

Report on CSIR-CLRI @ the 12th CII-NID Design Summit 2017

14th December 2012

Hotel Le Meredien, New Delhi



The CII-NID Design Summit is a grand event that celebrates Design in India. The summit is the most powerful platform that attracts participation from Design Houses, Design Institutes, Policy makers, Media, and user Industry from India & overseas. It is no doubt an inspiring and stimulating global forum set in the Indian context. CII, India's largest industry association has been performing the role as India's strategic body for Design. It has bage I strenuously and diligently worked to strengthen and support the economy and society by demonstrating and promoting the vital role of design in making businesses more competitive and public services more effective.

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Preamble

Recently the Union Cabinet gave its approval to the long-awaited ambitious National Manufacturing Policy (NMP), which seeks to set up mega industrial zones, create 100 million jobs by 2022 and put India at par with manufacturing powers like China and Japan. The NMP seeks to enhance the share of manufacturing in the GDP to 25 per cent within a decade from current about 16%.

Focus on manufacturing in not an Indian phenomenon alone. Manufacturing is leading once again. It's recognized as the basis of big economies. The generator of goods and services. The medium by which ideas take substance. The reinvestment in manufacturing worldwide, and the commitment by those involved to improve and even reinvent their companies, is why we are seeing manufacturing momentum in so many corners of the globe.

In the background of the focus on manufacturing and this decade being announced as the decade of innovation in India, it is but imperative to establish that Design has an important enabling role to play in achieving both the objectives.

It is imperative is to exploit the dynamic relationship between product design, production efficiency and profits. Better designs trim the cost of assembly lines, strip material and process waste from ledgers, help service people inspect and quickly upgrade systems and enable lean and six-sigma personnel to refine rather than re-manufacture. More than increasing efficiencies, good design ensures that there is something to manufacture that people desire. New product development and efficient product design help create a competitive advantage that rewards companies, customers and even economies.

CII has played a major role in the bringing out of National Manufacturing Policy and is playing an important role in achieving the mission of Innovation enabled India.

The 12th CII-NID Design Summit discussed what role Design can play in supporting business sustainability and growth through design innovation coupled with a close knowledge of manufacturing.

The Theme

The importance of design, its value and importance to businesses and the utility of design thinking to tackle the most challenging problems is quite well known. Having established the significance of design and design thinking for business vitality, it is now incumbent upon us to see how we can put this to use in practice. As we all know there is big gap in thinking and doing. It is this gap that this edition of design summit intended to fill. The summit proposed to answer the most important question - "how to make it happen".



This summit deliberated on how to move from "design thinking" to "design doing." The summit explored key methods, strategies and successful techniques to extrapolate design thinking to design doing within businesses. It endeavoured to explore how businesses can achieve new growth using design.

Focusing on Design doing and design for manufacture lead to increased understanding of how to create products which not only appeal to the market, but are practical to manufacture. It will see how design and engineering could be integrated in an organization.

Sub-themes

To make things happen is not easy and would require a deep and functional look into several aspects. Using a combination of proven methods, case studies, academic research, the summit unfolded the theme through several sub-themes:

- Integrating Design into the organization
- Managing Design
- Creating a "Design Doing"
- Operational Excellence in Design
- Design leadership
- Measuring Design value using metrics
- Design as Strategic Integrator for Innovation
- Research for Design
- Product lifecycle management
- Product design and manufacturing strategies
- Design for disposal and recycling

The Speakers



Abhijit Thosar is a Design Consultant and Customer Experience Strategist with over 18 years of industry experience.

Lee Bazalgette, Colombo Design Studio. Lee hopes that Colombo Design Studio will help to build upon the talent of local designers working in the fields of architecture, interior and graphic design, and encourage people to recognise the value of design in all aspects of life.

Christoffer Langenskiold is the founding CEO of The Big Picture, a service designer consultancy that aims at democratizing customer Experience.

Paul Priestman is co-founding director of Priestmangoode, a leading multidisciplinary design consultancy specialising in transport, aviation, environment and product design for a roster of significant brands across the globe.

Vivek Sirohi is a Chemical Engineer from Indian Institute of Technology, Delhi. He is current the Vice-President, R&D for South Asia as well as Global VP for Water Category for Unilever.

