nonwovens replace synthetic alternatives, improving wearability and supporting traditional dyeing and printing practices. Eco-friendly adhesives, including water-based binders, natural resins, and starch-derived formulations, ensure effective bonding without toxic residues. Cotton tapes and plant-fibre cords are used for bindings and edge reinforcement, maintaining flexibility, repairability, and biodegradability throughout the product.

Rajasthani embroidery remains central to the identity and performance of these leather products. Techniques such as Taanka, Zardozi, Kantha, Herbeja, Salwali, and chain stitch adapt well to biodegradable leather surfaces, maintaining stitch precision, thread tension, and surface integrity.

Embroidery continues to serve both aesthetic and structural functions, while metallic embellishments and fittings are used thoughtfully for their durability and recyclability. Traditional finishing techniques such as hand-stitching, folding, burnishing, and natural wax polishing further reinforce a handcrafted aesthetic while reducing reliance on synthetic coatings.

By integrating biodegradable leather developed through the ICAR–FDDI collaboration with natural reinforcements, linings, and traditional embroidery, leather products can evolve into near-complete biodegradable systems. At the end of their usable life, these products can safely decompose or be repaired and reused, aligning with circular design principles that emphasise longevity, ecological regeneration, and reduced waste.

This collaborative approach demonstrates how scientific research and design education can work alongside artisanal traditions to create sustainable pathways for the future. By bridging innovation with heritage, biodegradable leather products enriched with Rajasthani embroidery emerge as ethical, culturally grounded, and future-ready expressions of India's living craft traditions.

Biodegradable Leather Board

Biodegradable Wool & Threads

Biodegradable Wool Padding

Ms. Basumitra Ghosh Mukherjee
Sr. Faculty (LLPD), Head of CoE - FDDI Kolkata

Ms. Basumitra Ghosh Mukherjee, Senior Faculty (Grade 1) and Head of the Centre of Excellence (CoE) - FDDI Kolkata is a senior academic and technical professional with extensive experience across industry, research, and institutional development in the leather and lifestyle products sector.

A Master's graduate in Leather Apparel Design and Technology from NIFT, she began her career in the leather goods export industry in 2002 and spent nearly a decade working with leading global brands including ZARA, MANGO, NEXT, Debenhams, Clarks, and Samsonite, culminating in a vice-presidential–level leadership role.

At the CoE, her work focuses on product development, manufacturing excellence, sustainability, and market relevance, with contributions to national and international initiatives including craft cluster upgradation in Shantiniketan, SADC region market studies, and leather sector capacity building in Tanzania, reflecting a strong industry-informed and implementation-driven approach to research and education.

Hyacinth Harmony

"Sustainable Crafting"

Empowering Communities Through Water Hyacinth Innovations"

This project was undertaken as a focused exploration of water hyacinth, examining both its environmental impact and its potential as a sustainable material. The objective was to understand how an invasive aquatic plant could be transformed into meaningful, functional, and value-added products. The initiative provided an opportunity to closely observe the processes involved, practical challenges, and collaborative efforts required to convert water hyacinth into usable forms.

Working in association with the Swachhtapukare Foundation offered valuable insights into the intersection of material exploration, sustainability, and community engagement. Through hands-on experience, I gained a comprehensive understanding of how water hyacinth is collected, processed, and refined, while also learning how thoughtful design interventions can contribute to products that are both environmentally responsible and socially relevant.

This journey significantly strengthened my appreciation for teamwork, traditional knowledge systems, and responsible design thinking. It contributed meaningfully to my personal and professional growth, reinforcing the importance of sustainability-driven approaches in contemporary product and craft practices. I am sincerely grateful to the Swachhtapukare team for their guidance and support, and I extend heartfelt thanks to my parents for their constant encouragement. As part of the project outcomes, I developed a range of functional products using water hyacinth, including pencil stands, notebook covers, file covers, storage boxes, and utility boxes. These products were designed to celebrate the material's natural texture, while enhancing their aesthetic appeal and functional value through thoughtful surface detailing.

To further enrich the products, block printing was applied to selected items such as pen stands, file covers, jewellery boxes, and storage boxes. Given the handcrafted and textured nature of water hyacinth, the surfaces were first prepared using natural treatments to create a relatively smooth and stable base.

Hand-carved wooden blocks, featuring both traditional and contemporary motifs, were then used with eco-friendly dyes.
Each block was carefully aligned and pressed to ensure clarity, with separate blocks employed for different colours.

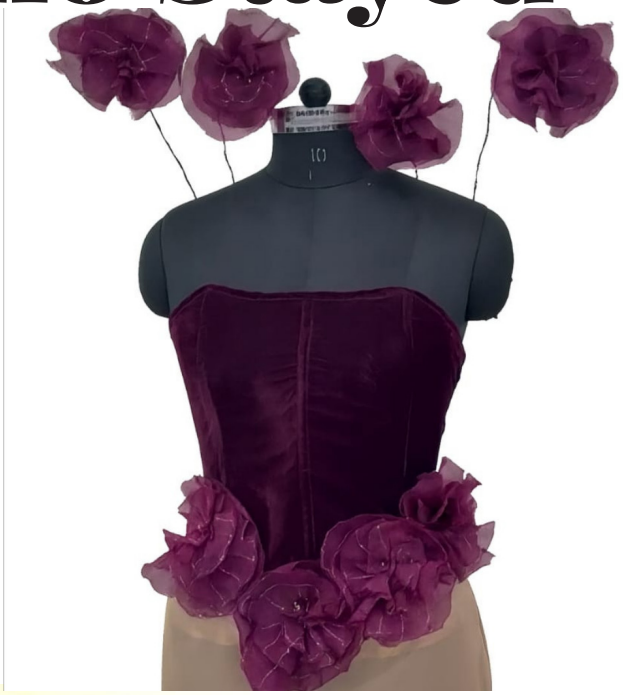
After printing, the products were naturally dried and finished with a light protective coating to enhance durability while preserving the integrity of the printed designs.

By integrating traditional block-printing techniques with sustainable materials, the project demonstrates how craft, design, and environmental responsibility can converge to create unique, eco-conscious utility products.

Mr. Srijan Saha,
Fashion Design, 5th Semester,
2025 Batch, FDDI, Kolkata

Collection Theme:

“The One Who Stayed”



“The One Who Stayed” is a couture collection rooted in the idea of “My Favourite Place”, exploring the deeply personal journey of surviving loneliness, emotional toxicity, and unspoken struggles. At its core, the collection reflects the quiet power of healing through the presence of one person who truly understands and offers emotional safety.

The garments juxtapose inner pain with emotional renewal, translating vulnerability into strength. Mechanical flowers emerge as a central motif, symbolizing transformation, rebirth, and inner growth. Each piece evolves into a form of living art, revealing resilience, emotional depth, and the subtle strength found in healing.

The featured artwork is a structured velvet corset in a deep burgundy hue, representing emotional intensity and endurance. The firm architectural structure contrasts with soft, airy 3D organza flowers placed at the waist, while wired blooming flowers rise from the neckline, suggesting growth emerging from restraint. This interplay between rigidity and softness mirrors the transition from emotional confinement to release.

To enhance the narrative, mini DC motors powered by a compact battery are integrated into the garment, enabling the flowers to rotate and bloom. This kinetic movement visually expresses healing in motion, transforming emotional pain into growth and renewal.

Blending wearable art, emotional storytelling, and kinetic couture, the collection invites viewers to witness the journey from emotional struggle to inner blooming. “The One Who Stayed” seeks to evoke a shift—from pain to healing, from isolation to connection offering a fresh, intimate perspective on resilience and self-growth.

Ms. Tejaswani,
Fashion Design, 7th Semester,
2022 Batch, FDDI, Chandigarh

Pattachitra

Reviving Traditional Art Through Product Design

This creation draws inspiration from the rich heritage of Pattachitra art practiced in Pingla village, Midnapore, renowned for its expressive narrative style and intricate hand-painted motifs. The project seeks to reinterpret this traditional art form within a contemporary design context by thoughtfully integrating it into functional product design.

The design features wooden gussets crafted from reclaimed wood, deliberately selected to promote sustainability and responsible material usage. Hand-rendered Pattachitra motifs are meticulously painted onto these wooden surfaces, transforming them into visual storytelling elements that anchor cultural meaning within the product. These gussets are paired with finely crafted leather, creating a refined dialogue between traditional art, natural materials, and modern craftsmanship.

Through this work, the intention is to preserve and reimagine an indigenous art form while developing a premium range of leather products that balances cultural value, sustainability, and contemporary aesthetics.

The product range comprises a sling bag, laptop bag, and tote bag, each incorporating hand-painted wooden gussets inspired by Pattachitra art. While the sling and laptop bags emphasize the contrast between painted wood and premium leather, the tote bag further integrates traditional Kantha stitching on the leather panels, adding an additional layer of handcrafted textile expression. Collectively, the products demonstrate a thoughtful fusion of functional design, indigenous art, and artisanal detailing within a contemporary leather product range.

Ms. Anindita Ghorai,
Leather Lifestyle & Product Design,
3rd Semester, 2024 Batch,
FDDI, Kolkata

LEGACY OF EXCELLENCE

Defining Style Reinventing Leather

Superhouse Group is one of the leading exporters of leather footwear and accessories from India. We have 22 factories in Unnao, Kanpur, Agra, Noida, Kolkata, each specializing in different products. Our passion for perfection and assurance towards quality is our prime responsibility. Over the past four decades, we expanded our business in more than 50 countries and have established our wholly owned subsidiaries in the US, UK, UAE, Germany, Spain and France. Our development can be well seen in our flagship brand Allen Cooper present in numerous retail & e-commerce platform.

Superhouse Group

Corporate office : 15/288, Civil Lines, Kanpur (India)
Email : info@superhousegroup.com | Website : www.superhousegroup.com

ALEAN GALLERY

Mr. Ajeet Raj and **Ms. Aatya Patel**, esteemed alumni of FDDI Kolkata campus of the School of Leather Goods and Accessories Design (LGAD), 2019-23 batch are the founders of Alean Gallery, a prominent branding and marketing agency in India. Their journey from design students to successful creative entrepreneurs exemplifies the power of collaboration, innovation, and a shared vision for crafting meaningful brand experiences. Anchored in strong design fundamentals and enriched by contemporary, insight-driven thinking.

Alean Gallery embodies their belief that purposeful creativity can deliver tangible business impact.

Professional Journey

Ajeet and Aatya's paths first converged at FDDI, where a shared passion for design, storytelling, and strategic thinking laid the foundation for a lasting creative partnership. After graduation, both explored diverse professional landscapes, gaining rich industry exposure that sharpened their individual strengths and broadened their perspectives

Ajeet Raj went on to build a strong foundation in design innovation, CAD solutions, and creative strategy, supported by extensive hands-on experience and leadership roles across projects. Complementing this, Aatya Patel developed expertise in brand management, training and development, strategic planning, and creative direction. Together, their distinct yet highly synergistic skill sets culminated in the inception of Alean Gallery—a platform where design thinking seamlessly integrates with business strategy, transforming ideas into impactful brand solutions.

Alean Gallery is a creative branding and marketing agency operating at the intersection of design, technology, and storytelling. Specializing in brand identity, product and packaging design, digital marketing, and strategic brand consulting, the agency delivers innovative, market-ready solutions tailored to contemporary business needs. Driven by precision, originality, and insight-led creativity, Alean Gallery has successfully collaborated with over 30 export houses and buying houses across India, helping brands strengthen their presence and connect meaningfully with their audiences.

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Milestones & Achievements

Alean Gallery stands out for establishing India's first fashion CAD–focused creative agency and for its successful collaborations with national and international clients. The founders are also recognized for contributing to the modernization of traditional design processes through the integration of digital tools, bridging design education with professional practice.

Alean Gallery's portfolio includes projects for Dabur (Packaging), Shuddh Sawad—India's first Thekua brand to reach a ₹1 crore valuation within a year—Anuttama Chocolates, and Mill8, whose packaging received appreciation from the Honorable Prime Minister of India, Shri Narendra Modi, and recognition from major brands and influencers such as Blinkit, Zomato, Subko Coffee, Triggered Insan, and Ruchika Rathore.

Reflections & Learnings

The founders acknowledge FDDI as a key influence in shaping their design thinking, discipline, and industry-oriented approach. Their entrepreneurial journey has reinforced the importance of clear communication, mutual respect for complementary expertise, and balancing creativity with commercial viability—demonstrating that strong partnerships thrive on trust, shared values, and continuous learning.

"Your creative voice matters. Learn to combine creativity with strategy, & always believe in the power of collaboration."

Ms. Aatya Patel,
Founder & Creative Director
Alean Gallery Digital Marketing & Consultancy Pvt. Ltd.

