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# JILTA

Journal of Indian Leather Technologists Association

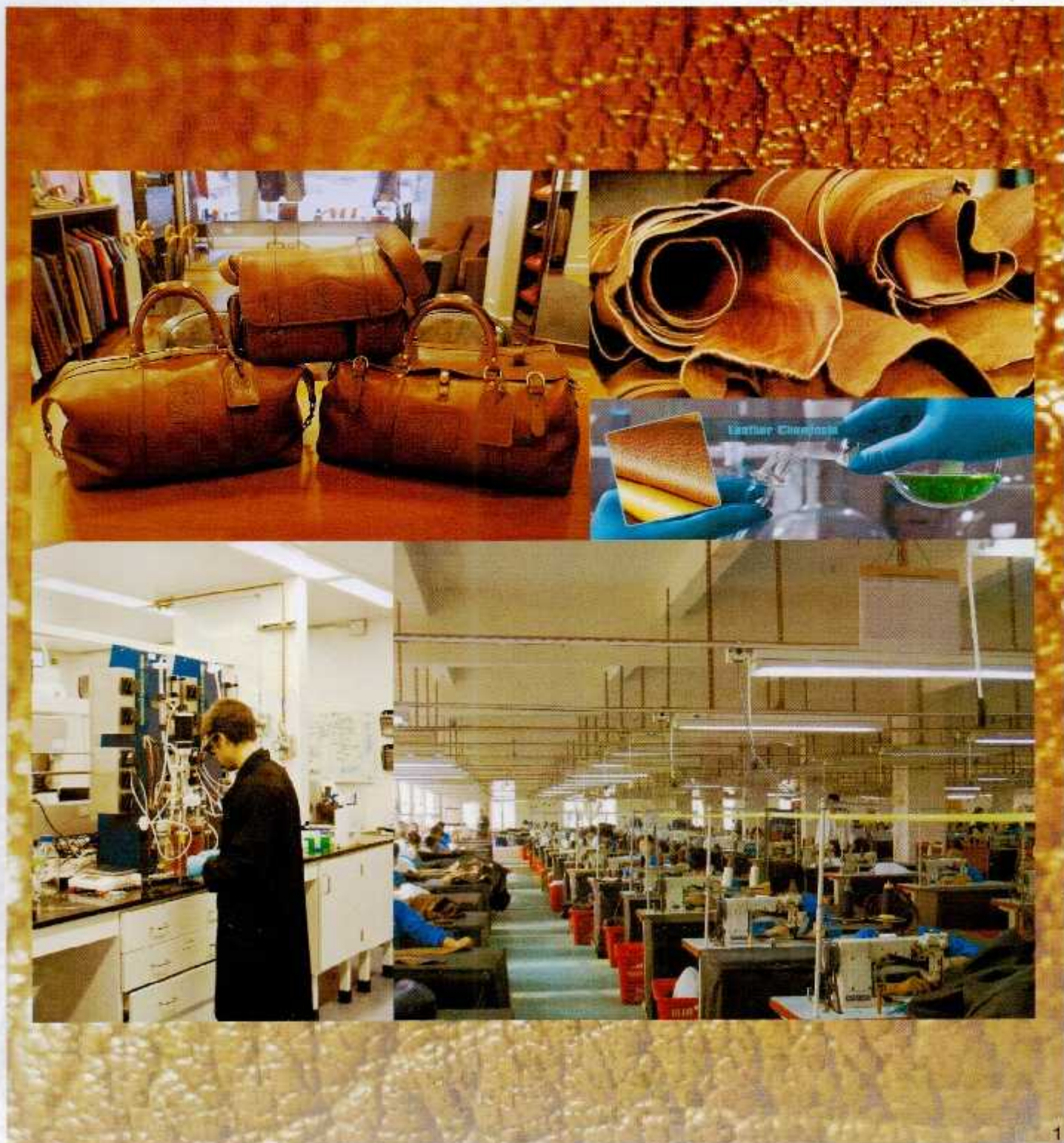
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January 2019





# Our Activities

- An Association with over 600 members from India and abroad working since last 68 years for the growth and development of Leather and its allied industries.
- Organize seminars, symposiums, workshops in order to share information, knowledge & latest development and interactions for the benefit of all concerned.
- Organize Human Resource Development programmes on regular basis.
- Publish for over 60 years, a technical monthly journal namely “Journal of Indian Leather Technologists’ Association” (JILTA), widely circulated through out the World.
- Publish books for the benefit of the students at various levels of study, for the Research Scholar and the Industry.
- Work as interface between Industry and the Government.
- Assist Planning Commission, various Government Institutions, Ministry and autonomous bodies to formulate appropriate policies for the growth of the Industry.
- Assist small and tiny leather goods manufacturers in marketing their products by organizing LEXPOs in Kolkata and different parts of India.

## Indian Leather Technologists’ Association

[A Member Society of International Union of Leather Technologists’ and Chemists Societies (IULTCS)]

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## JOURNAL OF INDIAN LEATHER TECHNOLOGISTS' ASSOCIATION (JILTA)

Indian Leather Technologists' Association is a premier organisation of its kind in India was established in 1950 by Late Prof. B.M.Das. It is a Member Society of International Union of Leather Technologists & Chemists Societies (IULTCS).

The Journal of Indian Leather Technologists' Association (JILTA) is a monthly publication which encapsulates latest state of the art in processing technology of leather and its products, commerce and economics, research & development, news & views of the industry etc. It reaches to the Leather / Footwear Technologists and the decision makers all over the country and overseas.

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# Outlook on Energy Commodities



Energy prices fell sharply in November on the back of plunging oil and gasoil prices. Energy prices fell 3.1% month-on-month in November, following October's 5.5% increase.

In the oil market, the recent U.S. decision to allow eight countries to continue importing Iranian oil for 180 days following the reintroduction of sanctions on 4 November underpinned the price decline. In addition, top global producers the U.S., Russia and Saudi Arabia were pumping near record levels. On the demand side, concerns emerged over the health of the global economy following a slowdown in China, and disappointing GDP figures in the EU and Japan. In contrast, natural gas prices increased notably, on the back of low stocks as the northern hemisphere enters the winter season—the period of peak natural gas demand. Regarding coking coal, prices edged up due to tight supply, while uranium prices continued to recover on better demand prospects.

Economic panelists see energy prices declining 3.2% in Q4 2019 compared to the same period of 2018 (previous edition: -4.4% year-on-year), likely due to softer global demand and stronger oil supply from the U.S. A potential supply cut by OPEC and non-OPEC oil producers and the future of Iranian oil output are key risks to the outlook. Focus economics analysts expects energy prices to be fairly flat in Q4 2020 in annual terms, inching down 0.6%.

## Price Data of Energy Commodities

Items	2012	2013	2014	2015	2016
Brent Crude Oil	111.67	108.69	98.9	52.42	43.83
WTI Crude Oil	94.08	97.97	93.02	48.68	43.28
Gasoline	3.04	2.92	2.66	1.94	1.44
Natural Gas	2.76	3.76	4.26	2.63	2.55
Thermal Coal	98.17	85.83	72.54	60.38	62.96
Coking Coal	252.1	147.71	114.58	90.93	129.68
Uranium	48.86	38.66	33.44	36.81	26.45
Gasoil	953.38	918.88	837.79	488.16	390.61

### Note:-

- Brent Crude Oil prices in USD per barrel (bbl).
- WTI Crude Oil prices in USD per barrel (bbl).
- Gasoline prices in USD per gallon (gal).
- Natural Gas prices in USD per Million of British Thermal Units (MMBtu).

- Thermal Coal prices in USD per metric ton (mt).
- Coking Coal prices in USD per metric ton (mt).
- Uranium prices in USD per pound (lb).
- Gasoil prices in USD per metric ton (mt).
- All prices are average of period (aop).

Brent crude oil prices continued to freefall over the last month, with the global oil benchmark sinking to more than a one-year low in late November. On 30 November, oil prices traded at USD 57.5 per barrel, which was down 24.0% from the same day last month. The benchmark price for global crude oil markets was down 9.5% from the same day last year and was 13.8% lower on a year-to-date basis. The announcement in early November that the U.S. would provide waivers to eight countries in order to allow them to continue purchasing Iranian oil after the implementation of U.S. sanctions on 4 November triggered the price spiral, as Iranian exports are now unlikely to fall as much as previously predicted. Moreover, Saudi Arabia, Russia and the U.S.—the world's top three oil producers—are pumping close to all-time highs, adding further downward pressure on prices. On the demand side, signs have recently emerged of flagging activity. The Chinese economy has been decelerating in 2018, Japan recorded a contraction in the third quarter, while Q3 GDP data for the Euro area was the weakest since 2014. This likely added to investors' concerns over the future appetite for crude oil.