Zachery Jean Paradis background in design, business, social sciences, and technology has prepared him to work with companies to become more successful innovators.

Anil Saini. With more than 24 years of experience in the field of automotive and consumer product design, Anil Saini has developed teams and infrastructure for many Industrial design and styling studios.

Francesco Morace Sociologist, journalist and author of over 20 books, translated into various languages, and ranging in subject from trends in consumption to social change. Founder of the research and strategic consulting institute Future Concept Lab (1989), he is also a professor at Domus Academy and Milan's Politecnico.

Jashish Kambli, Executive Partner, Future Factory. Jashish is the founder of Future Factory, a leading product design consultancy in the region, where he has led design initiatives for global brands in over 40 companies.

Taina Snellman founded the Tikau design company in Helsinki in 2008 with the aim of combining sustainability, human dignity and global solidarity.

Paul Hendrikx is the co-founder of Studio Mango which he founded with Frank Hanssen.

Aditya Vijay Berlia, Pro Chancellor & Co-Founder, Apeejay Stya University

Jan Gogelein. After graduating in 2001 as industrial design engineer from the University of Delft in the Netherlands, Jan Gogelein started his career working on product designs and international retail concepts.

Ajay Verma, Vice President Value Solutions Dassault Systemes India,. As Vice President for Value Solutions at Dassault Systemes, Ajay has responsibility for driving the company's business through its channel partners across India.

Willem Woudenberg is branding & design consultant. He has a long experience working for clients in Netherlands and Europe, in particular in the service sector.

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Anuj Prasad is the Founder & CEO of Desmania, a leading design consulting firm in India. He is an alumnus of NID, with a base qualification in Production engineering.

Naushad Forbes is Director of Forbes Marshall, India's leading Steam Engineering and Control Instrumentation firm. He is the CEO of the Steam Engineering Companies within the group.

Rajshree Pathy is the Chairperson and Managing Director of Rajshree Sugars and Chemicals Limited.

R Mukundan, Managing Director of Tata Chemicals Limited, joined Tata Administrative Service in 1990, after completion of MBA from FMS, Delhi University. He is an Engineer from IIT, Roorkee and an Alumnus of Havard Business School, London.

Sudhir Kumar, Product Designer is a Post Graduate in Industrial Design from National Institute of Design, Ahmedabad with Mechanical Engineering background.

Vikram Sharma has been the Managing Director of BP Ergo since June-2011. Prior to joining BP Ergo, Vikram was one of the founders of Crossover Energy, an energy services company helping businesses reduce their overall energy costs.

MD SADIQ, Scientist, CSIR-CLRI Shoe Design & Development Centre, India is a distinguished Leather Technologist with specialization in Footwear Science and Engineering in which he holds a Master's degree.

Venkat Rao is a young industrial designer from India. Graduated from D J Academy of Design Coimbatore, Venkat has a professional work experience in the field of Consumer Products, Toys, Interface and Furniture design.

Pradyumna Vyas, Prof. Director, National Institute of Design (NID). Acquired Masters in Industrial Design from Indian Institute of Technology, Bombay, India (IITB). Prof. Vyas has over 27 years of professional and teaching experience in different spheres of design.

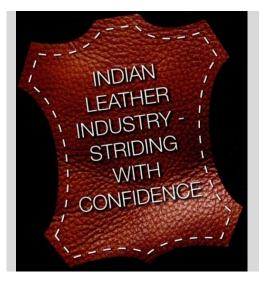
Adi Godrej, President, Confederation of Indian Industry (CII) & Chairman, Godrej Group. Adi Godrej is chairman of the Godrej Group. He is also chairman of Godrej Industries Ltd., Godrej Consumer Products Ltd., Godrej Properties Ltd., Godrej Hershey Ltd. The Godrej Group is one of India's largest conglomerates.

Chandrajit Banerjee is the Director General of Confederation of Indian Industry (CII). Mr Banerjee has been with the CII for over 25 years and has been the Director General, CII since May 2008.

Nick Talbot is the Global Design Head at Tata Elxsi. In his current role, Nick is responsible for all design initiatives for the Industrial Design division of Tata Elxsi across the globe including India.

Varsha Gupta has a Post Graduate degree in Textile & Clothing from University of Delhi and has been trained at FIT, New York. Presently, she is an Associate Professor and Chairperson of Master of Design Program at NIFT, New Delhi and her current research interests include Recycling and Sustainable Development.