"Design is not just about aesthetics; it's about solving real problems. Stay curious, embrace technology, and never stop experimenting."

Mr. Ajeet Raj,
Managing Director & CMO
Alean Gallery Digital Marketing & Consultancy Pvt. Ltd.

Nevil Lodaliya
Founder & Director
CHRN

CHRN

In an industry dictated largely by dominant global narrative, CHRN comes forth with a distinct purpose: to build a sneaker brand that speaks authentically from India, and to India. CHRN was born from the vision of founder and creative director, Nevil Lodaliya.

Nevil grew up taking in India's layered visual culture, through immersing himself in all that his surroundings had to offer in the cities of Bhavnagar, Gujarat and Mumbai. At the same time, he was also fascinated by the world of streetwear and sneaker culture. The idea of combining the two came from a wish to share India's immense craftsmanship and storytelling with the rest of the world through a global contemporary product.

To build that foundation, Nevil pursued B.Des in *Footwear Design & Production* at *FDDI*, Chennai, Batch 2020-2024 ,where he developed a strong understanding of shoe construction, materials, and form.

He later enrolled in Luxury Brand Management at Istituto Marangoni, gaining insight into how global luxury brands establish heritage and long-term relevance. However, the
experience clarified something deeper — he didn't want to contribute to existing legacies. He wanted to build one rooted in his own culture.

For Nevil, CHRN is more than footwear. It is a cultural statement — proof that Indian design can stand confidently on a global stage without dilution.

Amrit Kaal:
Transforming India's Garment and Textile Industry into a Global Powerhouse

By Dr. Annu Kumari

As India marches towards its Amrit Kaal vision of becoming a developed nation by 2047, the garment and textile sector stands at the forefront of this economic renaissance. Valued at around $220 billion and employing over 45 million people; predominantly in rural and semi-urban areas. This industry is not just a livelihood provider but a cornerstone of India's export economy, contributing an estimated 10–12% to total merchandise exports.

Government Policies Fuelling Growth

The government's strategic interventions are aligning closely with industry needs. The Production Linked Incentive (PLI) Scheme for textiles, with a financial outlay of ₹10,683 crore, incentivizes manufacturing of man-made fibre (MMF) apparel, MMF fabrics, and technical textiles. Seven PM Mega Integrated Textile Region and Apparel Parks (PM MITRA), planned across about 3,000 acres each, promise integrated "plug and play" infrastructure and are expected to significantly reduce logistics and operational costs. The National Technical Textiles Mission targets a technical textiles market of about $40 billion by 2030, with a thrust on geotextiles, medical textiles, protective gear, and smart fabrics.
Additionally, RoSCTL (Rebate of State and Central Levies and Taxes) and duty drawback schemes make Indian exports more competitive by effectively making exports almost tax-free, providing Duty Credit Scrips that can be used to pay import duties, and thereby increasing the net earnings of Indian exporters even when facing external pressures such as US and EU trade measures.

Industry Transformation and Future Scope

Amrit Kaal heralds a shift from volume-driven exports to value-added, sustainable production and branding. Under the broader "Make in India" and "Viksit Bharat 2047" agenda, "Crafted in India" positioning allows traditional crafts like Khadi, Banarasi silk, Chanderi, Kanchipuram, and other handloom clusters to integrate with 3D printing, AI-driven design, and block chain-based traceability, linking heritage with high technology and compliance.

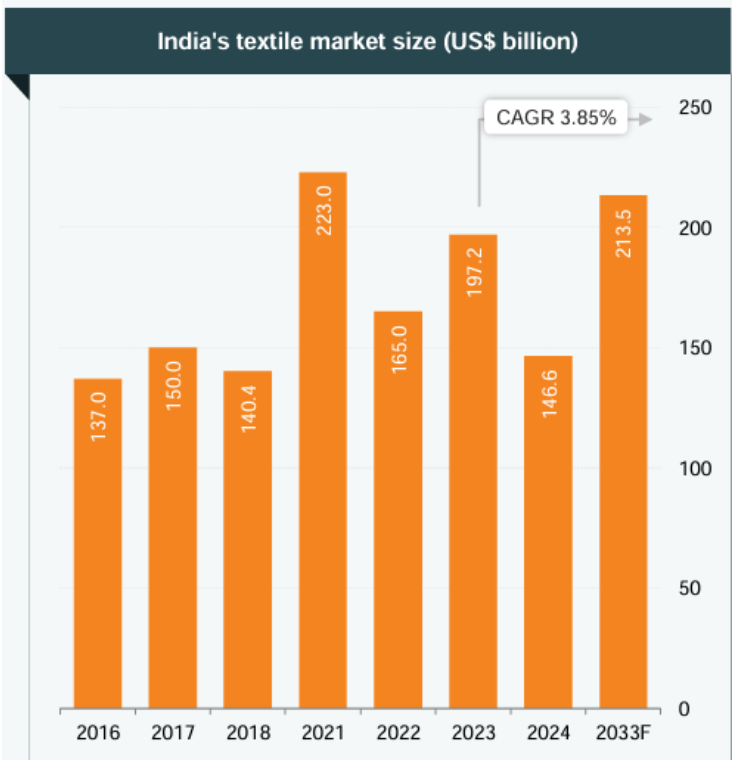


Fig 1. India's Textile Market Size (US$ billion) (Source: IBEF Report 2025)

By 2030, technical textiles alone are projected to generate several million additional jobs across manufacturing, installation, and services, while sustainable fashion driven by GOTS (Global Organic Textile Standard)-certified organic cotton and recycled polyester aims at a rapidly growing global green apparel market estimated in the mid–tens of billions of dollars. India, already a major producer of organic cotton, is well placed to supply certified sustainable fibres and fabrics to global brands.

According to IMARC, the Indian textile market size was valued at US$ 146.55billion in2024. The market is projected to reachUS$213.51 billionby2033, exhibiting a CAGR of 3.85%from 2025-2033 (refer Fig. 1). India's textiles and apparel exports are widely projected, by industry bodies and export councils, to move towards the $65 billion mark in the medium term, supported by Free Trade Agreements (FTAs) with partners such as the UAE and Australia and ongoing negotiations with the EU and UK. Capacity expansion, automation via Industry 4.0, skill upgradation through schemes like SAMARTH (aiming to

train up to 10 lakh workers in the organised and traditional sectors), and enhanced R&D in bio-fabrics and functional textiles together position India to aspire for a double-digit share in the global apparel and textiles market by 2047.

Challenges and Opportunities Ahead

Amid challenges like rising cotton prices, fluctuating global demand, and geopolitical issues such as higher tariffs in major export markets, Indian textile and apparel companies are facing clear short- to medium-term pressure. At the same time, however, nearshoring and the "China+1" sourcing strategy are encouraging global brands to spread their sourcing beyond China, which creates a strong opportunity for India to secure additional orders worth several billion dollars a year, particularly in core product categories such as knitted garments, woven apparel, and home textiles.

Meanwhile, emerging e-commerce and digital trade rails such as ONDC (Open Network for Digital Commerce) are gradually opening new channels for small and medium exporters, enabling clusters of weavers, knitters, and garment manufacturers to reach domestic and global buyers more efficiently. To stay ahead in this evolving landscape, industry leaders will need to invest in circular economy models, such as recycling, re-use, and waste reduction across the value chain as well as digital supply chains that use data, AI, and end-to-end visibility to meet buyers' ESG and compliance expectations. Firms that successfully align with these shifts will be best placed to participate in a global textile and apparel market that is expected to approach the trillion-dollar mark over the coming decades.

(Sources: Ministry of Textiles Annual Report 2024-25, NITI Aayog Viksit Bharat@2047, IBEF Textile Sector Profile)

Dr. Annu Kumari,
Faculty,
School of Fashion Design,FDDI Chandigarh

Dr. Annu Kumari is an academic and design professional associated with the School of Fashion Design, FDDI, with more than 10 years of experience across academia and industry. She completed her Ph.D. in Fashion Technology (Apparel Sizing) from NIFT Delhi (2024), where her doctoral research focused on the systematic development of a standard size chart for Indian plus-size women, carried out under the IndiaSize Project, a national initiative of NIFT Delhi and the Ministry of Textiles, Government of India.

Her research involved large-scale anthropometric data analysis and addressed a critical gap in inclusive apparel sizing in India. She has previously worked for three years at the Ethiopian Institute of Textile & Fashion Technology (EiTEX), Ethiopia as Principal Investigator for three institutionally funded projects and served as Learning Research Implementation officer. Currently at FDDI, she contributes to teaching, research, curriculum development, and academic initiatives.

Reviving Heritage Through Design:

FDDI Hyderabad Secures Patent for Calabash Bottle Craft

Dr. Rambabu Muppidi, Faculty in LLPD, FDDI Hyderabad, has been granted his 18th Indian Design Patent for the innovative product titled "Calabash Bottle" (Application No. 465502-001, Class 09-01). The design was filed on 07th August 2025, published on 07th October 2025, and the patent certificate was officially issued on 10th November 2025.

Developed as a pilot study with research support from Dr. Ravindra Babu Veguri and Mr. Mattagunja Anirudh (Student, FDDI Hyderabad) the project included extensive design explorations and field studies conducted at Shilparamam (Banjara Hills and Rayadurgam) and various craft clusters across Hyderabad's cultural hubs.

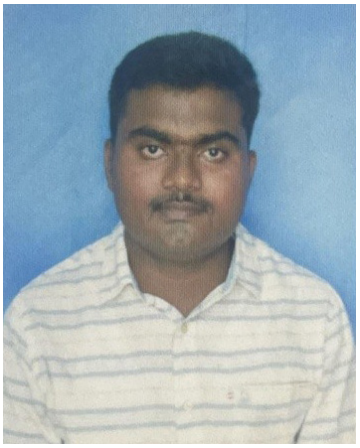
The design has been published in The Patent Office Journal No. 45/2025 dated 07 November 2025 (Page 110437) available at https://search.ipindia.gov.in/IPOJournal/Journal/ViewJournal

This eco-innovative Calabash Bottle revives a traditional Indian craft that utilizes dried gourds (Lagenaria siceraria), seamlessly merging heritage with contemporary usability. The design embodies sustainability, cultural preservation, and circular design principles—reflecting Dr. Muppidi's ongoing commitment to integrating traditional craft wisdom with modern design innovation.

This accomplishment was made possible under the legal direction and guidance of Mr. Subhajit Saha, Head of Legal & IPR and Founder, Resolute 4IP, and Mr. Shailendra Kumar, Legal Advisor II, Resolute 4IP, whose continued support throughout the IPR process has been invaluable.

Calabash Bottle"
(Granted No. 465502-001) granted &
published in Patent Office Journal No. 45/2025

Dr. Rambabu Muppidi,
Faculty,
School of Leather Goods & Accessories Design,



Mr. Mattaguja Anirudh
Student, 4th Year,
School of Leather Goods & Accessories Design,

Innovation in Activewear:
FDDI Chennai Faculty's Modular Sports Bra Receives Design Registration

A design registration has been granted by the Indian Patent Office for an innovative creation titled "Sports Bra." The design has been jointly developed by Ms. Dhivya S, Junior Faculty, School of Fashion Design (FD), FDDI Chennai, and published in Design Journal No. 40/2025, dated 03rd October 2025, under the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