## Brent Crude Oil Price History Data (USD per barrel, aop)

Item	2013	2014	2015	2016	2017
Brent Crude Oil	108.69	98.9	52.42	43.83	54.26

Coking coal prices have edged up in recent weeks on robust Chinese demand. On 30 November, coking coal traded at USD 219 per metric ton, which was 0.3% higher than on the same day last month. However, the price was down 13.8% on a year-to-date basis but was 9.4% higher than on the same day last year. Prices maintained their upward trend since early August on robust Chinese steel output, given that coking coal is used in the production of stainless steel. In addition, Beijing's relaxation of production curbs has further sustained demand levels, thereby propping up prices. Looking ahead, warning signs appeared in late November, when prices for Chinese steel plunged: Chinese steelmakers consequently incurred their first



losses in three years. As a result, production is expected to wane as firms' attempt to protect their profit margins and amid a general weakening of demand. However, a likely rise in demand from India should soften the blow somewhat, as the Indian government pushes for greater steel production.

**Coking Coal Price History Data (USD per metric ton, aop)**

Item	2013	2014	2015	2016	2017
Coking Coal	147.71	114.58	90.93	129.68	170.76

European low sulphur gasoil prices fell sharply in late November, dragged down by markedly lower prices in oil markets. On 30 November, gasoil traded at USD 564 per metric ton, which was down 17.6% from the same day last month. Moreover, the price was 5.8% lower on a year-to-date basis, but was up 3.2% from the same day last year. Gasoil prices tumbled on the recent rout in the crude oil markets, and despite ultra-low inventory levels ahead of the high-demand heating season. Inventories in the Amsterdam-Rotterdam-Antwerp storage hub fallen by more than 30% in recent months.

**Gasoil Price History Data (USD per metric ton, aop)**

Item	2013	2014	2015	2016	2017
Gasoil	918.88	837.79	488.16	390.61	482.81

Crude oil prices' downward spiral pulled gasoline prices even lower in recent weeks. On 30 November, reformulated blendstock for oxygenate blending (RBOB) gasoline traded at USD 1.52 per gallon, which was 19.3% lower than on the same day last month. Moreover, the price was down 17.3% on a year-to-date basis and was 10.4% lower than on the same day last year. Gasoline prices continued to recoil in late November, in tandem with plunging crude oil prices, which have experienced immense downward pressure from heightened concern over potential excess global supply, softer implications of U.S. sanctions on Iran and weakening global demand prospects. Moreover, according to the most recent EIA report, gasoline production remained robust, with output rising to an average of 10.2 million barrels per day in the week ending 23 November.

**Gasoline Price History Data (USD per Gallon, aop)**

Item	2013	2014	2015	2016	2017
Natural Gas	3.76	4.26	2.63	2.55	3.02

Prices for Australian thermal coal have fallen in recent weeks on a combination of structural shifts and temporary factors, but remain fairly elevated. On 30 November, the spot price for Australian thermal coal was USD 102.9 per metric ton. While

the price was down 4.3% from the same day last month, it was 1.2% higher on a year-to-date basis and was up 6.3% from the same day last year. Priced dropped markedly on developments in China and Japan—the two biggest markets for the commodity—and due to more structural changes in the energy markets in Asia. A new Chinese ban came into effect, which effectively halts all coal imports until early next year. This reflects both a move away from coal and the effects of high coal prices: The price tag has made the commodity less competitive amid a scaling back of investments in coal-fired projects in Australia's biggest export markets. Moreover, Japanese demand dampened following a fire at a power plant caused by an earthquake in September. Stockpiles there have subsequently been reallocated and dragged on import needs.

**Thermal Coal Price History Data (USD per metric ton, aop)**

Item	2013	2014	2015	2016	2017
Thermal Coal	85.83	72.54	60.38	62.96	87.22

The rally in uranium prices, which began in April this year amid production cutbacks, has continued in recent weeks. On 30 November, uranium traded at USD 29.1 per pound, which was 4.3% higher than on the same day last month. Furthermore, the price was up 22.5% on a year-to-date basis and was 32.3% higher than on the same day in 2017. Prices trended upwards in November amid news that a Chinese state-backed company agreed to purchase uranium assets in Namibia from Rio Tinto. This also highlights China's growing interest in the commodity given its nuclear energy ambitions—the Asian giant is expected to have put five new nuclear power plants online by the end of this year alone.

**Uranium Price History Data (USD per pound, aop)**

Item	2013	2014	2015	2016	2017
Uranium	38.66	33.44	36.81	26.45	22.06

West Texas Intermediate (WTI) crude oil prices have hit a 13-month low over the last month on ample supply. WTI crude oil prices traded at USD 50.8 per barrel on 30 November, which was down 23.3% from the same day last month. The price was 16.0% lower on a year-to-date basis and was down 11.5% from the same day last year. On the international scene, the announcement in early November of U.S. waivers for eight countries to allow them to continue importing Iranian oil sent prices crashing in recent weeks. Moreover, Saudi Arabia and Russia continue to pump at near-record highs, adding further downward price pressure. Domestically, comprehensive EIA data for the week ending 23 November showed U.S. crude oil





inventories rose by 3.6 million barrels over the previous week, approximately 7% higher than the 5-year average. The 23 November data also marked the 10th consecutive week that inventories have climbed, an indication of elevated supply. On the demand side, despite a strong U.S. economy, global demand for crude oil is likely abating on weaker dynamics in China, the EU and Japan.

**WTI Crude Oil Price History Data (USD per barrel, aop)**

Item	2013	2014	2015	2016	2017
WTI Crude Oil	97.97	93.02	48.68	43.28	50.84



**CORRIGENDUM**

The Designation "Associate Professor" against the name of the Co-Author Mr. Bibhas Ch. Paul, of the Article titled "Mounting Headwinds Weigh on Global Growth Further Down the Road" published in the December' 2018 issue of JILTA, was a Typographical Error, which is regretted.

*Goutam Mukherjee*  
**Dr. Goutam Mukherjee**  
Hony. Editor, JILTA



## From the desk of General Secretary



### INAUGURATION CEREMONY OF SILIGURI LEXPO' XXV

This was held at Kanchanjungha Stadium adjacent ground on 22<sup>nd</sup> December' 2018 at 5.00 pm.



The dignitaries present on the dais were Mr. Goutam Deb, Hon'ble Minister-in-Charge, Department of Tourism, Govt. of West Bengal as the **Chief Guest**. Mr. Rajat Sarkar, Hon'ble councilor & opposition leader, Siliguri Municipal Corporation, Mr. Nantu Paul, Hon'ble councilor, Siliguri Municipal Corporation and Vice Chairman, North Bengal Sports & Games Board, Govt. of West Bengal, as the **Guests of Honour**. Also present on the dais were Mr. Asit Baran Kanungo, Vice President, ILTA and Mr. B. C. Jana, Jt. Secretary, ILTA.



The programme started with the Welcome address delivered by Mr. A. B. Kanungo.

In his address Mr. Kanungo recalled his experience during the early years of the event. He also highlighted on how ILTA is thinking and working on the rising possibilities of the growth of leather goods business in North-East states, for which Siliguri is the gateway. He requested through the MiC to the Government authorities for simplification of the documents and other formalities to organize the fair in future at a large scale and smoothly. He welcomed the local artisans who are showing their interest in this business. He welcomed the citizens of the Siliguri and adjacent areas who are the key stakeholders of this glorious event since its commencement.



Mr. Ranjan Sarkar, briefly shared his experience with the Siliguri LEXPO during his college hood when he started visiting this fair with his parents and family members 25 years ago. He advised the organizers for organizing trainings and to offer assistance to the upcoming generations in this trade. He promised that all cooperation and assistance would be provided from the local administrations, if this venture is initiated by ILTA.







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Mr. Nantu Paul, in his address recalled his long involvement since inception of LEXPO at Siliguri 25 years ago. He strongly supported Mr. Ranjan Sarkar regarding the training and assistance to the new generation for growth of the leather industry. He urged the MiC on behalf of ILTA, for providing more financial and infrastructural support for organizing leather fair more and more in Bengal as well as in other states of India and simultaneously he advised ILTA to take necessary actions so that unemployed young generation become more interested in this trade.



Mr. Goutam Deb, in his Inaugural speech, first offered thanks to the organizers for inviting him as the Chief Guest of the Silver Jubilee celebration of the event. Then he acknowledged the income generation scope from this trade for the new generation and he promised whole hearted support to the organizers in future. He also acknowledged the lacuna from the Govt.'s side in respect of more involvement and responsibility in this type of venture. Parallely he promised to help, if the organizers come to him with any specific proposals.



The event was then inaugurated by lighting the lamp by all the dignitaries present on the dais.