Introducing LEATHER at the 12th CII-NID Design Summit 2012

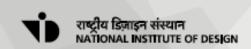


In the words of **Prof Pradyumna Vyas, Member Secretary & Director, National Institute of Design**

"The LEATHER Sector has been introduced at this 12th Design ³ dge | Summit which would be an eye-opener for the International ⁵ Design fraternity and immense opportunities for collaboration."

<u>CSIR-Central Leather Research Institute at the Design Summit</u>









PROGRAM DESIGN SUMMIT 2012

DAY - 2 14th DEC.

1545 - 1600 Hrs



Case Study Presentation - The Travel of India in Fashion Forecasting for Leather by Md. Sadiq

Scientist – CSIR – Central Leather Research Institute, India

MD SADIQ, Scientist, CSIR-CLRI Shoe Design & Development Centre, India is a distinguished Leather Technologist with specialization in Footwear Science and Engineering in which he holds a Master's degree. His focus has been on Footwear Styling and Design; R & D in Trend Forecasting, Colours and Texture development. He has also innovated in HRD activities with accent on Shoe Design Education and Training. He has also excelled in Planning for the Indian Leather sector in the area of design, trends and global competitiveness. His signature contribution has been in enabling the 'Travel of India in fashion forecasting for LEATHER' - an R&D initiative for garnering global leadership. He helped India gain a foothold in the prestigious MODEUROP Colour Club

Travel of INDIA in 'fashion forecasting' for leather is an initiative to bring to the fore the ability of the Indian Leather Industry to take pro-active measures in fashion forecasting and design development by providing a scientific leather product development focus in the areas of color forecasting, range building, design and retail analysis. The outcome envisaged is to strengthen the Indian leather product design capabilities, which would be reflected in product quality enhancement.

The Travel of INDIA in Fashion Forecasting for LEATHER



Md Sadiq, CSIR-CLRI Shoe Design & Development Centre began his presentation with "Overview of the Indian Leather Industry" thereby introducing LEATHER at this CII platform. Highlighting the potential and prospects:

- > A prominent sector in Indian economy in terms of employment generation and export earnings
- Is among the top ten foreign exchange earners for the country
- > Strong production base Annual production about US \$ 7.5 Billion
- Annual export 2010-11 US \$ 4868 million in 2011-12
- > 3.00% share in global leather trade of US\$ 137.96 billion (2010)
- Value-added finished products presently constitute 80% from a mere 7% in 1956-57
- Nearly 70% production takes place in Small and Medium Enterprises (SMEs)-About 42000 units registered under SSI
- About 2.5 million workforce Rural & semi-urban greas
- Women constitute 30% of the work force in the organized units
- Increasing importance to occupational safety and work environment
- Is bestowed with an affluence of raw materials, with India endowed with 21% of world cattle & buffalo and 11% of world goat & sheep population.
- > Has strong tanning base and produces 2 billion sq.ft. of leather annually, meets about 10% of the global requirement of leather.
- > Is the second largest producer of Leather Garments with an annual production capacity of 16 million pieces and the third largest exporter
- ➤ Is the fifth largest global exporter of Leather Goods & Accessories including Saddlery & Harness with an annual production capacity of 63 million pieces of leather articles, 52 million pairs of Industrial gloves & 12.50 million pieces of Harness & Saddlery items.
- > The target of the Government of India for the leather sector to achieve an export value of USD 14 billion by 2016-17, growing at a Cumulative Annual Growth Rate of about 25%.
- > On the whole, the Indian leather industry has very good prospects on the export front.

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Having introduced the Indian Leather Industry that is 'striding with confidence,' he said: What Innovation Dimension is the INDIAN LEATHER INDUSTRY in? Where do we slot the Innovation in the INDIAN LEATHER Industry?

- In a globalizing economy, **design** is being perceived as a **new engine of economic and industrial growth**.
- Design and breakthrough innovations can play a pivotal role in positioning of Leather and Leather Product industries in the global arena by value addition apart from enhancing competitiveness.
- Leather has emerged as a fashion product.
- Colour, texture and other highlights add to the fashion values of creatively designed leather products. These add significantly to the value realization from leather products.
- "To emerge as a strong global player in the world leather trade, all efforts to take proactive measures to be ready with the fashion leathers when the fashion does emerge, is crucial."