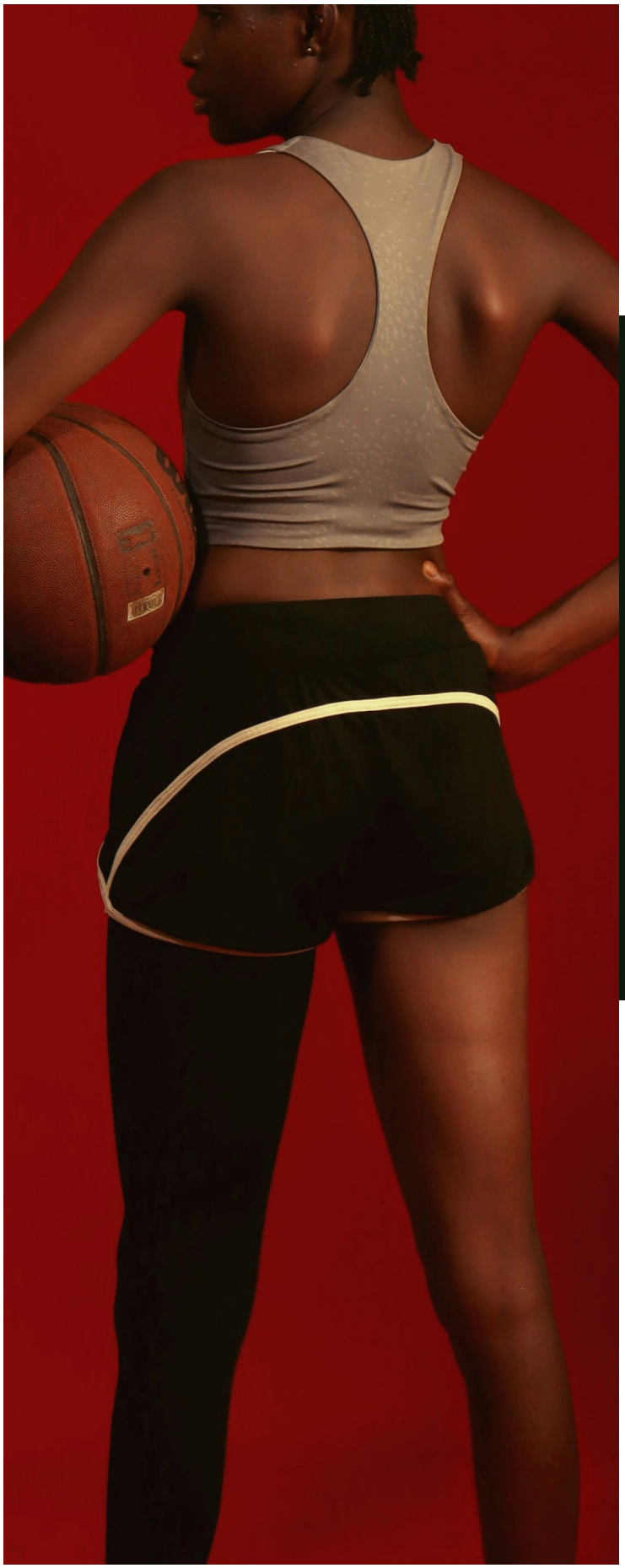
The registered design represents a breakthrough in the field of intimate apparel, focusing on the development of a 3D-printed modular support structure for plus-size sports bras. The innovation aims to enhance comfort, stability, and motion control while alleviating pain and discomfort commonly experienced by large-breasted women during physical activities.

Unlike conventional compression-based or caged designs, this modular innovation provides a natural and ergonomic support mechanism, integrating advanced 3D printing technology to optimize manufacturing efficiency, minimize material waste, and reduce production time.


पेटेंट कार्यालय, भारत सरकार | The Patent Office, Government Of India

डिजाइन के रजीकरण का प्रमाण पत्र | Certificate of Registration of Design

Ms. Dhivya S,
Junior Faculty
School of Fashion Design
FDDI Chennai



CHRN

The fashion and apparel industry has largely been dominated by European countries up until a few decades ago. In fact, even American designers used to follow suit of their European counterparts until the legendary Battle of Versailles fashion show in 1973. Various social and cultural factors such as oblivion, cultural contempt, colonialism and unequal capital access come into play, as to why the growing fashion industry in other countries is not getting the recognition it deserves.

In the last few years, the global impact India has created in the world is getting harder to ignore; be it the popularity of “chai tea lattes” or marketing a dupatta as a “Scandinavian scarf”. The main concern however, lies in the blatant lack of recognition. During the year 2025, brands such as Prada, Saint Laurent and Louis Vuitton had prominent Indian elements in their collections. From kohlapuri chappals to a snakes and ladders runway, India’s impact can no longer be overlooked.

The Indian luxury landscape is an amalgamation of the world’s largest population, a dynamic demographic and a rapidly increasing middle class. Foreign products are often deemed better in the eyes of an Indian consumer due to psychological, social and cultural factors. A sense of inferiority when it comes to ones own country is a major contributor. This is when CHRN comes in. A sneaker is a perfect conduit to globalise a cultural that has been held under contempt for far too long. It is versatile, caters to a large demographic and has endless options when it comes to creativity. Entering the sneaker industry with the promise of brilliant craftsmanship and uncompromising quality, CHRN stands at the juncture of a sense of individuality and heritage. With each piece lovingly designed with careful precision by CHRN’s founder Nevil Lodaliya, the brand strives to showcase the side of India that the rest of the world chooses to not recognise.

By Preen Arora, Marketing Head, CHRN

Industry, Innovation and International Exposure

A Student Visit to the Canton Fair

The 138th Canton Fair – Phase 3, held from October 31 to November 4, 2025, at the China Import and Export Fair Complex, Guangzhou, brought together leading manufacturers and buyers from across the globe. Focused on consumer goods, this phase highlighted the evolving landscape of everyday products shaped by innovative design, advanced technology, and sustainability. The experience was particularly enriching and highly relevant for lifestyle product designers like myself, offering valuable insights into global market trends and design directions.

Phase 3 covered a diverse range of product categories, including bags, fashion accessories and footwear; textiles and home lifestyle products; personal care and beauty items; toys, baby products and children's wear; health-focused products; office, stationery, sports and leisure goods; pet products and food-related items; as well as tech-enabled lifestyle devices.

Each section reflected shifting global consumer demands and innovations that shape the future of product design.

By
Ms. Mary Goreth,
3rd Year, Semester V, LLPD,
FDDI Kolkata

Key Trends That Defined The Fair

Sustainability as a Core Priority: Biodegradable plastics, recycled raw materials, circular packaging solutions, and eco-conscious designs dominated the showcase — signaling that sustainability is now a mainstream expectation, not a niche concept.

Smart and Connected Products on the Rise: Tech accessories and lifestyle devices are increasingly integrating connectivity, sensors, and intelligent features to improve user experience.

Automation and AI Taking Over Manufacturing: Robotic arms executing cutting, forming, stitching, assembly, and quality inspections with high precision were major highlights. Several exhibitors demonstrated AI-powered forecasting, rapid prototyping, and mass customization technologies — confirming that the future factory will be driven by automation and data.

A Memorable Interaction: A discussion with a representative from a company specializing in recyclable packaging materials left a lasting impression on me. It underscored how sustainable solutions become viable and scalable only when design innovation, material science, and cost efficiency converge to meet market demands.

India vs Global Industry:
A Learning Perspective

Strengths of Global Exhibitors	Strengths of Indian Industry	Areas India Can Improve
Consistent innovation and R&D	Competitive pricing	Quality standardization
Strong automation adoption	Skilled crafting capabilities	Production scalability
Customer-centric product development	Growing design focus	Higher investment in advanced tech

India is advancing but must accelerate modernization to match global performance benchmarks—especially in smart manufacturing and sustainable technology adoption.

STUDENT BUZZ

A Shift in Design Thinking

Sustainability as a Core Priority: Biodegradable plastics, This visit reshaped my understanding of what contemporary design education must prepare us for: design must be inherently sustainable; products must align with practical, global consumer expectations; and technology—particularly AI and robotics—will increasingly define future workflows. As a result, I now approach my academic and studio projects with a sharper focus on market relevance, responsible material choices, and scalable, innovation-driven solutions.

Message for Fellow Students

The world of design is bigger than what we see in our classrooms. Industry exposure, such as visits to the Canton Fair, enables students to witness real-world innovation firsthand, develop global awareness, and understand the complex design challenges currently being addressed by industries worldwide. Such experiences bridge the gap between academic learning and professional practice.

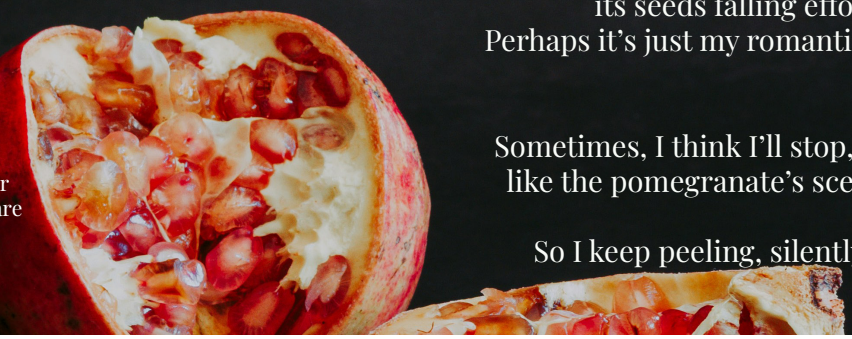
This visit reaffirmed my commitment to becoming a designer who contributes meaningfully to the future of consumer products—creating solutions that are intelligent, sustainable, and globally competitive. It has strengthened my resolve to pursue design with a forward-looking mindset that balances creativity with responsibility and market relevance.

POMEGRANATES

Ms. V.Chandana Samyuktha,
School of Fashion Design,
FDDI Chandigarh, 2023-27

Today, as I was eating a pomegranate, a thought quietly crossed my mind—how many years has it been since someone peeled a pomegranate for my mother? I have always seen her do it herself, patiently and lovingly, with a care that speaks of a love far sweeter than the fruit itself.

The thought stayed with me, lingering long enough to find its way into these words. I hope you enjoy this little reflection, and perhaps it inspires you to peel a pomegranate for your mother—or simply tell her how grateful you are for her unconditional love.

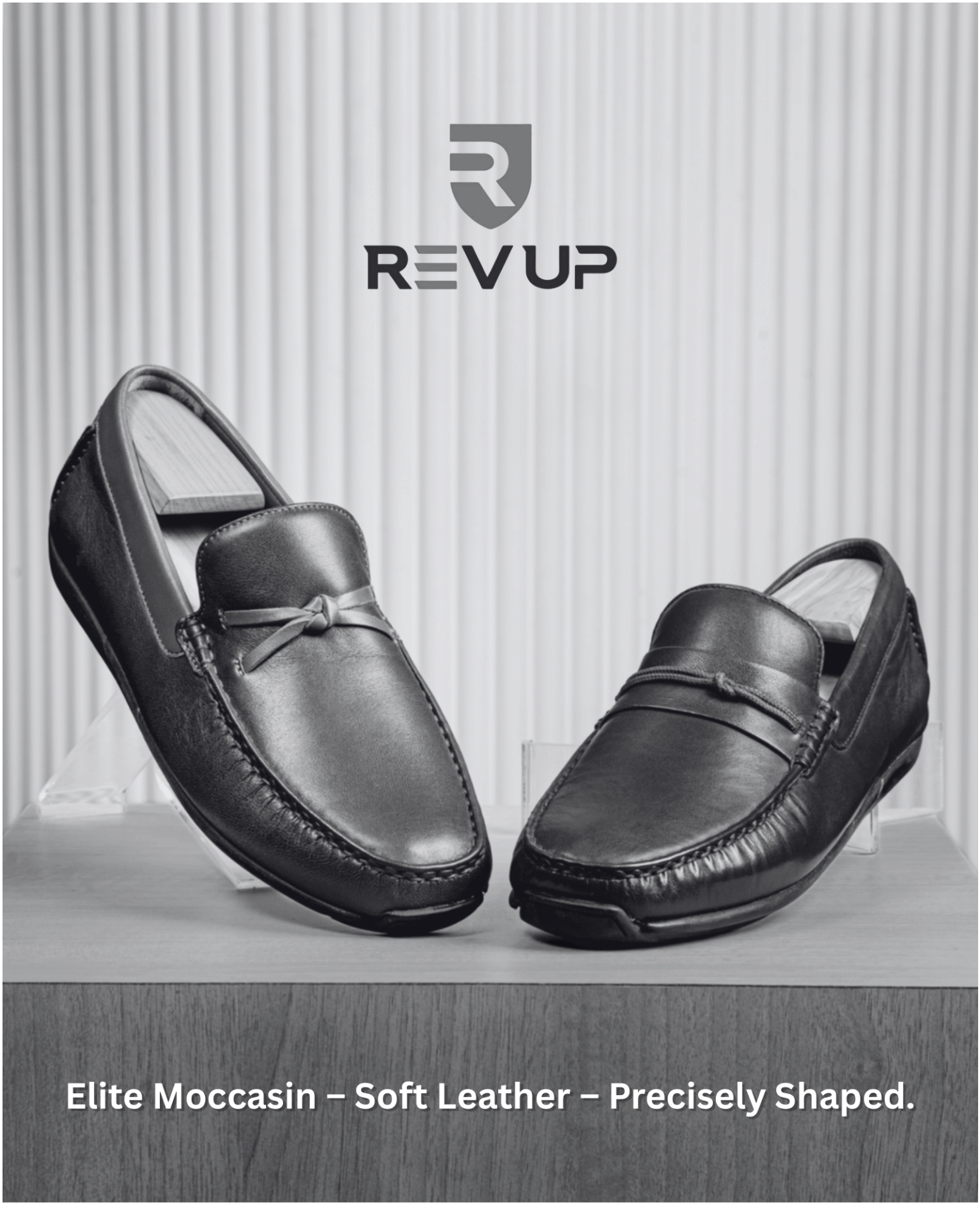


I always peel the pomegranates for them,
my fingers stained blood-red,
releasing each seed, oh, so sweet.
The bitter rind lingers in my hands.