Mr. B. C. Jana thereafter offered Vote of Thanks to the Hon'ble Guests for gracing the function and making the Silver Jubilee event memorable and glorious. He also offered thanks to the local dignitaries for their kind cooperation in organizing the fair smoothly. The stall holders and all people present were also thanked by Mr. Jana who requested them to help themselves with refreshments being served.

A few years ago, ILTA organized in collaboration with MSME a workshop in fairground of LEXPO at Siliguri, to help interested participants to develop themselves as Entrepreneurs. Mrs. Sampa Sarkar was one such participant in the programme who put up a stall "Sampa Handicrafts" in this year's LEXPO. This is a good achievement of ILTA.

### SEMINAR AT CHENNAI DURING IILF' 2019 : THE 1<sup>ST</sup> S. S. DUTTA MEMORIAL LECTURE

Above is scheduled to be held on Saturday the 2<sup>nd</sup> February, 2019, i.e. the second day of IILF – 2019 at Seminar Hall 'A' of Chennai Trade Centre.

Mr. N. Safeeq Ahmed, Chairman, Indian Finished Leather Manufacturers and Exporters Association, Chennai has kindly consented to grace the occasion as the **Chief Guest**.

Padmashri & Padmabhushan Dr. T. Ramasami, Ex-Secretary, Dept. of Science & Technology, Govt. of India, Mr. Sothi Selvam, Director, Balmer Lawrie & Co. and Mr. Tuncay Deriner, M.D., Stahl India, have kindly consented to grace the occasion as the **Guests of Honour**.

Dr. B. Chandrasekaran, Director, CSIR-CLRI, Chennai, has kindly consented to deliver the very first Prof. Sasanka Sekhar Dutta Memorial Lecture.



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Dr. Buddhadeb Chattopadhyay, Ex-Principal, GCELT & at present Principal, MCKV Institute of Engineering, Howrah, West Bengal, has kindly consented to deliver a lecture in memorabilia.

### 17<sup>TH</sup> SANJOY SEN MEMORIAL LECTURE

Above is scheduled to be held on Monday 14<sup>th</sup> January, 2019 at Freya Design Studio, Calcutta Leather Complex, Bantala.

Mr. Asok Banerjee, President, Calcutta Management Association has kindly consented to deliver the Sanjoy Sen Memorial Lecture titled "Management Challenges in today's turbulent economy: Case Study approach in Indian Leather and allied Industries".

Mr. Ramesh Kumar Jujeja, Regional Chairman (E), CLE, Mr. Imran Ahmed Khan, General Secretary, CLCTA, and Mr. Adhar Sahni, President, ILPA have kindly consented to grace the occasion as Guests of Honour.

Individual Invitation Cards were posted on 22nd December' 2018.

Depending on the number of requests received, ILTA will arrange transport from Science City (Parama Island Police Station) to Calcutta Leather Complex and back on 14/01/2019 for which members are requested to positively let ILTA office know their requirement over telephone no. (033) 2441-3429 / 2441-3459, latest by Tuesday 8<sup>th</sup> January, 2019.

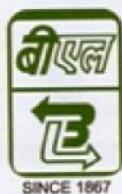
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(Susanta Mallick)  
General Secretary

**Executive Committee Members meet every Thursday  
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Members willing to participate are most welcome.**



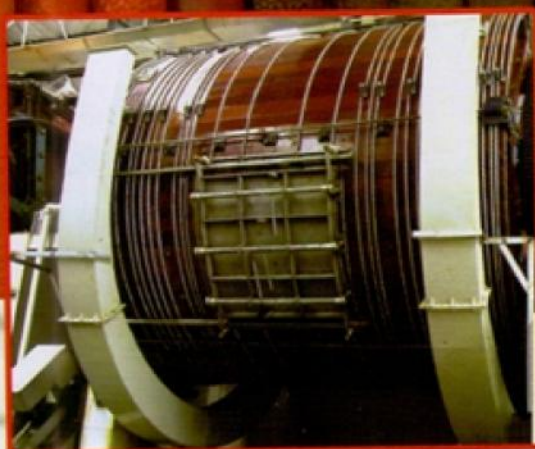


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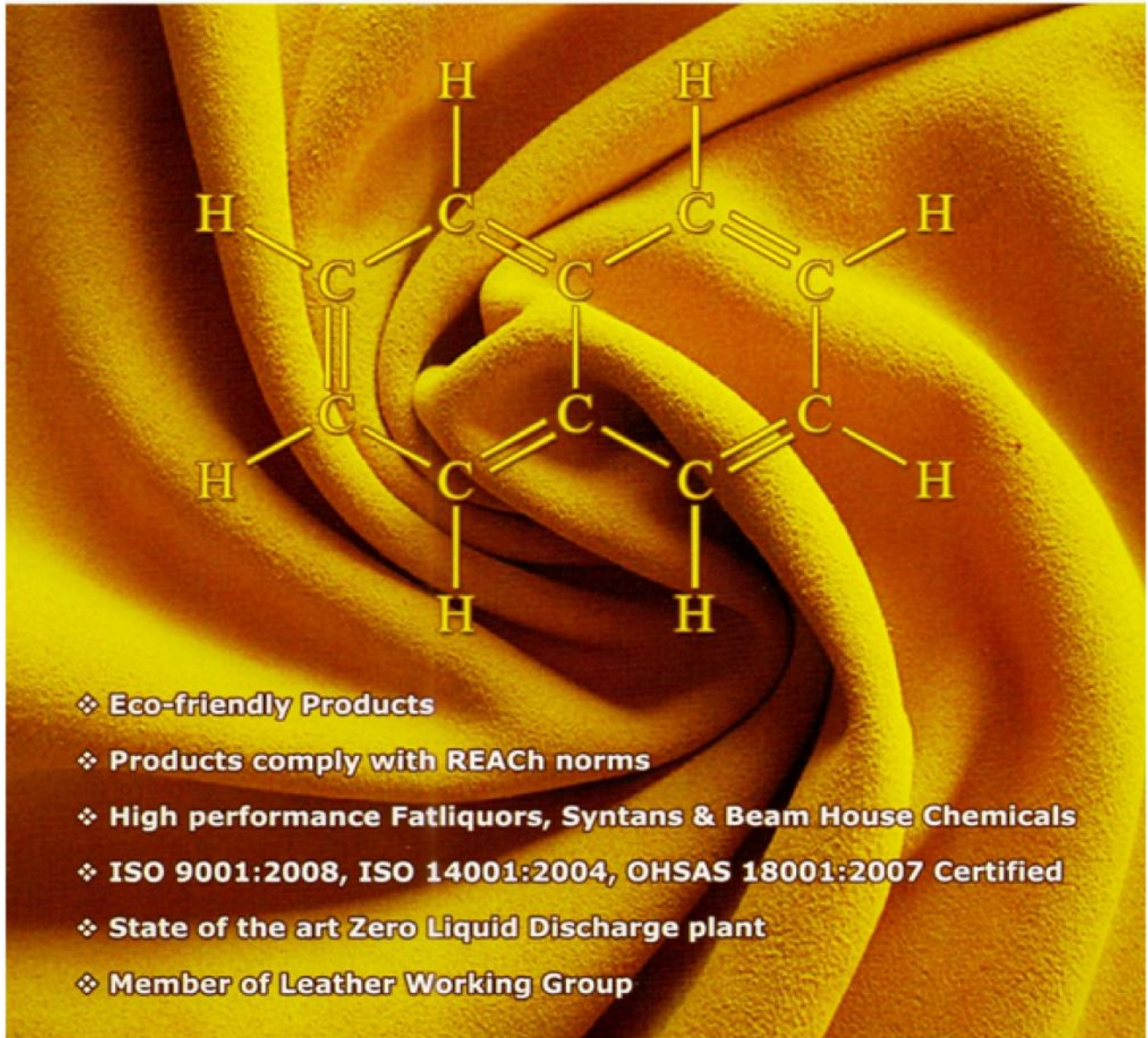
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**Balmer Lawrie & Co. Ltd.**

(A Government of India Enterprise)


Leather Chemicals Division

Manali, Chennai - 600068, India







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# Artificial Intelligence – Future of the Industry



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## Introduction:

Artificial intelligence is becoming good at many “human” jobs—diagnosing disease, translating languages, providing customer service—and it’s improving fast. This is raising reasonable fears that AI will ultimately replace human workers throughout the economy. But that’s not the inevitable, or even most likely, outcome. Never before digital tools have been so responsive to us, nor we to our tools. While AI will radically alter how work gets done and who does it, the technology’s larger impact will be in complementing and augmenting human capabilities, not replacing them.