Highlighting the Need of the Hour:

"Success in being able to work with **high-end customers** requires building design capabilities that enable us to **offer exciting collections** that can compete internationally," he said.

He went on to explain the SHOE pie that explains 'concept' to 'market' encapsulating the stages of SHOE Engineering in a value chain.

He then started to present the Case Study:

The Travel of India in Fashion Forecasting for Leather

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by providing a scientific leather product development focus in the areas of colour forecasting, range building, design and retail analysis.

The outcome envisaged is to strengthen the Indian leather product design capabilities which would be reflected in product quality enhancement.

He explained as to How CSIR-CLRI & the Industry had walked their talk in this endeavour ... From being a mere resourcing partner in the early 90's to being able to deliver the right product for the right market $P_{\phi,ge}$ and the right season, TODAY; the Indian Leather Industry has travelled a long way.

Mr Sadig presented the various stages of Fashion Forecasting for LEATHER and chose this opportune moment to release the 'first copy' of the MODEUROP Colour Card for the Spring Summer 2014 season, globally first.



In picture: Prof Pradyumna Vyas, Member Secretary, National Design Council and Director, National Institute of Design releasing the 'first copy' of the MODEUROP Colour Card for the Spring Summer 2014 season in the presence of Dr BN Das, Chief Scientist & Head, CSIR-CLRI Shoe Design & Development Centre and Shri Md Sadig, the Speaker

He moved on to explain the Evolution of the Colours for the Spring Summer 2014 season.

He then introduced CSIR-CLRI to the audience as a central hub in Indian Leather Sector with direct roles in education, research, training, testing, designing, forecasting, planning, social empowerment and leading in science and technology relating to leather.

Explaining how CSIR-CLRI was leap frogging in the design domain; he elaborated:

- 1. How modern age retailing with customization was catching rapid fire with the discerning and is becoming a highly profitable enterprise world-wide.
- 2. Setting-up of 'The Leather INCUBATOR' to nurture a culture of developing new leathers based on the seasonal demands.

3. To set up an all products 'Design Station' for design and range building of seasonal design collection; offer new design collection.

Citing 'Innovation in Design" as an example, he said the newer and niftier ideas on Design innovation could be:

- (a) GPRS tracking of school going children with intelligent chips integrated in their school shoes.

 Would help parents track if their children have reached school safely on the path they have Page |
 been taught to walk. Any deviation from this path would alert the parents through an 'alert'
- (b) Tracking soccer players aiming their kinematical motion analysis the total distance, in meters, run by each player while on the field. The new data could help advance our understanding of the world's most popular sport, much like recent developments in baseball measurement have aided analysis of pitcher motion and fielding ability.
- (c) Just like 'intelligent' baby nappies, when wet, changes colour; can we define a system in therapeutic footwear (for example: footwear for diabetes) when based on the spread of the colour on the gel; it gives an understanding that it is time to change the footwear.

Md Sadiq, in conclusion said that "Future growth of Global Leather Industry will continue to be market driven. Believing in Technology partnerships with Global Leaders was the way forward for decided advantages in strengthening the Indian competence in Design Doing.

Research - Academia - Industry synergy is a prime driver of Design Doing

Through "Fashion Forecasting" & "Value Engineering" INDIA would gain a major edge over the competition ... and we will be among nations in the foreyards of DESIGN DOING!

Interaction with the audience



A unique event



The format of the summit was such that it evoked good amount of discussion and deliberation on the sub-themes.

Brand Leaders and admired figures

The summit had known and leading names from the industry and academia as keynote speakers. The focus was on design heads from leading companies around the world who shared the secrets of successful design strategy. Joining them on the platform were some of the most innovative and admired figures from the world of design consultancy and academics.

Case Studies

The summit sessions featured case studies from leading companies within India as well as from abroad.

Shared Learning

Shared learning was the essence of the summit with invited papers addressing the sub-themes.

Audience

The summit aimed at senior product designers as well as innovation professionals working for a brand, OEMs or consultancies. The Design Summit was for corporates, SMEs, entrepreneurs, designers and academics. The attendees were Managers, Directors, CEOs or COOs.



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