They never see the ache in my wrist,
the soft sting of giving—
always giving— peeling back the layers
until only the flesh remains, sweet and red,
offered to them, never returned.

I hold the knife like a promise,
cutting away the part I want most—
the seeds that hide within, but always for their taste,
never for mine.
But I never complain, I just wish and hope.
I wonder if the pomegranate knows my pain,
its seeds falling effortlessly into my hands.
Perhaps it's just my romantic mind, confusing skill
with pity.

Sometimes, I think I'll stop, but the thought fades,
like the pomegranate's scent on my hands, which
they'll never notice.
So I keep peeling, silently wishing that one day,
they'll peel it for me.



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Chintan Shivir 2025

A Roadmap for India's Footwear and Leather Future

On 22 December 2025, the DPIIT, in association with FDDI hosted a focused Chintan Shivir at its Noida campus. The programme was anchored with the Department for Promotion of Industry and Internal Trade. The objective was direct. Build a practical roadmap for the future of India's footwear and leather sector.

The one day programme brought together policy leaders, industry experts, academicians, and institutional heads. Discussions focused on skilling, design and innovation, industry collaboration, and standards and compliance. The intent was execution. Outcomes were defined with ownership, timelines, and monitoring.

The Shivir opened with a campus walkthrough. Participants reviewed academic facilities, centres of excellence, and testing infrastructure. This grounded policy discussions in on ground capability and scale.

The keynote address by senior leadership from Department for Promotion of Industry and Internal Trade highlighted the urgency of industry aligned skilling, export readiness, and compliance driven growth. The message was unambiguous. Talent must be factory ready. Research must be applied.

Discussion in progress during the Chintan Shivir

Mr. Vivek Sharma, IRS, MD, FDDI presenting a memento to Ms. Nidhi Kesarwani, IAS, Joint Secretary, DPIIT

The institutional presentation by FDDI outlined Vision 2030. The focus was national integration, strong industry linkage, and outcome driven education. FDDI positioned itself as a sector enabler with a pan India footprint.

Four thematic panels worked in parallel.

The first panel examined future prospects and skilling. Members stressed industry led training models, mandatory factory immersion, live projects, and cluster based short term programmes. A national footwear skilling framework anchored by FDDI emerged as a key recommendation.

The second panel focused on design, research, and innovation. Discussions covered materials research, comfort science, biomechanics, and technology transfer. Structured collaboration with leading institutions and stronger applied research linked to industry needs were prioritised.

The third panel addressed industry academia collaboration and asset utilisation. Participants recommended clear systems to convert industry problem statements into student projects and applied research. Better utilisation of campus infrastructure through incubation, PPP models, and CSR partnerships was emphasised.

The fourth panel focused on policy, standards, and ecosystem strengthening. Members called for a structured compliance roadmap, exporter readiness clinics, and alignment with global standards. FDDI was envisioned as a national knowledge hub for standards, testing, and compliance support.

A defining feature of the Chintan Shivir was its implementation focus. Dedicated working groups were constituted with clear mandates and monthly reporting. A 30, 60, and 90 day action plan was defined to ensure follow through.

The DPIIT FDDI Chintan Shivir 2025 marked a decisive shift from dialogue to delivery. It reinforced the role of institutions as change engines. It laid the foundation for a stronger, more competitive footwear and leather ecosystem driven by skills, innovation, and standards.

FDDI, India Signs Landmark MoA with the University of Northampton, UK

FDDI, India has entered into a comprehensive Memorandum of Agreement (MoA) with the University of Northampton (UoN), United Kingdom, marking a significant milestone in its international academic engagement.

This landmark partnership strengthens institutional collaboration and creates enhanced opportunities for FDDI students both past and present—to pursue globally recognized programmes at UoN.

On behalf of FDDI, Mr. Vivek Sharma, IRS, Managing Director (MD), signed the MoA whereas from UoN, Mr. Anne-Marie Kilday, Vice – Chancellor and Professor of Criminal History signed the MoA which will remain in force for three years, with provisions for renewal by mutual consent.

From Left: Mr. Mathew Hanes, Global Director, UoN and Mr. Vivek Sharma, IRS, MD, FDDI exchanging the MoA

The MoA encompasses the introduction of international academic pathways, including dual-degree and joint programmes to promote academic mobility; the launch of specialized short-term, medium-term, and niche courses aligned with evolving industry requirements; faculty and student exchange initiatives to foster cross-border knowledge sharing; and collaborative research and development endeavours aimed at driving innovation and addressing emerging challenges in the global footwear, fashion, and allied industries.

FDDI Collaborates with FITT, IIT Delhi for Research and Innovation

FDDI has entered into a strategic collaboration with the Indian Institute of Technology, Delhi (IIT Delhi).

From Left: Dr. Arnab Chanda, Associate Professor CBME, IIT Delhi, Dr. Nikhil Agarwal, MD, FITT, IIT Delhi, Mr. Vivek Sharma, IRS, MD, FDDI and Mr. Sharad Srivastava, Joint Director, CoE, during the MoU exchange ceremony fostering academic and research collaboration

The Memorandum of Understanding (MoU) was signed with the Foundation for Innovation and Technology Transfer (FITT), IIT Delhi. This partnership marks a significant step forward in advancing research and development, consultancy activities, and knowledge transfer between the two premier institutions.

The MoU encompasses the exchange of academic and research materials, publications, and intellectual properties; cooperation in project proposals and research activities of mutual interest; organization of joint short-term programs and intellectual enrichment opportunities; and the shared use of laboratory and research facilities to strengthen collaborative innovation and skill development.

The MoU was formally signed by Mr. Vivek Sharma, IRS, Managing Director (MD), FDDI, and Dr. Nikhil Agarwal, Managing Director, FITT, IIT Delhi.

Dr. Arnab Chanda, Associate Professor at the Centre for Biomedical Engineering (CBME), IIT Delhi, and joint faculty at AIIMS, New Delhi, will coordinate the collaboration from IIT Delhi, while Mr. Sharad Srivastava, Joint Director, CoE, will lead coordination efforts from FDDI.

FDDI Signs MoU with Wadhwani Foundation to Enhance Career Readiness

FDDI has entered into a transformative collaboration with the Wadhwani Foundation (WF) to enhance the career readiness and employability of its students. An MoU has been signed to implement an AI-powered application that will support final-year students across all 12 FDDI campuses for a period of three years, from 2025 to 2028.

The MoU was signed by Mr. Vivek Sharma, IRS, Managing Director (MD), FDDI and Mr. Sunil Dahiya, Executive Vice President (EVP) - WF. The signing ceremony was conducted in the esteemed presence of Col. Pankaj Kumar Sinha, Secretary, FDDI, Mr. Manoj Agrawal, CAO, FDDI, Mr. Prashant Saxena, Head – Business Development, FDDI-HO, Col. Santosh Jha, Vice President - WF, Mr. Raman Handa, Director - WF, Ms. Priyanka Panwar, Consultant - WV, and Ms. Sheetal Bhandari, Program Manager - WF. The initiative is designed to sharpen soft skills, enhance communication, build confidence, and provide AI-driven mock interviews and provide AI-driven mock interviews with personalized feedback.

By combining structured training with cutting-edge technology, the program aims to prepare students effectively for placement opportunities and align them with evolving industry expectations.

This partnership underscores FDDI's commitment to equipping its graduates not only with strong technical expertise but also with the employability skills required to succeed in today's competitive global market.

Shaping Standards: Manak Manthan on Therapeutic Footwear

The Bureau of Indian Standards (BIS), Hyderabad Branch Office, in collaboration with FDDI, Hyderabad Campus, organized a Manak Manthan session on the Draft Indian Standard "Therapeutic Footwear (Specification)" — Document No. MHD 09 (27829) WC.

Mr. Rakesh Tanneeru, Scientist E & Director, BIS Hyderabad, opened the session by welcoming representatives from the footwear industry, faculty members from FDDI and GILT Telangana, and student participants. He provided an overview of the draft standard formulated by the Assistive Products Including Rehabilitation Appliances, Orthotic and Prosthetic Items Sectional Committee (MHD 9).

This was followed by a detailed technical presentation by Mr. Aditya Das, Scientist E & Head, Medical Equipment and Hospital Planning Department (MHD), BIS New Delhi. He explained that the draft specification defines general and safety requirements for therapeutic footwear designed for individuals with diabetes, neuropathy, at-risk feet, and those vulnerable to foot ulcers. The document also elaborates on material requirements, testing parameters, and test methods, while excluding footwear categories already covered under other standards.

FDDI participates in 'SHOETECH Kanpur 2025'

FDDI participated in the 15th edition of SHOETECH Kanpur 2025, a Buyer–Seller Meet-cum-Exhibition organized by the Indian Footwear Components Manufacturers Association (IFCOMA) on 16–17 December 2025 at the KLC Complex, Banthar, Unnao. The event was inaugurated by Mr. Rajendra Kumar Jalan, Chairman, FDDI, in the presence of senior representatives from industry, finance, and skill development institutions.
The exhibition showcased the latest footwear components, materials, chemicals, and advanced technologies presented by leading domestic and international exhibitors.

A wide range of products—including specialized soles, shoe lasts, insoles, linings, chemicals, packaging solutions, and state-of-the-art machinery—highlighted the innovation and depth of the footwear ecosystem. Knowledge-sharing seminars and interactive sessions further facilitated industry dialogue and networking. FDDI's stall emerged as a key attraction, displaying an impressive collection of men's and women's footwear across casual, formal, and sports categories, along with leather goods and fashion accessories such as travelware, handbags, belts, wallets, and portfolios.

The exhibits received high appreciation from dignitaries and visitors alike for their quality, creativity, and craftsmanship. The stall also drew strong interest from international visitors and technical experts from countries including Sri Lanka, Dubai, and Singapore.

A notable highlight was an intricately carved pair of shoes designed at the FDDI Fursatganj campus, which garnered widespread admiration for its seamless blend of traditional craftsmanship and contemporary design.

The two-day exhibition witnessed participation from nearly 2,000 entrepreneurs, with over 80 footwear component and machinery manufacturers from across India, reaffirming SHOETECH Kanpur's significance as a major industry platform and underscoring FDDI's strong industry engagement and design excellence.

FDDI Hosts National Seminar & Exhibition on India's Footwear Heritage

FDDI Hyderabad, in collaboration with the Pleach India Foundation (PIF), successfully organized a three-day national seminar and exhibition titled "Tales Below the Heels: India Design Language – Footwear Series" from 28–30 November 2025. The event brought together scholars, designers, artisans, academicians, policymakers, and students to explore India's rich and diverse footwear heritage—from sacred Padukas to Juttis, Mojaris, Kolhapuris, and other regional traditions.

The initiative aimed to document, revive, and globalize India's indigenous footwear traditions by developing a unified design vocabulary rooted in heritage, while reinforcing commitments to craft preservation, artisan empowerment, and the national vision of Vocal for Local.

The seminar was inaugurated by Mr. Jishnu Dev Varma, Hon'ble Governor of Telangana, in the presence of senior dignitaries including Mr. Jayesh Ranjan, IAS, Special Chief Secretary; Dr. Raghavendra Rao H. Kulkarni, Keynote Speaker; Dr. Narasimhugari Tej Lohit Reddy, IAS, Executive Director, FDDI Hyderabad; and representatives from the Archaeological Survey of India, Pleach India Foundation, and FDDI.

A booklet featuring sculptural evidence of Indian footwear and the Book of Abstracts was released on the occasion. Through multiple offline and online sessions, experts examined historical references to footwear in sculpture, coins, literature,and folk traditions, alongside in-depth studies of regional styles such as Mojari, Jutti, Pulla, and Kolhapuri. Discussions highlighted the use of AI and CAD tools for documentation and revival, sustainable and vegan materials, and the fusion of heritage arts with modern ergonomic design. Contemporary perspectives included reinterpretations of traditional forms, embroidery-infused modern footwear, and global fashion insights.

A parallel public exhibition and artisan workshops showcased traditional footwear from across India, with live demonstrations by master craftsmen. Dedicated panel discussions addressed craft sustainability, evolving techniques, and challenges faced by artisan communities, alongside a special session on sustainable and circular footwear practices featuring industry leaders.

A view of the inaugural session

Impact of AI & VR on transforming Footwear Retail Footprints

By Dr. Ashok Sahai

The footwear retail industry is changing rapidly with the introduction of Artificial Intelligence (AI) and Virtual Reality (VR). These technologies are helping brands improve the way they design shoes, connect with customers, sell products, and manage their stores. Whether shopping online or in physical stores, customers are now enjoying a more interactive and convenient shopping experience. Overall, AI and VR are playing a major role in reshaping footwear retailing.