Certainly, many companies have used AI to automate processes, but those that deploy it mainly to displace employees will see only short-term productivity gains. In our research involving 1,500 companies, we found that firms achieve the most significant performance improvements when humans and machines work together. Through such collaborative intelligence, humans and AI actively enhance each other’s complementary strengths: the leadership, teamwork, creativity, and social skills of the former, and the speed, scalability, and quantitative capabilities of the latter. What comes naturally to people (making a joke, for example) can be tricky for machines, and what’s straightforward for machines (analyzing gigabytes of data) remains virtually impossible for humans. Business requires both kinds of capabilities. To take full advantage of this collaboration, companies must understand how humans can most effectively augment machines, how machines can enhance what humans do best, and how to redesign business processes to support the partnership. Through our research and work in the field, we have developed guidelines to help companies achieve this and put the power of collaborative intelligence to work.

## Discussion:

Humans need to perform three crucial roles. They must *train* machines to perform certain tasks; *explain* the outcomes of

those tasks, especially when the results are counterintuitive or controversial; and *sustain* the responsible use of machines (by, for example, preventing robots from harming humans). Machine-learning algorithms must be taught how to perform the work they’re designed to do. In that effort, huge training data sets are amassed to teach machine-translation apps to handle idiomatic expressions, medical apps to detect disease, and recommendation engines to support financial decision making. In addition, AI systems must be trained how best to interact with humans. While organizations across sectors are now in the early stages of filling trainer roles, leading tech companies and research groups already have mature training staffs and expertise.

Consider Microsoft’s AI assistant, Cortana. The boot required extensive training to develop just the right personality: confident, caring, and helpful but not bossy. Instilling those qualities took countless hours of attention by a team that included a poet, a novelist, and a playwright. Similarly, human trainers were needed to develop the personalities of Apple’s Siri and Amazon’s Alexa to ensure that they accurately reflected their companies’ brands. Siri, for example, has just a touch of sassiness, as consumers might expect from Apple.

AI assistants are now being trained to display even more complex and subtle human traits, such as sympathy. The start-up Koko, an offshoot of the MIT Media Lab, has developed technology that can help AI assistants seem to commiserate. For instance, if a user is having a bad day, the Koko system doesn’t reply with a canned response such as “I’m sorry to hear that.” Instead it may ask for more information and then offer advice to help the person see his issues in a different light. If he were feeling stressed, for instance, Koko might recommend thinking of that tension as a positive emotion that could be channeled into action.

As AIs increasingly reach conclusions through processes that are opaque (the so-called black-box problem), they require human experts in the field to explain their behavior to nonexpert

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users. These “explainers” are particularly important in evidence-based industries, such as law and medicine, where a practitioner needs to understand how an AI weighed inputs into, say, a sentencing or medical recommendation. Explainers are similarly important in helping insurers and law enforcement understand why an autonomous car took actions that led to an accident—or failed to avoid one. And explainers are becoming integral in regulated industries—indeed, in any consumer-facing industry where a machine’s output could be challenged as unfair, illegal, or just plain wrong. For instance, the European Union’s new General Data Protection Regulation (GDPR) gives consumers the right to receive an explanation for any algorithm-based decision, such as the rate offer on a credit card or mortgage. This is one area where AI will contribute to *increased* employment: Experts estimate that companies will have to create about 75,000 new jobs to administer the GDPR requirements.

In addition to having people who can explain AI outcomes, companies need “sustainers”—employees who continually work to ensure that AI systems are functioning properly, safely, and responsibly.

AI can boost our analytic and decision-making abilities and heighten creativity.

For example, an array of experts sometimes referred to as safety engineers focus on anticipating and trying to prevent harm by AIs. The developers of industrial robots that work alongside people have paid careful attention to ensuring that they recognize humans nearby and don’t endanger them. These experts may also review analysis from explainers when AIs do cause harm, as when a self-driving car is involved in a fatal accident. Other groups of sustainers make sure that AI systems uphold ethical norms. If an AI system for credit approval, for example, is found to be discriminating against people in certain groups (as has happened), these ethics managers are responsible for investigating and addressing the problem. Playing a similar role, data compliance officers try to ensure that the data that is feeding AI systems complies with the GDPR and other consumer-protection regulations. A related data-use role involves ensuring that AIs manage information responsibly. Like many tech companies, Apple uses AI to collect personal details about users as they engage with the company’s devices and software. The aim is to improve the user experience, but unconstrained data gathering can compromise privacy, anger customers, and run afoul of the law. The company’s “differential privacy team” works to make sure that while the AI seeks to

learn as much as possible about a group of users in a statistical sense, it is protecting the privacy of individual users.

Smart machines are helping humans expand their abilities in three ways. They can *amplify* our cognitive strengths; *interact* with customers and employees to free us for higher-level tasks; and *embody* human skills to extend our physical capabilities. Artificial intelligence can boost our analytic and decision-making abilities by providing the right information at the right time. But it can also heighten creativity. Consider how Autodesk’s Dreamcatcher AI enhances the imagination of even exceptional designers. A designer provides Dreamcatcher with criteria about the desired product—for example, a chair able to support up to 300 pounds, with a seat 18 inches off the ground, made of materials costing less than \$75, and so on. She can also supply information about other chairs that she finds attractive. Dreamcatcher then churns out thousands of designs that match those criteria, often sparking ideas that the designer might not have initially considered. She can then guide the software, telling it which chairs she likes or doesn’t, leading to a new round of designs.

Throughout the iterative process, Dreamcatcher performs the myriad calculations needed to ensure that each proposed design meets the specified criteria. This frees the designer to concentrate on deploying uniquely human strengths: professional judgment and aesthetic sensibilities. Human-machine collaboration enables companies to interact with employees and customers in novel, more effective ways. AI agents like Cortana, for example, can facilitate communications between people or on behalf of people, such as by transcribing a meeting and distributing a voice-searchable version to those who couldn’t attend. Such applications are inherently scalable—a single chatbot, for instance, can provide routine customer service to large numbers of people simultaneously, wherever they may be.

SEB, a major Swedish bank, now uses a virtual assistant called Aida to interact with millions of customers. Able to handle natural-language conversations, Aida has access to vast stores of data and can answer many frequently asked questions, such as how to open an account or make cross-border payments. She can also ask callers follow-up questions to solve their problems, and she’s able to analyze a caller’s tone of voice (frustrated versus appreciative, for instance) and use that information to provide better service later. Whenever the system can’t resolve an issue—which happens in about 30% of cases



- it turns the caller over to a human customer-service representative and then monitors that interaction to learn how to resolve similar problems in the future. With Aida handling basic requests, human reps can concentrate on addressing more-complex issues, especially those from unhappy callers who might require extra hand-holding. Many AIs, like Aida and Cortana, exist principally as digital entities, but in other applications the intelligence is embodied in a robot that augments a human worker. With their sophisticated sensors, motors, and actuators, AI-enabled machines can now recognize people and objects and work safely alongside humans in factories, warehouses, and laboratories. In manufacturing, for example, robots are evolving from potentially dangerous and “dumb” industrial machines into smart, context-aware “cobots.” A cobot arm might, for example, handle repetitive actions that require heavy lifting, while a person performs complementary tasks that require dexterity and human judgment, such as assembling a gear motor.

Hyundai is extending the cobot concept with exoskeletons. These wearable robotic devices, which adapt to the user and location in real time, will enable industrial workers to perform their jobs with superhuman endurance and strength.

In order to get the most value from AI, operations need to be redesigned. To do this, companies must first discover and describe an operational area that can be improved. It might be a balky internal process (such as HR’s slowness to fill staff positions), or it could be a previously intractable problem that can now be addressed using AI (such as quickly identifying adverse drug reactions across patient populations). Moreover, a number of new AI and advanced analytic techniques can help surface previously invisible problems that are amenable to AI solutions.

Next, companies must develop a solution through co-creation—having stakeholders envision how they might collaborate with AI systems to improve a process. Consider the case of a large agricultural company that wanted to deploy AI technology to help farmers. An enormous amount of data was available about soil properties, weather patterns, historical harvests, and so forth, and the initial plan was to build an AI application that would more accurately predict future crop yields. But in discussions with farmers, the company learned of a more pressing need. What farmers really wanted was a system that could provide real-time recommendations on how to increase productivity—which crops to plant, where to grow them, how

much nitrogen to use in the soil, and so on. The company developed an AI system to provide such advice, and the initial outcomes were promising; farmers were happy about the crop yields obtained with the AI’s guidance. Results from that initial test were then fed back into the system to refine the algorithms used. As with the discovery step, new AI and analytic techniques can assist in co-creation by suggesting novel approaches to improving processes.