One of the biggest problems in online footwear shopping is not being able to try shoes before buying them. AI and VR solve this issue by allowing customers to virtually try on shoes using their smartphones or VR devices.

With AR/VR try-on features, shoppers can see how the shoes look on their own feet in real time. This makes shopping more fun and reduces confusion while choosing footwear.
Higher sales: When customers feel more confident about their purchase, they are more likely to buy.
Fewer returns: Better size and fit visualization reduces wrong purchases and return costs.

AI helps brands understand customer preferences by studying their browsing history, foot size, and past purchases. Based on this data, customers receive personalized shoe recommendations that match their style and needs. This makes shopping easier and more satisfying.
AI-powered chatbots and virtual assistants also help customers by answering questions, suggesting

products, and assisting during checkout, providing quick support at any time.
AI helps retailers predict which shoes will be in demand by analyzing trends, seasons, and regional preferences. This prevents overstocking and shortages, helping stores save money and reduce waste.

AI and machine learning make supply chains faster and more efficient. From predicting demand to managing stock delivery, these technologies help retailers respond quickly to market changes.

AI allows footwear brands to run more effective marketing campaigns by targeting the right customers with personalized advertisements. This further increases customer interest and improves sales.

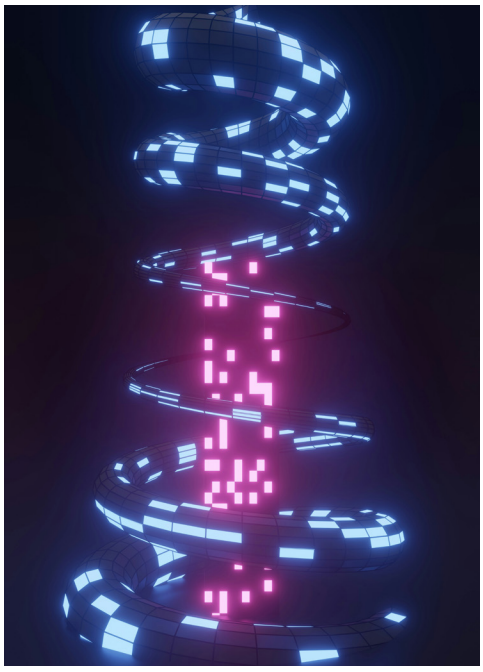
VR and AR also make marketing more exciting through virtual product launches and immersive brand experiences. These interactive activities create a stronger emotional connection between the brand and the customer, increasing loyalty.

Many footwear brands are now combining digital tools with physical stores to improve the shopping experience. Smart mirrors and AR displays in stores help customers see how shoes look without trying them on physically.

VR stores allow customers to explore products in a virtual environment from anywhere in the world. This creates a seamless shopping experience across mobile apps, websites, and physical stores.

As AI and VR continue to improve, they will play an even bigger role in footwear retailing by:

- Creating more interactive and engaging brand experiences
- Supporting phygital retail, which combines online and offline shopping
- Improving sustainability by reducing returns and managing inventory better



Retailers who adopt these technologies successfully will have a strong advantage in the future. AI and VR are changing the way footwear is bought and sold. From virtual try-ons and personalized shopping to better inventory management and creative marketing, these technologies are making footwear retail smarter and more customer-friendly. As more people become comfortable with digital tools, the use of AI and VR will continue to grow, leading to greater efficiency, customer satisfaction, and business success.

Dr. Ashok Sahai
Sr. Faculty
School of Footwear
FDDI Kolkata

EXPERT TALK

Dr. Ashok Sahai holds a B.Sc., M.B.A., DFD, M.Phil., Ph.D, Product and Brand Management from IIM Rohtak. He brings with him rich and diverse experience across leading organizations such as Mirza International Ltd., Crew BOS Products Pvt. Ltd., Creative Home Fashions, and Apollo International Ltd., where he was closely associated with product development, branding, and market-driven strategies.

He joined FDDI in 2009 and currently serving as Sr. Faculty in FDP Department at FDDI, Kolkata. With over 24 years of cumulative experience spanning both industry and academia, Dr. Sahai has made significant contributions to footwear education and research. He has published nine research papers in reputed national and international journals focusing on the Indian footwear market and industry dynamics, and has also been associated with international consultancy projects, further reinforcing his global perspective and industry relevance.

From Concept to Creation: CAD/CAM in Footwear Design

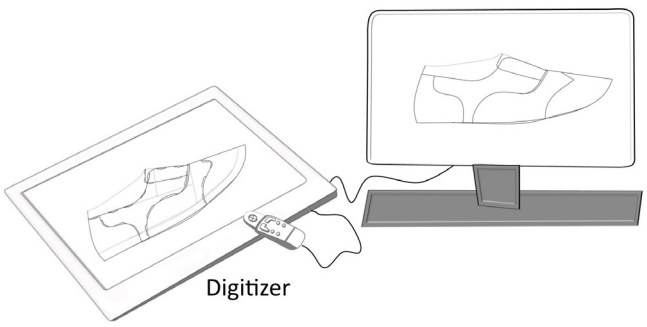
By Mr. Varun Gupta & Mr. A.V. Suresh

Computer Aided Design (CAD) has been used in footwear design since the 1970s and has gradually become an integral part of the footwear industry. With continuous improvements in computer technology, CAD systems have evolved from basic 2D drafting tools into advanced platforms capable of creating complete 3D virtual shoes. Along with CAD, the term Computer Aided Manufacturing (CAM) is commonly used in footwear product development.
In footwear, CAD refers to designing shoes in 2D or 3D digital environments, whereas CAM refers to generating manufacturing outputs from CAD data, such as pattern cutting, grading, nesting, CNC operations, and 3D printing. Traditionally, CAD in footwear was mainly associated with 2D pattern

This article is taken from the Book "ABC of Footwear Technology" written by Mr. Varun Gupta, Senior Faculty Geade-1, FDDI, Furstagnaj Campus and Mr. A. V. Suresh, Senior Technical Consultant, Romans CAD (Strategies, France)-Pune.
engineering. Today, 3D CAD software allows the creation of a full virtual shoe (digital twin), from which accurate 2D patterns can be developed for production.

Some of the advantages of using CAD in Footwear Designing are as below:

- Enables early concept development before physical shoe creation
- Allows creation of 3D virtual footwear models prior to manufacturing
- Facilitates quick material, colour, and accessory trials for faster decision-making
- Generates accurate 2D patterns directly from 2D/3D designs
- Supports rapid design modifications to accommodate changes
- Enables fast grading of patterns across size ranges
- Allows systematic storage and easy retrieval of digital design data
- Makes it easy to adapt designs in line with forecasted trends



DESIGNING IN 2D

Although 2D CAD software can be used for drawing design lines similar to manual methods, it is most commonly used for pattern engineering and grading. Traditionally, designers create the shoe shell manually and then digitize it into the CAD system using a digitizer. Digitization is a skilled process, and its major limitation is that the physical shell is not visible on the screen during tracing. This makes it difficult to verify accuracy and often requires cutting and comparing patterns with the original shell.

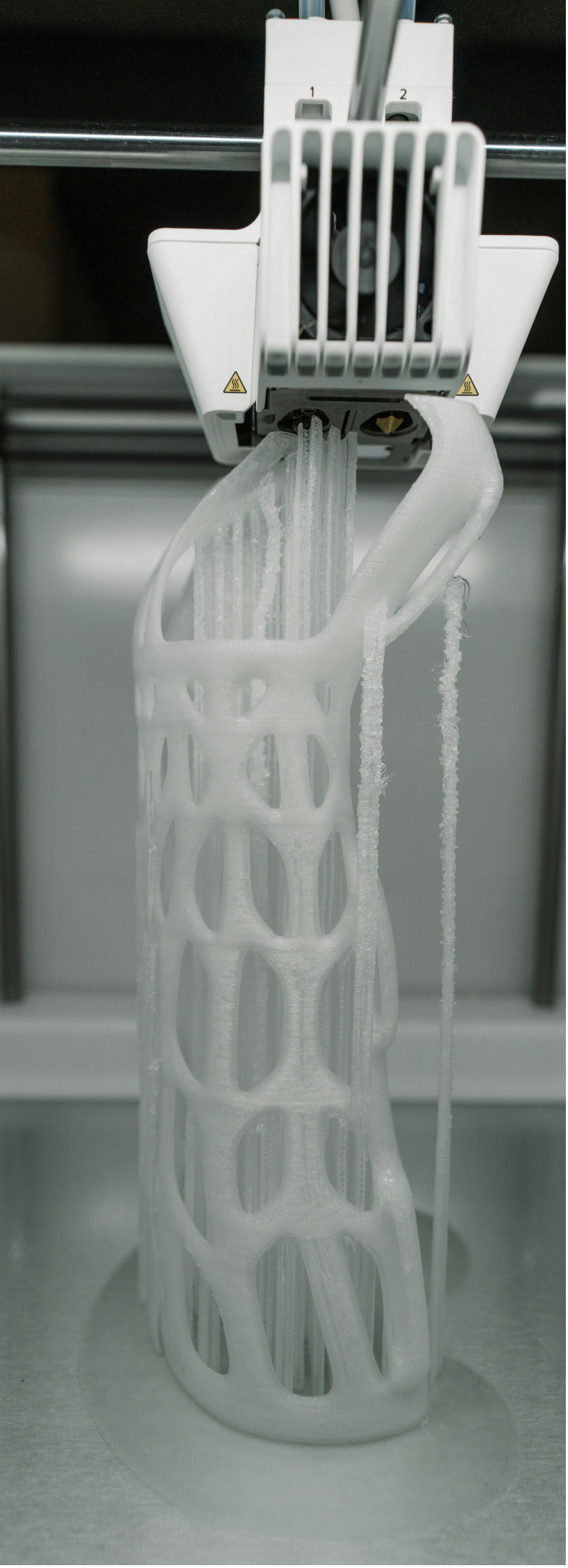
Modern 2D CAD systems overcome this limitation by allowing direct import of design images into the software. Designers can trace style lines directly on the image displayed on the screen, enabling easy verification and correction while eliminating the need for digitizer hardware.

COMMON 2D CAD WORKING METHODS

- Digitizing only the mean form and completing the design digitally
- Digitizing the complete shell and then creating and grading patterns
- Digitizing manually created patterns only for grading

PATTERN CUTTING

After grading, the patterns are prepared for physical cutting. The digital patterns are nested in the software on a predefined pattern sheet size to optimize material usage. The nested data is then sent to a pattern cutting machine. During cutting, the pattern sheet is fixed to the machine table using tape or a vacuum system to prevent movement. Cutting machines typically use pens for marking pattern information and knives for cutting pattern boundaries and stencils. This CAM process ensures higher accuracy, consistency, and speed compared to manual cutting.



DESIGNING IN 3D

In recent years, many footwear companies have adopted full 3D shoe design to reduce development time and minimize the number of physical samples. 3D CAD allows designers to work directly on the digital last, visualize the complete shoe, and make design decisions at an early stage.
Some advanced software allows simultaneous modification of 3D designs and 2D patterns, further reducing engineering effort.

SHOE CONFIGURATOR

One limitation of physical prototypes and 3D printed models is the difficulty in visualizing the materials and color combinations. Shoe configurators provide an effective solution to this problem. Once the 3D CAD shoe model is completed, it is uploaded to a web-based configurator along with material options. Designers, marketing teams, or customers can interact with the virtual shoe, experiment with different materials, colors, and logos, and generate multiple variants without producing physical samples. Many brands now use shoe configurators to offer personalized footwear, which is manufactured and delivered based on customer selections

3D PRINTING

After completing the 3D design in CAD software, the model can be printed using a 3D printer. The design is processed in 3D printing software, where it is sliced into thin horizontal layers. The printer builds the object layer by layer, forming the complete volume. This process is known as additive manufacturing and is widely used for rapid prototyping in footwear development.

Common 3D Printing Technologies

- FDM (Fused Deposition Modeling): Economical, limited color options
- PolyJet: supports multiple colors and textures, produces more realistic prototypes but at higher cost
- SLA (Stereolithography): Uses UV laser to cure liquid resin; offers high detail and smooth surface finish.
- SLS (Selective Laser Sintering): Fuses powdered material using a laser; ideal for strong, functional parts.
- DLP (Digital Light Processing): Cures resin using projected light; faster printing with fine accuracy.

Footwear designing software are specialized systems developed specifically for the footwear industry. They support complete 3D shoe visualization, pattern engineering, grading, costing, and technical documentation. Designers can sketch directly on the last, apply materials and textures, and generate both 3D models and 2D patterns from the same dataset. Many systems also include material and component libraries, automatic report generation, and integration with ERP systems, ensuring that any design or material change is automatically reflected in costing and reports. Here are some of the software for Footwear Designing.

- Romans CAD: This software is developed by Strategies, France. Strategies develops and markets the Romans CAD Software©™ Digital Platform dedicated to the footwear, leather goods, and soft materials industries. More information is available at https://www.romans-cad.com

- iCAD 3D+: This software is developed by INESCOP, Spain. ICad3D+. It is footwear design and pattern engineering that integrates into a single program with two different environments. 3D design and 2D patterns, which works in parallel and simultaneously. More information is available at https://www.icad3dplus.com/

- Shoemaster: Shoemaster offers comprehensive 2D and 3D solutions for shoe design, engineering, and manufacturing. Originally developed in the 1970s within Clarks Shoes' R&D department, now Owned by Atom, Italy. They have solutions for 3D Design and 2D pattern Engineering etc. bundled as Design, Engineer, Patterns etc., More information is available at https://atom-shoemaster.com

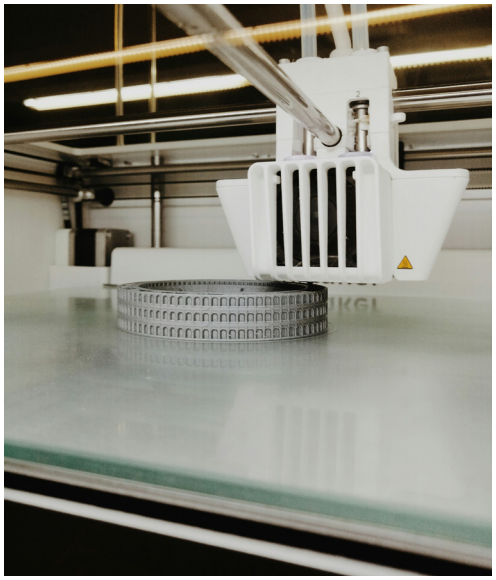
- Mind Shoe Design: This software is developed by Mind Technology, Portugal. Designed to make shoe design in full 3D, very similar to drawing using conventional 2D tools. This has both 3D and 2D software and Technical file generation. More information is available at https://mindshoedesign.pt/product

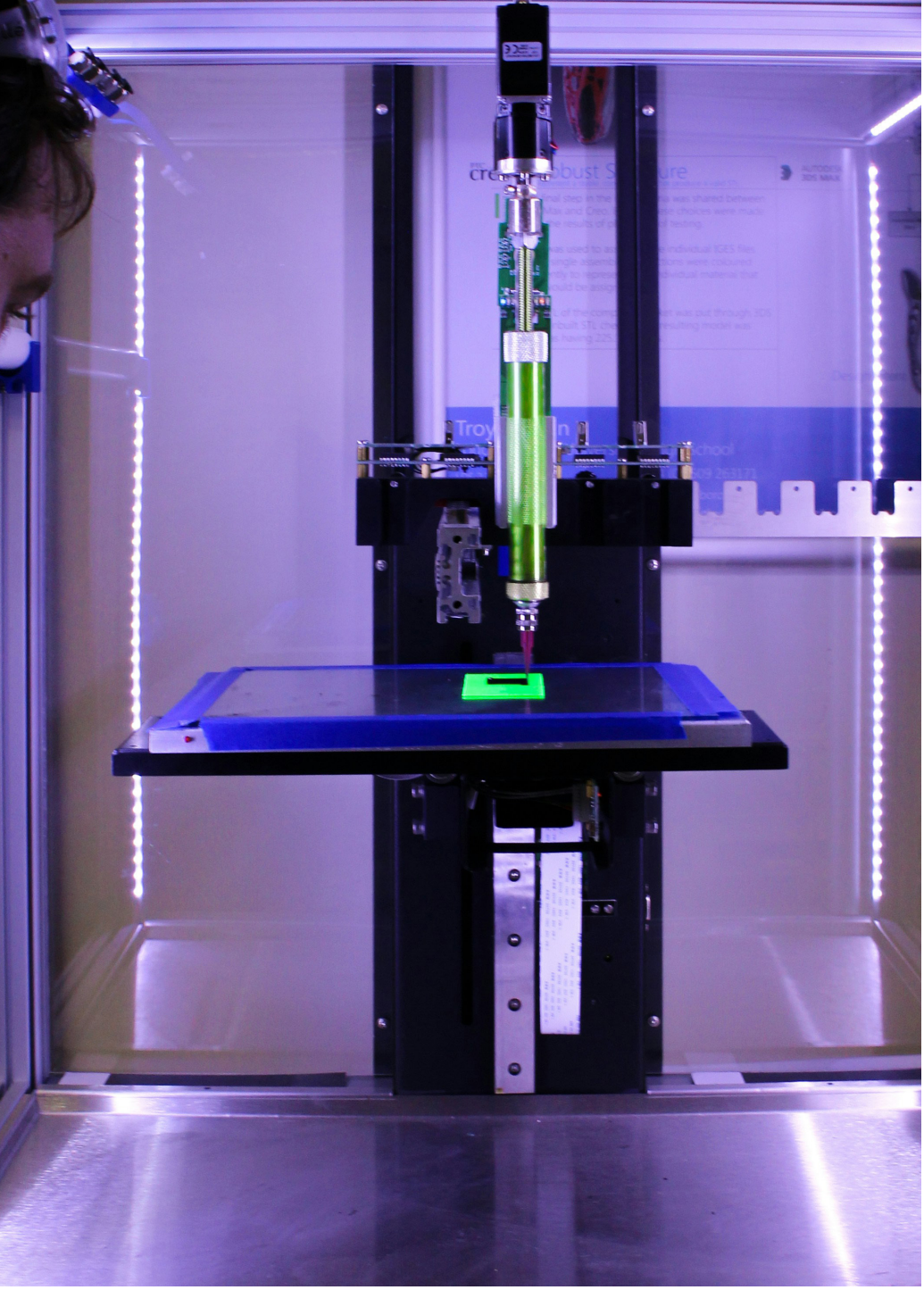
- Procam Dimensions: This software is developed by Procam Software, Systems & Services, Austria that specializes in software and system solutions for the footwear industry. Dimensions is a 3D and 2D software and GDM is a Graphical Documentation software is used for Product Data Management applications. More information is available at https://www.procam-software.com

- FTWkit: FTWkit is a plugin suite for Rhino designed specifically for footwear development, from Italy. It has 2D/3D design (Botcha), pattern engineering (Jevero), and cost/material management (Jevero Cost). More information is available at https://ftwkit.com/

- Caligola: From Comelz, Italy, offering CAD/CAM systems, nesting tools for footwear and leather goods. CALIGOLA is a 2D pattern engineering software, ST PLUS is costing for footwear and leather goods. More information is available at https://www.comelz.com/en/products/software/

- Naxos: This is developed by TESEO SpA, Italy, which provide solutions for both 3D design (PRAGMA) and 2D pattern engineering (Naxos)





Mr. A.V Suresh,
Senior Technical Consultant,
Romans CAD (Strategies, France)-Pune

Mr. A.V. Suresh holds an M.Tech in Footwear Science & Engineering and a B.Tech in Mechanical Engineering, with over 28 years of experience in academics, production, footwear software and technologies, process enhancement, and CAD/CAM/CNC–based design engineering.

He has worked with Avanti Leathers Ltd., Andhra Pradesh; Sriram Polytechnic, Chennai; CFTI, Agra; NIFT, Chennai; and Delcam Consulting & Technology Services (Autodesk), Pune. Currently, he is serving as a Senior Technical Consultant at Romans CAD (Strategies, France), Pune.

[The information in the article is taken from the Book **"ABC of Footwear Technology"** written by both the authors featured in this article.]

Mr. Varun Gupta,
Sr.Faculty I,
School of Footwear Design & Production
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Mr. Varun Gupta is a postgraduate in Footwear Designing & Production Management with over 23 years of experience in the footwear industry and academia. He has worked with leading organizations including TATA International (Dewas), Sagari Leathers (Agra), and KIWI Enterprises (Gurugram), and has served as an International Consultant in South Africa and Botswana.

Currently, he is Senior Faculty (Grade-I) at FDDI, Fursatganj Campus, Raebareli. He has authored two books for FDDI and has published three international and three national research papers, along with four book chapters with a national publisher.

Footwear Technology: The Non-Negotiable Essentials

By Mr. M.D Prince Joseph

In today's competitive footwear industry, the role of a footwear and accessories technologist is critical. Positioned at the intersection of design, engineering, quality, and consumer expectations, the technologist ensures that products are not only aesthetically appealing but also safe, comfortable, durable, and commercially viable. Certain aspects of this responsibility must never be compromised, as they directly affect brand reputation, customer satisfaction, and long-term business success.

What must a footwear technologist never compromise?
A footwear technologist is involved throughout the product lifecycle, from concept and prototype development to bulk production and post-market review. The role requires a clear understanding of the target customer and the ability to translate design intent into accurate technical specifications for suppliers and manufacturers.

Working closely with designers, buyers, merchandisers, QA teams, and vendors, technologists troubleshoot production issues, improve efficiencies, and ensure consistency in fit and quality. In smaller organizations, they often manage the entire technical process independently.

Core responsibilities include product development, fit reviews, sample sealing, last measurement, grading validation, and recommending pattern or construction changes to improve comfort and performance.

Fit and Comfort: The Core Priorities

Fit and comfort are the most critical and non-negotiable aspects of footwear technology showing the consistency of brand. Every product is fitted to a model aligned with the brand's customer size specification, and feedback is incorporated into revised technical standards.
A technologist must understand the brand's target market, age groups, foot shapes, and regional fitting preferences. Working across multiple lasts each season, they ensure that fit adjustments and pattern corrections are driven by customer needs not compromised for fashion or design elements.

Proto Development and Risk Assessment

Early involvement at the proto stage is essential. A thorough pre-risk assessment can prevent the majority of production issues by identifying risks related to materials, construction, fit, durability, and compliance before

bulk production.
No compromises should be made on quality standards, construction integrity, safety, or performance, as these directly impact returns, customer trust, and production efficiency.

Quality, Compliance, and Brand Protection

A footwear technologist plays a key role in protecting brand credibility. Products must meet industry testing requirements and global regulatory standards. Staying updated on new materials, technologies, construction methods, and testing protocols is essential in a global manufacturing environment.

Equally important is learning from customer returns and post-market feedback. Analyzing past issues and implementing improvements in future collections strengthens product reliability and long-term brand value.

Conclusion

Being a footwear technologist is more than a technical function; it is a responsibility that influences consumer comfort, safety, and trust. Fit, comfort, quality, risk assessment, and compliance must never be compromised, regardless of fashion trends or commercial pressures. By combining technical expertise, factory experience, and continuous learning, a footwear technologist ensures sustainable product success and upholds the integrity of the brand.

Mr. M.D Prince Joseph,
Sr.Faculty
School of Footwear Design
FDDI Hyderabad

EXPERT TALK

Mr. M.D. Prince Joseph is a Senior Faculty member at the School of Footwear Design and Production, FDDI Hyderabad, serving since 2011. With over 24 years of experience across academia and industry, he holds a Diploma in Footwear Manufacturing Technology, a Master's in Labour Management, and an MBA in Footwear Design and Production Management. His expertise spans Footwear Technology, including Research and Applications, Foot Anatomy and last modeling, Applied Ergonomics, and Footwear Bottom Construction.

In 2013, he was deputed to Ethiopia under the International Twinning Project, contributing to industry skill development and the launch of the B.Sc. in Footwear Science and Engineering at Addis Ababa University. He serves as the Convergence Coordinator, promoting collaboration among NID, NIFT, IIFT, IIP, and FDDI Hyderabad, and is actively involved in curriculum development and research. Among his contributions are a publication in IJSRP (October 2023) and a national seminar presentation on Topic such as "Footwear Ergonomics and Its indigenous knowledge system" and "Latest technology &Advancement in Safety Footwear".

Leather and Alternative Surfaces: The Season Ahead

By Mr. Sushant Kapil

Spring/Summer 2027 reflects a growing shift in footwear and accessory materials, where responsibility meets expression. Designers are increasingly balancing durability with emotional appeal, drawing inspiration from heritage textures, nature-led motifs, and crafted finishes. The season reflects a growing preference for materials that not only last longer but also communicate story, comfort, and individuality.