The third step for companies is to scale and then sustain the proposed solution. SEB, for example, originally deployed a version of Aida internally to assist 15,000 bank employees but thereafter rolled out the chatbot to its one million customers. Through our work with hundreds of companies, we have identified five characteristics of business processes that companies typically want to improve: flexibility, speed, scale, decision making, and personalization. When reimagining a business process, determine which of these characteristics is central to the desired transformation, how intelligent collaboration could be harnessed to address it, and what alignments and trade-offs with other process characteristics will be necessary.

At Mercedes-Benz, cobot arms become an extension of the human worker’s body.

For Mercedes-Benz executives, inflexible processes presented a growing challenge. Increasingly, the company’s most profitable customers had been demanding individualized S-class sedans, but the automaker’s assembly systems couldn’t deliver the customization people wanted. Traditionally, car manufacturing has been a rigid process with automated steps executed by “dumb” robots. To improve flexibility, Mercedes replaced some of those robots with AI-enabled cobots and redesigned its processes around human-machine collaborations. At the company’s plant near Stuttgart, Germany, cobot arms guided by human workers pick up and place heavy parts, becoming an extension of the worker’s body. This system puts the worker in control of the build of each car, doing less manual labor and more of a “piloting” job with the robot.

The company’s human-machine teams can adapt on the fly. In the plant, the cobots can be reprogrammed easily with a tablet, allowing them to handle different tasks depending on changes in the workflow. Such agility has enabled the manufacturer to achieve unprecedented levels of customization. Mercedes can individualize vehicle production according to the real-time



choices consumers make at dealerships, changing everything from a vehicle's dashboard components to the seat leather to the tire valve caps. As a result, no two cars rolling off the assembly line at the Stuttgart plant are the same. For some business activities, the premium is on speed. One such operation is the detection of credit-card fraud. Companies have just seconds to determine whether they should approve a given transaction. If it's fraudulent, they will most likely have to eat that loss. But if they deny a legitimate transaction, they lose the fee from that purchase and anger the customer. Like most major banks, HSBC has developed an AI-based solution that improves the speed and accuracy of fraud detection. The AI monitors and scores millions of transactions daily, using data on purchase location and customer behavior, IP addresses, and other information to identify subtle patterns that signal possible fraud. HSBC first implemented the system in the United States, significantly reducing the rate of undetected fraud and false positives, and then rolled it out in the UK and Asia. A different AI system used by Danske Bank improved its fraud-detection rate by 50% and decreased false positives by 60%. The reduction in the number of false positives frees investigators to concentrate their efforts on equivocal transactions the AI has flagged, where human judgment is needed.

The fight against financial fraud is like an arms race: Better detection leads to more-devious criminals, which leads to better detection, which continues the cycle. Thus the algorithms and scoring models for combating fraud have a very short shelf life and require continual updating. In addition, different countries and regions use different models. For these reasons, legions of data analysts, IT professionals, and experts in financial fraud are needed at the interface between humans and machines to keep the software a step ahead of the criminals. For many business processes, poor scalability is the primary obstacle to improvement. That's particularly true of processes that depend on intensive human labor with minimal machine assistance. Consider, for instance, the employee recruitment process at Unilever. The consumer goods giant was looking for a way to diversify its 170,000-person workforce. HR determined that it needed to focus on entry-level hires and then fast-track the best into management. But the company's existing processes weren't able to evaluate potential recruits in sufficient numbers—while giving each applicant individual attention—to ensure a diverse population of exceptional talent. By providing employees with tailored information and guidance, AI can help them reach better decisions. This can be especially

valuable for workers in the trenches, where making the right call can have a huge impact on the bottom line.

Consider the way in which equipment maintenance is being improved with the use of “digital twins”—virtual models of physical equipment. General Electric builds such software models of its turbines and other industrial products and continually updates them with operating data streaming from the equipment. By collecting readings from large numbers of machines in the field, GE has amassed a wealth of information on normal and aberrant performance. Its Predix application, which uses machine-learning algorithms, can now predict when a specific part in an individual machine might fail.

This technology has fundamentally changed the decision-intensive process of maintaining industrial equipment. Predix might, for example, identify some unexpected rotor wear and tear in a turbine, check the turbine's operational history, report that the damage has increased fourfold over the past few months, and warn that if nothing is done, the rotor will lose an estimated 70% of its useful life. The system can then suggest appropriate actions, taking into account the machine's current condition, the operating environment, and aggregated data about similar damage and repairs to other machines. Along with its recommendations, Predix can generate information about their costs and financial benefits and provide a confidence level (say, 95%) for the assumptions used in its analysis. Without Predix, workers would be lucky to catch the rotor damage on a routine maintenance check. It's possible that it would go undetected until the rotor failed, resulting in a costly shutdown. With Predix, maintenance workers are alerted to potential problems before they become serious, and they have the needed information at their fingertips to make good decisions—ones that can sometimes save GE millions of dollars.

Providing customers with individually tailored brand experiences is the holy grail of marketing. With AI, such personalization can now be achieved with previously unimaginable precision and at vast scale. Think of the way the music streaming service Pandora uses AI algorithms to generate personalized playlists for each of its millions of users according to their preferences in songs, artists, and genres. Or consider Starbucks, which, with customers' permission, uses AI to recognize their mobile devices and call up their ordering history to help baristas make serving recommendations. The AI technology does what it does best, sifting through and processing copious amounts of data to recommend certain offerings or actions, and humans do what



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they do best, exercising their intuition and judgment to make a recommendation or select the best fit from a set of choices.

The Carnival Corporation is applying AI to personalize the cruise experience for millions of vacationers through a wearable device called the Ocean Medallion and a network that allows smart devices to connect. Machine learning dynamically processes the data flowing from the medallion and from sensors and systems throughout the ship to help guests get the most out of their vacations. The medallion streamlines the boarding and debarking processes, tracks the guests' activities, simplifies purchasing by connecting their credit cards to the device, and acts as a room key. It also connects to a system that anticipates guests' preferences, helping crew members deliver personalized service to each guest by suggesting tailored itineraries of activities and dining experiences.

Reimagining a business process involves more than the implementation of AI technology; it also requires a significant commitment to developing employees with what we call "fusion skills"—those that enable them to work effectively at the human-machine interface. To start, people must learn to delegate tasks to the new technology, as when physicians trust computers to help read X-rays and MRIs. Employees should also know how to combine their distinctive human skills with those of a smart machine to get a better outcome than either could achieve alone, as in robot-assisted surgery. Workers must be able to teach intelligent agents new skills and undergo training to work well within AI-enhanced processes. For example, they must know how best to put questions to an AI agent to get the information they need. And there must be employees, like those on Apple's differential privacy team, who ensure that their companies' AI systems are used responsibly and not for illegal or unethical purposes.

We expect that in the future, company roles will be redesigned around the desired outcomes of reimagined processes, and corporations will increasingly be organized around different types of skills rather than around rigid job titles. AT&T has already begun that transition as it shifts from landline telephone services to mobile networks and starts to retrain 100,000 employees for new positions. As part of that effort, the company has completely overhauled its organizational chart: Approximately 2,000 job titles have been streamlined into a much smaller number of broad categories encompassing similar skills. Some of those skills are what one might expect (for example, proficiency in data science and data wrangling), while

others are less obvious (for instance, the ability to use simple machine-learning tools to cross-sell services). Industrial organizations today are under tremendous pressure to not only stay competitive, but also to establish themselves as industry leaders. For many companies, the challenge to achieve Top Quartile operational performance as well as complete capital projects on time and on budget often appears difficult, if not unattainable. Too often, industrial firms overlook the transformative power and game-changing performance of new methodologies and technologies. When automation technologies—commonly viewed as component or device commodities—are treated as part of a broader, more strategic decision, the result can be a tremendous improvement in operational performance. A strategic approach to operations technology decision-making can help companies achieve Top Quartile performance, ultimately increasing shareholder value.

Instead of being satisfied with old technologies and old ways of doing things that bring only incremental improvements, manufacturers seeking Top Quartile performance need to look at their projects and plant performance with dramatically higher expectations.

When the word "Neural" is heard first thing come to our mind is neurons in the brain which is a part of decision-making process. It is one of the main characteristics which makes humans differ from robots (or regular computer programs). Humans can see things, analyze them, and learn from them to act better in next time. On the other hand, regular programs follow the same set of instructions and they don't develop their selves. We can program them to do certain tasks and we can get a good outcome based on how they were programmed. But we can do many things if we can make programs to learn. Then they will develop their selves along with time. This is called as "Machine Learning" and Artificial Neural Network (ANN) is a computational model used in Machine Learning which works similar to biological neurons. When information flows through the neural network, it senses them and learns by adjusting the network to generate a good solution. Passing data as much as possible throughout the network is better to get a much accurate result. This is called as "training" the neural network. Before using a neural network, we need to train it and tune such that to make good decisions. For this purpose, we use testing data. They consist of the inputs to the network and corresponding expected outputs. By feeding them properly, we can teach network and then we can use it to take decisions on unknown data. Basically, Artificial Neural Networks are used in non-linear statistical data



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modeling where complex relationships exist between inputs and outputs. The training process is used to discover those complex relationships and patterns in the data set.

Neural Networks are very common where computer-based predictions are required. Usually, they are capable of making accurate predictions. Some applications are stock market trend prediction, handwriting recognition, speech recognition, land sliding prediction etc. Furthermore, social media like Facebook, search engines like Google also uses these to give rich user experiences.

In many instances, by replacing older, accepted work practices and outmoded technologies, industrial manufacturers are able to achieve significant gains.

Companies can attain Top Quartile performance in a variety of ways:

- ❖ **Project Certainty:** Traditional approaches to project management can introduce project risk, extra cost, and extended startup time. Industrial companies are able to reduce this capital project risk as well as eliminate cost and time overruns, achieving a savings of 20 to 30 percent on their investment. According to industry benchmarking data, Top Quartile performers have 54 percent lower costs and 49 percent shorter schedules than fourth quartile performers. Top Quartile performers in capital projects not only achieve schedule and cost goals, but also derive faster ROI, which improves shareholder value. A proven approach to achieving these performance goals is to move strategic engineering decisions into earliest project stages. Historically, many important decisions are allowed to move to later stages, when there is the least flexibility to make changes. As a consequence, change orders result in schedule disruption and increased cost. Top Quartile project teams typically engage an industry expert in project design and execution that not only has a track record of global consistency of delivery, but also follows a methodology that ensures projects are completed on time and within budget.
- ❖ **Reliability:** Unplanned downtime costs industrial manufacturers an estimated \$50 billion annually. Equipment failure is the cause of 42 percent of this unplanned downtime. Unplanned outages result in excessive maintenance, repair, and equipment

replacement. Similarly, outdated maintenance procedures waste resources and may expose staff to greater safety risk. In fact, according to a 2013 Solomon RAM study, fourth quartile companies spend nearly four times as much on maintenance costs as Top Quartile companies. By contrast, Top Quartile manufacturers leverage the power of predictive intelligence built into new technologies. Companies that are able to all but eliminate these costly unplanned outages set the benchmark for operational performance. Designing a plant to achieve Top Quartile reliability yields huge payoffs over the life of the project.

- ❖ **Industrial Energy Management:** Outmoded technologies and inadequate monitoring of process energy consumption result in unnecessary cost and waste of resources. Energy is one of the biggest operating costs in the manufacturing—as much as 40 percent in industries like refining. According to a U.S. Department of Energy study, as much as 37 percent of energy brought into industrial plants is wasted annually, and 15 percent or more of steam generated is lost. Inadequate monitoring of furnaces and gas-fired heaters can cause excessive fuel consumption, increased emissions, and added maintenance cost. Energy is also wasted as the result of leaks and process variability due to inadequate monitoring of processes. By delivering stable, reliable power, energy companies can reduce fuel consumption, waste, emissions, and maintenance costs. In fact, studies show that an effective Energy Management Information System can result in energy savings of 5 to 15 percent—millions of dollars saved annually. Top Quartile manufacturers have energy costs among the lowest in their industry, despite maximum utilization of production facilities.
- ❖ **Productivity:** Standard maintenance practices are labor intensive and inefficient. Industrial firms are able to safely improve workforce performance and productivity by 60 percent. Through better training of personnel and modern automation technologies, employees have improved insight into process and equipment conditions and as a result, are empowered to make better-informed business decisions on the plant floor. Industry leaders typically operate with the





leanest staff, exhibiting limited labor waste and the fewest safety incidents. In the pulp and paper industry, for example, companies that have implemented preventive maintenance and other labor-saving automation technologies have experienced a productivity gain among maintenance staff of up to 66 percent, and process efficiency gains of 20 to 30 percent.

As these examples demonstrate, redefining performance expectations and taking a strategic approach to automation technologies can materially change the economic outcome of a company's plant operations or capital projects. Manufacturers that measure their industrial projects and plant operations against these new thresholds of performance typically expect no on-time or on-budget slippage on their green field projects or plant upgrades, nor any unscheduled plant or production equipment failures.

There is no doubt that the manufacturing sector is leading the way in the application of artificial intelligence technology. From significant cuts in unplanned downtime to better designed products, manufacturers are applying AI-powered analytics to data to improve efficiency, product quality and the safety of employees.

#### **Human-robot collaboration:**

The International Federation of Robotics predicts that by the end of 2018 there will be more than 1.3 million industrial robots at work in factories all over the world. In theory, as more and more jobs are taken over by robots, workers will be trained for more advanced positions in design, maintenance, and programming. In this interim phase, human-robot collaboration will have to be efficient and safe as more industrial robots enter the production floor alongside human workers. Advances in AI will be central to this development, enabling robots to handle more cognitive tasks and make autonomous decisions based on real-time environmental data, further optimizing processes.

Artificial intelligence is also changing the way we design products. One method is to enter a detailed brief defined by designers and engineers as input into an AI algorithm (in this case referred to as "generative design software"). The brief can include data describing restrictions and various parameters

such as material types, available production methods, budget limitations and time constraints. The algorithm explores every possible configuration, before homing in on a set of the best solutions. The proposed solutions can then be tested using machine learning, offering additional insight as to which designs work best. The process can be repeated until an optimal design solution is reached. One of the major advantages of this approach is that an AI algorithm is completely objective – it doesn't default to what a human designer would regard as a "logical" starting point. No assumptions are taken at face value and everything is tested according to actual performance against a wide range of manufacturing scenarios and conditions.

Artificial intelligence is a core element of the Industry 4.0 revolution and is not limited to use cases from the production floor. AI algorithms can also be used to optimize manufacturing supply chains, helping companies anticipate market changes. This gives management a huge advantage, moving from a reactionary/response mindset, to a strategic one. AI algorithms formulate estimations of market demands by looking for patterns linking location, socioeconomic and macroeconomic factors, weather patterns, political status, consumer behavior and more. This information is invaluable to manufacturers as it allows them to optimize staffing, inventory control, energy consumption and the supply of raw materials. The manufacturing sector is a perfect fit for the application of artificial intelligence. Even though the Industry 4.0 revolution is still in its early stages, we're already witnessing significant benefits from AI. From the design process and production floor, to the supply chain and administration, AI is destined to change the way we manufacture products and process materials forever.

#### **Conclusion:**

Most activities at the human-machine interface require people to do new and different things (such as train a chatbot) and to do things differently (use that chatbot to provide better customer service). So far, however, only a small number of the companies we've surveyed have begun to re-imagine their business processes to optimize collaborative intelligence. But the lesson is clear: Organizations that use machines merely to displace workers through automation will miss the full potential of AI. Such a strategy is misguided from the get-go. Tomorrow's leaders will instead be those that embrace collaborative intelligence, transforming their operations, their markets, their industries, and—no less important—their workforces.



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52<sup>nd</sup> LERIG 2019!



**Technologies for Leather Sector: Approaches towards Industry 4.0 (29-30 January 2019, Triple Helix Auditorium, CSIR-CLRI)**

CSIR-Central Leather Research Institute organizes the annual Leather Research-Industry Get-Together (LERIG) every year to coincide with LEATHERWEEK. At LERIG, deliberations on technologies and trends & policy related support for leather, leather products and allied sectors is held.

Keeping with the trend, this institute along with the stakeholders have proposed "Next Gen Technologies for Leather Sector: Approaches towards Industry 4.0" as the theme for 52<sup>nd</sup> LERIG 2019. LERIG 2019 will be held between 29 & 30<sup>th</sup> Jan 2019 at Triple Helix Auditorium, CLRI.

The first day of LERIG 2019 (Tuesday, 29<sup>th</sup> January 2019) will be a half-day session and will have Nayudumma Lecture commencing in the afternoon. This will be followed by inauguration of LERIG 2019 in the early evening. On the following day (Wednesday, 30<sup>th</sup> January 2019), three sessions will focus on Futuristic Manufacturing, Energy Management, Water management & Compliance. This will be followed by panel discussion focusing on Leather sector for future.

We will endeavor to make LERIG 2019 concise and focused and at the same time, fruitful and meaningful to the Industry.

**Registration Fees:-**

Delegates	: Rs. 3000
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**FUTURE WILL BECOME NO.1 FOOTWEAR RETAILER IN ONE YEAR, SAYS BIYANI**

Future Retail Ltd., the retail arm of Future Group, which owns footwear brands such as Converse, Sketchers and Clarks, is expected to clock Rs.1,600 crore in revenue from footwear sales this year with a target of Rs.2,500 crore in 2019. Future Group founder and chief executive officer Kishore Biyani said that they are aggressively focusing on footwear to drive the fashion business.