Seasonal Direction: A Year-Round Design Narrative

S/S 27 offers brands and designers the chance to build material stories that can remain relevant across seasons. Rather than being a micro trend, the focus moves toward continuity and clarity—helping consumers feel confident in their choices. This long-term approach supports evolving design narratives that strengthen brand identity and material trust.

Leather and Non-Leather Innovations

Materials and surface finishes are expected to play a decisive role in deepening the relationship between product and user. Visual richness, tactile feel, and subtle playfulness will work together to create engaging sensory experiences.

Designers are encouraged to explore contrasting material pairings such as smooth versus textured, matte versus shine mainly to reflect the season's broader theme of interconnectedness.

Archival revival continues to be influential, with "storytelling" encouraging designers to reinterpret vintage materials and traditional finishes through a modern lens. At the same time, rising sustainability standards mean that responsible material selection is no longer a choice but a necessity. Traceable leathers, recycled and bio-based alternatives certified under widely recognised global standards, and environmentally mindful production processes are becoming essential industry benchmarks. Progress in this area is increasingly driven by collaboration between brands, suppliers, and manufacturers, reinforcing shared responsibility and long-term innovation.

Material & Design Strategies for S/S 27

- Endurable Materials

Invest in premium, responsibly sourced leather, synthetics, and plant-based alternatives to build timeless, sustainable collections.

- Coastal Feels

Nautical-inspired stripes and linear graphics bring a relaxed, resort-ready mood to footwear and accessories.

- Lived-In Leather

Worn, cracked, and aged surfaces highlight durability while celebrating imperfection and character over time.

- Artisan Impressions

Embossed textures introduce handcrafted depth, reflecting decorative and traditional craftsmanship.

- Home to Wardrobe

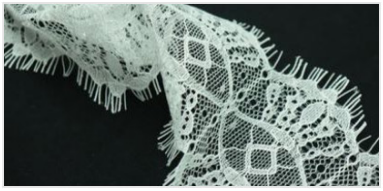
Interior-inspired textiles—such as upholstery weaves and soft furnishings—transition into fashion-forward material applications.

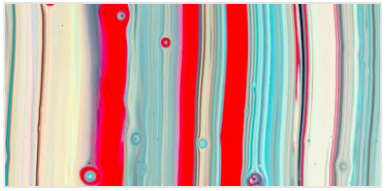
- Nature Bloom

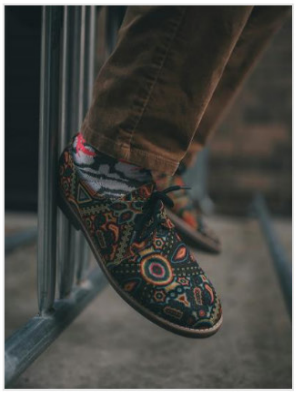
Floral references inform appliqués and surface details, drawing inspiration from meadow landscapes and organic forms.

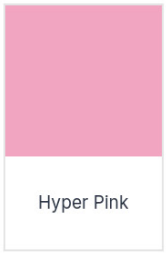
- Timeworn Sheen

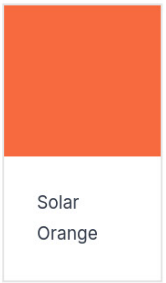
Metallic finishes evolve into muted, antique tones with a spiritual or heritage-inspired feel.

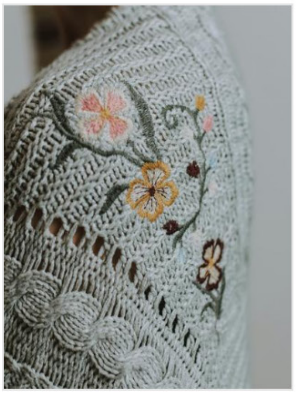


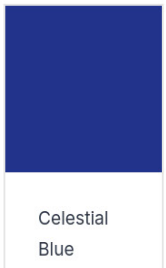


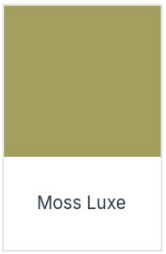


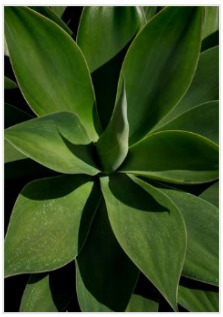












- Handcrafted Naturals

Regenerative materials combined with artisanal techniques reinforce authenticity and tactile richness.

- Reimagined Animal Textures

Shiny snakeskin effects refresh classic animal patterns with a contemporary edge.

- Skin-Comfort Surfaces

Soft, skin-like textures focus on comfort, enhancing wearability and sensory appeal.

For S/S 2027, materials speak with intentions, balancing responsibility, longevity, and expressions to create designs that feel meaningful in a changing the world.

Mr. Sushant Kapil
Jr.Faculty
School of Footwear Design
FDDI Noida

This article is based on independent analysis informed by global trend research and industry observation.

FDDI

FDDI Launches Industry Membership Program to Strengthen Structured Industry Engagement.

FDDI has launched its Industry Membership Program to strengthen structured engagement with footwear, leather, and allied industries. The initiative enables industry partners to access FDDI's testing, training, audit, COE, academic, and advisory services through clearly defined annual membership plans.

The membership program is designed to support quality compliance, skill development, product validation, and industry readiness. Members gain preferential access to testing services, structured training programs, laboratory audits, academic linkages, and institutional resources. The program also promotes closer collaboration between industry and FDDI for technology adoption, talent development, and innovation support.

The membership operates on an annual validity model and is positioned as a value driven service framework rather than a transactional offering. It aligns with FDDI's mandate of industry support, capacity building, and sustainable growth across the sector.

GOLD
Membership

Growth Partner

Industry Membership Program

Package features

1. Complimentary tests worth Rs.1.0L including CE tests on safety footwear /REACH tests/ basic physical tests on FDDI approved base prices. (Details of tests and prices in Annexure A)

2. Inter-laboratory testing on forty basic tests between industry in-house laboratories and FDDI, to validate internal testing results.(List of tests in Annexure A)

3. Two days (8hours per day) OR Four days (4 hours per day) structured training program on testing for two persons.

4. One annual audit of your industry laboratory. Includes advisory recommendations.

5. Twenty five percent fee concession on industry sponsored seats. Applicable to bachelor's and master's programs.

6. Flat 30% discount on the base price on all testing services (Valid for one year from the date of membership). This discount is applicable to all chargeable testing services. This offer will operate exclusive of the complimentary testing benefit as per Sl. no 1 above.

7. Five-year subscription to the FDDI magazine.

8. Complimentary ergonomic assessment of one article at COE of FDDI.

9. Access to 3D scanning facilities during the period of membership (Prior booking intimation with details of duration of access required and subject to a maximum of 20 hours cumulative in the entire membership period).

10. 20% discount on specific paid training programs conducted by FDDI from time to time, including on industry premise training programs.

11. Dedicated SPOC

Enhanced Value Additions

1. Priority testing and audit scheduling with faster turnaround time (TAT).
2. Early access to campus placement drives and internship engagement.
3. Featured listing on FDDI website as a Strategic Industry Partner.
4. Preferential invitation and protocol to FDDI events.
5. Opportunity to participate as a preferred industry speaker at FDDI conclaves and events.
6. Gold Category Plaque and Gold Category Membership certificate.

Annual Fee: Rs. 2,00,000 + 18%GST

SILVER
Membership

Growth Partner

Industry Membership Program

Package features

1. Complimentary tests worth Rs.50,000 including CE tests on safety footwear /REACH tests/ basic physical tests on FDDI approved base prices. (Details of tests and prices in Annexure A)

2. Inter-laboratory testing on Thirty basic tests between industry in-house laboratories and FDDI, to validate internal testing results.(List of tests in Annexure A)

3. Two days (8hours per day) OR Four days (4 hours per day) structured training program on testing for two persons.

4. One annual audit of your industry laboratory. Includes advisory recommendations.

5. Twenty five percent fee concession on industry sponsored seats. Applicable to bachelor's and master's programs.

6. Flat 30% discount on the base price on all testing services (Valid for one year from the date of membership). This discount is applicable to all chargeable testing services. This offer will operate exclusive of the complimentary testing benefit as per Sl. no 1 above.

7. Three-year subscription to the FDDI magazine.

8. Complimentary ergonomic assessment of one article at COE of FDDI.

9. Access to 3D scanning facilities during the period of membership (Prior booking intimation with details of duration of access required and subject to a maximum of 10 hours cumulative in the entire membership period).

10. 20% discount on specific paid training programs conducted by FDDI from time to time, including on industry premise training programs.

11. Dedicated SPOC

Enhanced Value Additions

1. Priority testing and audit scheduling with faster turnaround time (TAT).
2. Early access to campus placement drives and internship engagement.
3. Featured listing on FDDI website as a Strategic Industry Partner.
4. Preferential invitation and protocol to FDDI events.
5. Opportunity to participate as a preferred industry speaker at FDDI conclaves and events.
6. Silver Category Plaque and Silver Category Membership certificate.

Annual Fee: Rs. 1,00,000 + 18%GST

BRONZE
Membership

Associate Partner

Industry Membership Program

Package features

1. Inter-laboratory testing on Twenty basic tests between industry in-house laboratories and FDDI, to validate internal testing results.(List of tests in Annexure A)

2. One days (8hours per day) OR Two days (4 hours per day) structured training program on testing for two persons.

3. One annual audit of your industry laboratory.

4. Twenty five percent fee concession on industry sponsored seats. Applicable to bachelor's and master's programs.

5. Flat 30% discount on the base price on all testing services (Valid for one year from the date of membership). This discount is applicable to all chargeable testing services. This offer will operate exclusive of the complimentary testing benefit as per Sl. no 1 above.

6. One-year subscription to the FDDI magazine.

7. Access to COE facilities. Available at special member rates.

8. 20% discount on specific paid training programs conducted by FDDI from time to time, including on industry premise training programs.

Enhanced Value Additions

1. Preferential scheduling subject to availability

2. Eligibility for cluster-based group benefits.

3. Bronze Category Plaque and Bronze Category Membership certificate.

Annual Fee: Rs. 25,000 + 18%GST

For membership enquiries and onboarding support, industry partners may contact.

Mr. Prashant Kumar Saxena
Head Business Development and Skilling Projects
Footwear Design and Development Institute, Head Office

Role: Industry partnerships, membership onboarding, service integration, and strategic collaborations.

Email: pks@fddiindia.com

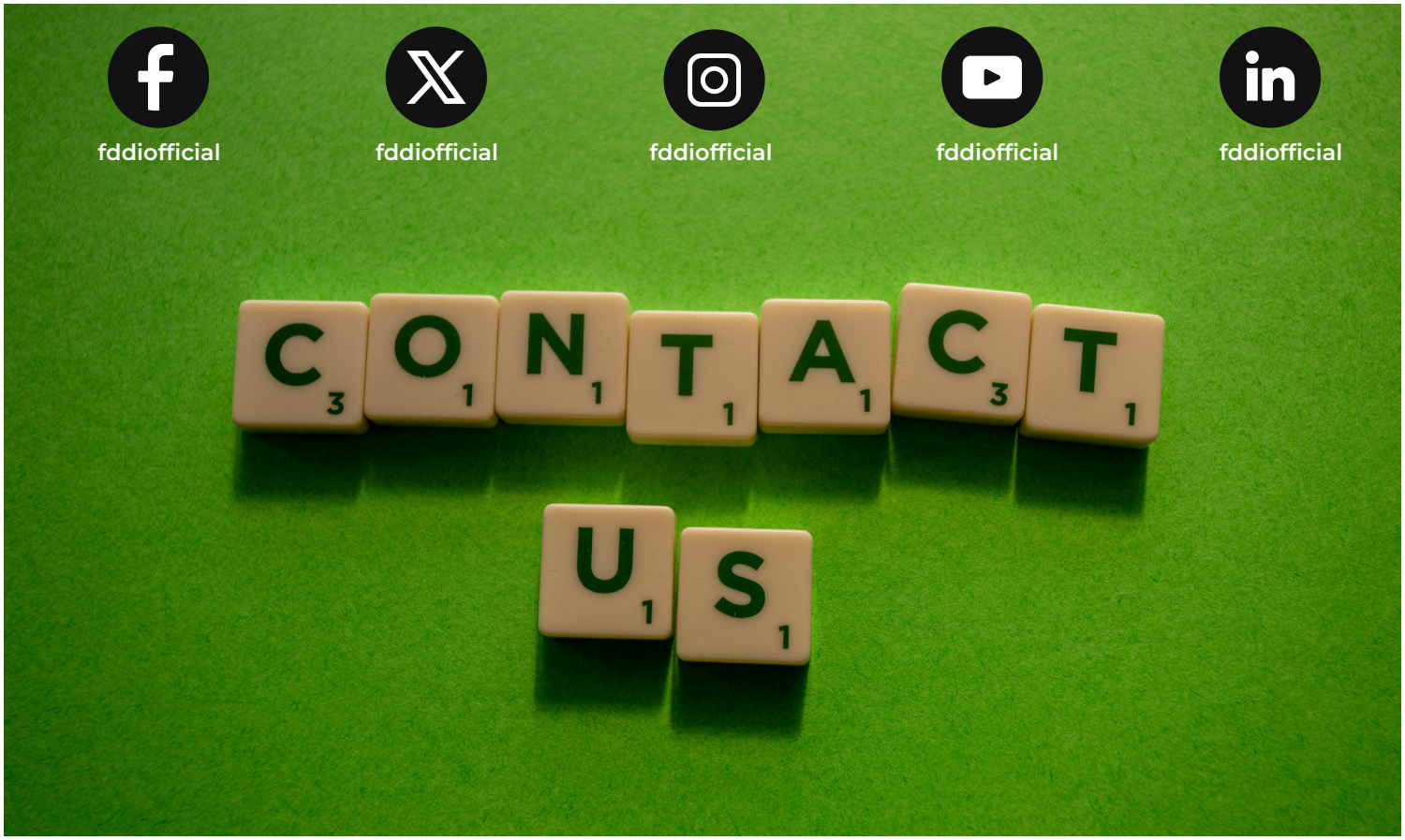
Ms. Rashmi Asthana
Head International Testing Centre
Footwear Design and Development Institute, Head Office

Role: Testing services, laboratory audits, compliance support, and technical service delivery under membership.