He was speaking at the launch of the company's fashion departmental store, Central, in New Delhi – its 44<sup>th</sup> in India.

"We are putting immense focus on the footwear department, along with accessories. Footwear is becoming the most necessary accessory especially for men who are now buying more pairs of shoes. In fashion, the category spend is moving towards footwear. Currently, we are the number two footwear retailer in the country after Bata India and in another one year we will be the biggest," said Biyani.

Last year, the group hired N. Mohan as the director of its footwear business. Mohan was the chief executive officer of footwear brand Aerosoles' Europe business. Future Group also expanded the Lee Cooper range from apparel to footwear and also bought a stake in women's footwear brand, Tresmode.

Hinting at the increasing purchase frequency in the footwear category, Biyani said that they have witnessed male consumers owing up to 20 pairs of shoes while women tend to own between 20 and 50 pairs of shoes.

The footwear section at the newly opened Central Store at Ambience Mall, Vasant Kunj, is spread across 10,000 sq. ft. housing both company's in-house brands as well as brands such as Woodland and Red Tape.

"Footwear is going to be the biggest story for us in the next two to three years. Fashion contributes 35% to Future Group's



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overall revenue and we want to build a Rs.70,000 crore strong fashion business in the next seven years. We are looking at fashion as a serious category," Biyani added.

Apart from Central, Future Retail is also present in the value fashion segment through its chain of 61 'FBB' stores which it plans to take it to 100 next year.

There are 12 new Central stores next year. It also sells value segment apparels, footwear and accessories in its Big Bazaar stores.

According to Rajat Wahi, partner, Deloitte Consulting, the footwear market in India stands at around \$9 billion and is expected to grow at a compounded annual growth rate of 16% to reach \$13 billion by 2020.

The men's footwear makes up approximately 60% of the market and is growing at 10% while women's footwear accounts for 30% and is expected to grow at 20%.

"The footwear category is seeing a lot of action with multiple global brands entering the market and Indian brands making a big play with new designs. The price point in the category has certainly moved up in a big way both for casual and smartwear. I feel while men's footwear category always had brands the women's category has no major national footwear brand and hence immense untapped potential," said Wahi.

*(Source : HT-MINT, New Delhi – 08/12/2018)*

### **LIGHTHOUSE BUYS STAKE IN FOOTWEAR-MAKER AQUALITE FOR RS. 250 CR**

Lighthouse Funds has invested Rs.250 crore (\$35 million) from its third fund to acquire a minority stake in footwear-maker Aqualite Industries Pvt. Ltd., the consumer-focused private equity firm said on Tuesday.

The footwear maker will use the funds for capacity expansion and growth, Aqualite founder Davinder Gupta said in a statement. The company is expecting a turnover of Rs.800 crore in the current financial year.

"Aqualite has achieved scale in the footwear industry for its product quality and relationship with its channel partners. We are very excited by the growth opportunity ahead of the company," said Sachin Bhartiya, partner, Lighthouse.

Audit and consulting firm EY advised Aqualite on the fundraise. Aqualite offers more than 6,500 products under several sub-brands. It has manufacturing units in Haryana and Rajasthan, and has a pan-India distribution network of Rs.35,000 retailers, with significant presence in north and east India.

This is Lighthouse's fourth investment this year. Last month, the fund invested Rs.160 crore in Duroflex, a leading mattress brand in South India. In September, it backed beauty retailer Nykaa with Rs.113 crore, and in June it invested Rs.83 crore in Tynor Orthotics, a manufacturer and exporter of orthopaedic and fracture aids.

Set up by Mukund Krishnaswami and Sean Novak, Lighthouse typically invests Rs.5-20 million per transaction in consumer facing firms. Some of its previous investments include Bikaji Foods, fashion brand FabIndia and biscuit maker Unibic.

Lighthouse India Fund III has a corpus of Rs.200 million. Its institutional investors include International Finance Corporation, the private investment arm of the World Bank, which invested Rs.20 million.

*(Source : HT-MINT, New Delhi – 05/12/2018)*

### **ASICS TO OFFER MORE PRODUCTS IN APPARELS, FOOTWEAR**

Japanese sportswear brand Asics plans to ramp up offerings across categories such as apparels and footwear in India as it eyes a larger presence in emerging segments such as athleisure, besides strengthening its core vertical.

Known for its celebrity users such as Barack Obama, Asics entered India in 2010 with an exclusive five year tie up with Reliance Retail. Since 2015, it has embarked on a standalone journey.

#### **Athleisure wear**

According to Rajat Khurana, Managing director, Asics India, athleisure will be an obvious choice with focus on both men and womenswear.

Athleisure refers to clothes that are worn to the gym and also double up as casual wear. These include joggers, sweat-shorts, t-shirts and even footwear. An increasing number of celebrities sporting these apparels and the rise of marathons have made the clothing line popular.





ILTA  
Since 1950

Clubbed along with the sportswear category in India, the athleisure segment is dominated by Nike, Adidas and Puma. Sportswear is a Rs.7,000 crore market here.

“We will continue to focus on technology and look to increase presence across categories such as athleisure. Performance clothing continues to be our focus,” he told BusinessLine. Apparels and accessories currently account for 15-20 per cent of the Asics’ turnover in India, and the idea is to take it to 20-25 per cent over a period of time.

### Tech-based shoes

The sportswear brand is also looking to expand the footwear range. While ‘technology-backed’ running shoes have been its strong point in India, it is now expanding presence in other categories like football boots (spikes) and cricket. Badminton or court shoes are another area.

“The width of offerings too will go up,” he said. Local sourcing, which at present is around 10 percent, focusing primarily on entry-level offerings in footwear and apparels, is also expected to go up.

“May be in another 3-5 years, local sourcing could go up to 30 percent. But, local production will also depend on factors like how the infrastructure for the technology used in our footwear develops here,” Khurana said.

Market sources say ‘gel technology’ that Asics uses in its footwear continues to be amongst its USPs.

### Expanding presence


Asics will look to shore up store presence too. The company plans to end the fiscal with 37 stores; and add another 15-16 stores in next fiscal. All stores are franchisee-owned. This apart, it will explore the possibility of tie-ups with premium gyms.

Focus will be on expanding across both Tier-I and II cities.

Some of the smaller cities that the company plans to tap include Bhubaneswar, Guwahati, Jalandhar, Patiala, Nashik, Pune and Coimbatore.

(Source : Business Line, New Delhi – 04/12/2018)





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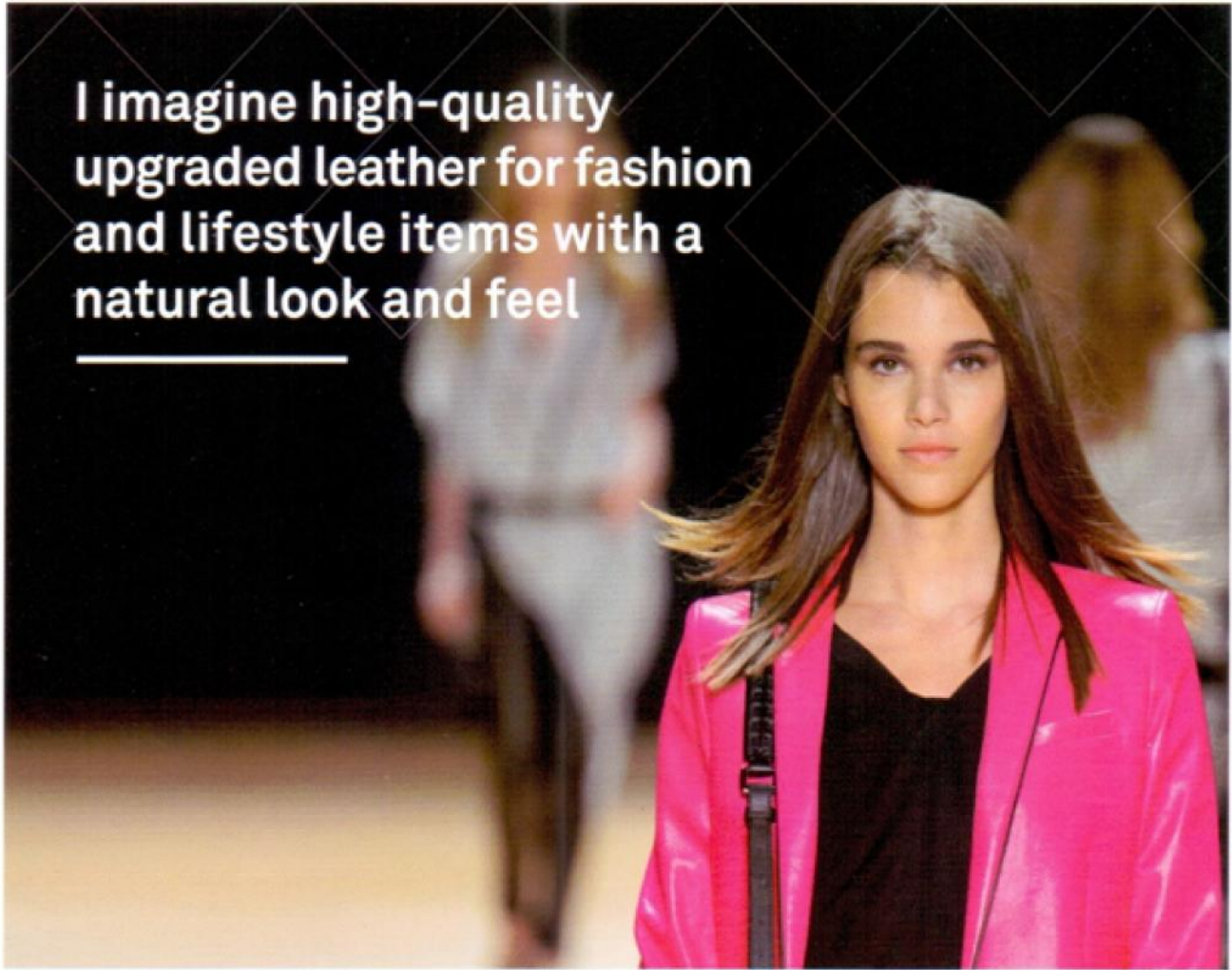
The range includes products for cleaning, protecting, refinishing and repairing. We even have solutions to upgrade your leather product so that it fits the latest fashion trends.