Email: hoditc@fddiindia.com

For registration and details, visit:

www.fddiindia.com



CONNECT WITH FOOTWEAR, FASHION & LIFESTYLE ECOSYSTEM THROUGH

"CREATIVE HORIZONS"

Creative Horizons, FDDI's quarterly magazine, provides a high-impact advertising platform with direct reach to manufacturers and exporters, Embassies and High Commissions, trade and export bodies, and the FDDI alumni network. Commercial advertisements enable brands to connect with industry leaders, professionals, academicians, students, and key decision-makers across the footwear, fashion, retail, and lifestyle sectors. In addition to the printed edition, Creative Horizons shall also be published in digital format. The advertisement tariff is as follows:

Size of Advertisement	Colour (In Rs.)	Black & White (In Rs.)
Full Page	20,000	10,000
Double/Center Spread (02 Page)	30,000	20,000
Inside Front Cover	25,000	15,000
Inside Back Cover	25,000	15,000
Back Cover	40,000	30,000
Half Page	10,000	5,000

GST@18% extra

Special Offers:

- Grab your advertising spot early and enjoy special discounted rates—first come, first served!
- Straight discount of 20 % on booking of four consecutive issues.
- Free company profile in any issue with the advance bookings of Rs. 50,000.00 and above and one-year free subscription of the magazine.

The advertisement material is required as per the specification given herewith:

Technical Specification		
Particular	Inches	MM
Page Size	**11X8**	**280X215**
Text Block	**93/8X71/4**	**250X195**

All advertisements shall be booked against 100% advance payment. Payment towards the advertisement may be made through Cheque, Demand Draft (DD), NEFT, or RTGS. The bank details of FDDI for processing the payment are provided below for ready reference:

Account Holder's Name: FOOTWEAR DESIGN & DEVELOPMENT INSTITUTE
Bank Name: HDFC Bank
Branch MICR Code: 110240446, IFSC/RTGS/NEFT
Code: HDFC0004715
Account No. : 50100631701714
PAN No. : AAATF0365K
GST Registration No. : 09AAATF0365K1ZN

FDDI RESERVES THE RIGHT TO REJECT ANY ADVERTISEMENT NOT CONFORMING TO PUBLICATION STANDARDS

CONTACT FOR ADVERTISING

North Region & East Region	South Region	West Region
Name: Mr. Varun Gupta Mobile No: 7310108020 Email: varun@fddiindia.com	Name: M.D. Prince Joseph Mobile No: 9748849494 Email: prince@fddindia.com	Name: Mr. Karan Singh Mobile No: 9894224072 Email:karan.singh@fddiindia.com

For magazine related queries
Mr. Prashant Kumar Saxena, Head Business Development & Skilling Project
Email: pks@fddiindia.com

STAR INTERNATIONAL PVT. LTD.

LEATHER & APPAREL AUTOMATION SYSTEMS

www.stargroupindia.com

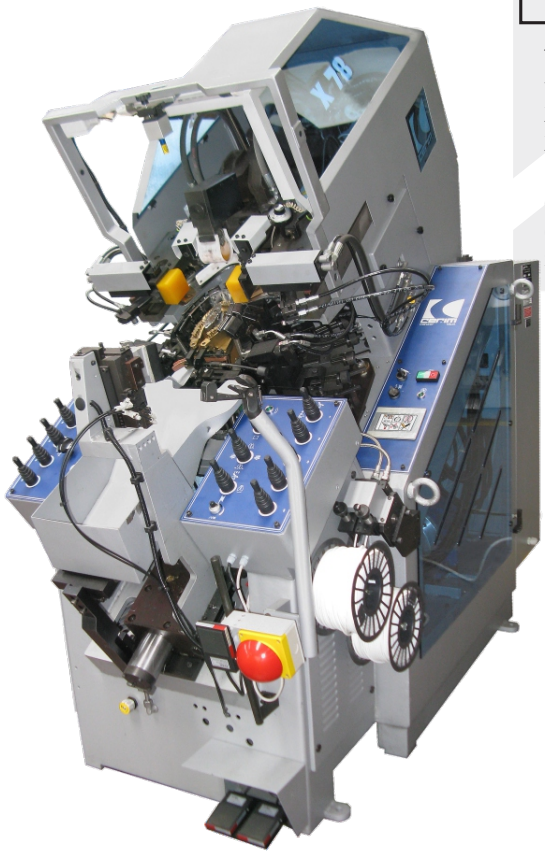
Star International Pvt. Ltd. is a leading importer and distributor of Footwear and Leather Goods machines in India. We offer a complete range of machines, from CAD-CAM to cutting, sewing, and finishing.

avantium
A CERIM AND ATOM COMPANY

cerim

GOLDEN WHEEL · Orisol Asia Ltd. ORISOL · KUKDONG MACHINERY CO., LTD · avantium · mind · KINGSUN · ASADI MACHINERY · EuroGLOBAL · newlast group · QG · CIUCANI MOCASSINO MACHINERY · S.P.S. · THREE-KING · TOYOTO · TAIWEI MACHINERY · TOYO · Elitron INNOVATIVE PRODUCTION METHODS · GLOBAL SHOE MACHINERY · YUSHIN

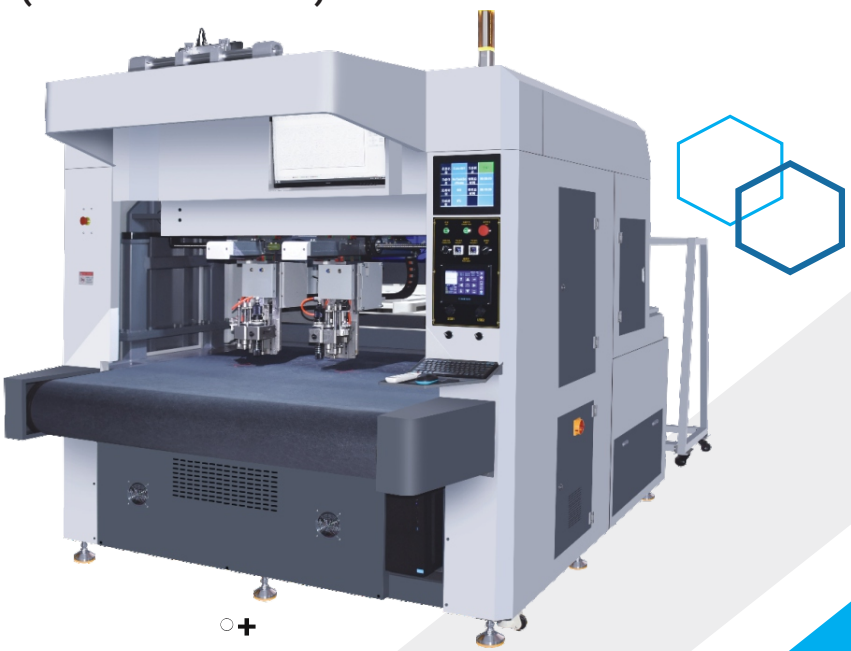
Toe Lasting Machine



The pulling over and toe lasting machine model X78, hydraulic 9 pincers and thermoplastic injection, is suitable for any kind of work. A special kit, in the basic version X78, grants a perfect lasting of safety shoes and boots with iron or plastic toe cap. The X78 is completed with wide range of standard features such as rotating pincers, new laser projector and movable pincers system. Additional features are available as optionals such as motorized wipers stroke, single pincers opening device, rearward drafting, kit for pointed toe ladies shoes, and heel rest with left and right movement . Special optional facilities allow to produce “Goodyear” and “San Crispino” footwear.

KINGSUN
SHOES & LEATHER GOODS MACHINES

AUTOMATIC DOUBLE HEAD CONVEYOR TYPE DIE-LESS CUTTING MACHINE (WITH PROJECTOR)



Specially developed for small size cutting , it can cut multi-layer material (cutting thickness: 12-18mm), equipped with dual asynchronous and intelligent typesetting system to maximize material utilization. The combination of casting process and high precision screw motion system realizes high precision cutting. Applied to shoes/clothing accessories industry: TPU /PU, gasket, leather, rubber, gangbao, mesh, digital printing materials, middle plate, gloves/hats and other flexible materials digital cutting and punching.

www.stargroupindia.com
sales@stargroupindia.com
91-9810500171,9625874237

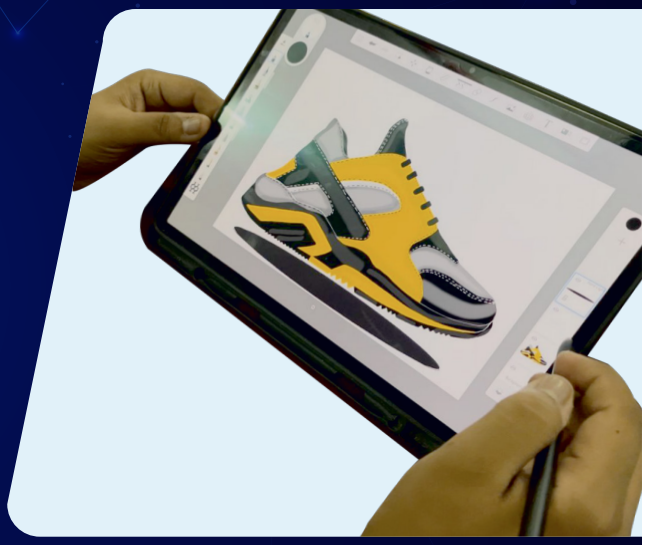
REGD. OFFICE : 120/828, Ranjeet Nagar, Kanpur - 208005 (INDIA)
CORPORATE OFFICE & COMMUNICATION ADDRESS : 120/192, Lajpat Nagar, Opp. Mariampur School, Kanpur - 208005 (INDIA)
Our Branches: New Delhi, Chennai, Kolkata, Agra, Punjab, Gujarat, Maharashtra, Bangalore

ACADEMIC PROGRAMMES OFFERED

FDDI offers a wide basket of undergraduate and postgraduate degree programs through four Specialized schools:

SCHOOL OF FASHION DESIGN

- **B. Des. (4 years) in Fashion with specializations in:**
  - Fashion Design
  - Fashion Communication
  - Textile & Apparel Design
- **M. Des. in Fashion (2-year) and Integrated program (5 -year)**



SCHOOL OF FOOTWEAR DESIGN & PRODUCTION

- **B. Des. in Footwear with specializations in:**
  - Footwear Design & Production
  - Sports & Lifestyle Footwear
  - High Fashion Footwear
- **M. Des. in Footwear (2-year) and Integrated program (5-year)**

SCHOOL OF LEATHER GOODS & ACCESSORIES DESIGN

- **B. Des. (4 years) with specializations in:**
  - Leather, Lifestyle & Product Design
  - Digital Design & Virtual prototyping

SCHOOL OF RETAIL & FASHION MERCHANDISE

- **BBA/MBA with specializations in:**
  - Retail & Fashion Merchandise
  - Business Analytics
  - Human Resource Management
  - Supply Chain Management
  - Global Luxury Brand Management

वाणिज्य एवं उद्योग मंत्रालय
MINISTRY OF
COMMERCE AND INDUSTRY

FDI