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If it can be imagined, it can be created.







## Stahl continues sustainability seminars to contribute to transparency in leather supply chain in India

**Waalwijk, The Netherlands, XX December 2018 - Stahl resumed its commitment to putting transparency into action with sustainability seminars in India. From December 4 to December 8 Michael Costello, Director Sustainability at Stahl, led the leather seminars in Chennai, Kanpur, Kolkata and Ranipet. With these seminars Stahl aims to familiarize local professionals with its sustainability philosophy for the industry and related sustainable solutions. The seminars attracted an average of 350 people per seminar.**

The seminars included informative presentations from UNIDO, the Leather Working Group, Solidaridad, CLRI and Stahl. Various important topics like safety & occupational health and the improvement of the environmental footprint of tannery operations in India have been addressed. Solidaridad updated the attendants on the progress with the Ganges Public Private Partnership project launched with Stahl, PUM and CLRI in 2017. The new elements of the LWG audit protocol were then introduced, with an emphasis on housekeeping and the chemicals management module (CMM), which is currently being implemented at tanneries.

Stahl presented the latest news on chemicals management, including information on how the ZDHC Gateway portal will work, and peeked into the future with a look at the recently agreed rules around Life Cycle Assessment calculations for leather manufacturing. The final discussion centered around the interesting views on fashion leather and sustainability as expressed by a group of Global Luxury Management students who received training at Stahl Campus® in March 2018.



"We are pleased but not surprised at the high attendance of our seminars this year" said Mr. Tuncay Deriner, General Manager of Stahl India. "It indicates the importance of these topics for the local tanning sector. The issues that were discussed around safety, housekeeping and water effluent are critical for the sustainability of our industry. Stahl is committed to taking action on them and to working closely with its customers and other stakeholders, to enhance the image and sustainability of leather."

Michael Costello, Stahl's Director of Sustainability added "We always receive such positive reactions from the attendants of these seminars that we are committed to continuing them into the future. Our focus is on promoting good practices and transparency in the industry, which in turn leads to a higher level of environmental stewardship. These seminars provide an excellent vehicle for achieving this goal in India and other countries where we are active."

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**Note for the editor:**

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**About Stahl**

Stahl is the world market leader in surface treatment and coating solutions for a wide variety of materials. We are active in differentiated high-margin niches, providing technology-driven solutions and a unique service model for premium applications. Our innovative products give the ultimate level of appeal, functionality, durability and comfort while reducing environmental impact. Although they do not realize it, hundreds of millions of people around the world touch and use Stahl products every day.





## RAW HIDES AND SKINS AND THEIR SELECTION

A. K. Sen Gupta

*S.I.S.I. Calcutta*

*(Continued from previous issue)*

### Attacks by Parasites and Defects from Diseases

#### *Ticks*

Ticks larvae when very small with three pair of legs and crawl about on grass or other plant life, come in contact with the animals. On the skin they undergo a number of developmental changes and mature into male and female 8 legged ticks.

Ticks are small bug-like animals and they are parasites. They live on the animal skin. The female attaches itself by its mouth parts and sucks blood and thereby weakens the animals. Generally ticks prefer to attach themselves on the tender parts of the skin, such as the skin between the fore-legs, but when countless they attach themselves to any part. As the ticks have claw-covered head and suck blood out of the fine capillaries by inserting the same, a certain amount of local damage is done at the site of attachment. The part becomes congested and inflamed which results in the damages of the tissue. Ticks are also carriers of serious systematic diseases which they inject into the animals.

When tick-damaged skins are processed into leather, the grain shows the damages where the ticks are attached. They are very unsightly in appearance and, therefore, they lower the value of the leather. Very often the places are found to be loose and badly decayed.

#### *Warble Flies*

Warble flies are of two types, viz. the "Hypoderma lineatum" and the "Hypoderma Bovies". These parasites lay eggs on the animals' hair, generally near their head. In a week's time the eggs are hatched and liberate larvae. The liberated larvae then travel down the hair and enter the animals' skin through the opening of the hair follicles or the associated glands. Once the larvae get under the skins surface, they penetrate the corium and reach the underlying connective tissue of the flesh. The larvae then start passing through the developmental stages and later on burrow out a considerable space for their own quarters and make a breathing communication with the outside atmosphere by burrowing through the corium and the epidermis. The opening thus formed for breathing is known, as breathing pore. While staying in this region when they complete all the stages of their development, they ultimately escape through the breathing pore. If the animal is slaughtered



before or soon after the larvae escape, the hide will show "open warble hole". But if the escape of the larvae effects much before the animal is slaughtered, the hide will show "healed warble hole". The healing work is done by fibroblasts of blood on producing the tissue.

The warble digests and destroys the skin around it. Such digestive action invariably weakens those parts causing them susceptible to bacterial infection and development of abscesses.

All warble affected skins produce unsatisfactory leathers both from the standpoint of appearance and strength.

#### *Lice*

Lice are of two species viz., "Sucking-lice" and "biting lice". They are small parasites and they live on animal skins attaching themselves to the hairs. The spots at which lice attach themselves are prone to inflammation, decomposition and looseness ; and the grain surface is scarred by the lesions made by them.

When the lice damaged skins are processed into leather, the grain shows the scars made by the lesions and the structure presents an unsightly appearance with unavoidable looseness.

#### *Mange*

Mange is a parasitic skin disease. It does not, however, identify any particular type, rather it is a broad name given to a number or different types of parasitic skin diseases, the most common being follicular or demodietic. Tanners are most familiar with this specific type. This form of mange is caused by a mite which is visible only under the microscope. It lives in the hair follicles and beneath the skin surface. The female mites move to a space between fibres below the level of the hair roots and lay hundreds of eggs from which young mange mites are born. The young mites undergo several changes and then when mature spread to other places to continue their multiplications.

This form of disease is a contagious one which affects all species of animals including man. This parasitic disease is difficult to detect and identify. When animals are affected with this disease they feel sense of irritation and start scratching or rubbing their skins on any object available. This adds to further damage of the skins or hides. Frequent scratching and rubbing result in pus formation and skin abscesses. Such bacterial infected lesions are the only readily noticeable indications of mange on the skins of animals. Shortly the hair becomes dull and matted by serious discharge. When such hides or skins are processed into leather, a great loss is suffered. The grain becomes coarse and scarred with prominent hair pockets. The mites exist as cheesy masses which may occupy as much as one half the thickness of the hide or skin.



### *Scabies*

Scabies is another type of mange i.e. a parasitic contagious skin disease caused by a parasitic mite. This mite is also too small to be seen without a magnifying lens. This disease spreads by contact either directly or indirectly and it is communicable to man also. When animals are affected with scabies they itch and rub themselves on any object available. Any sharp objects like barbed wire, nails, or rough boards etc. add to the injury of the hide or skin and increase the damage. As a result the skin becomes infected with bacteria and other fungi making it more difficult to cure. The lesions first appear on the shoulders and neck. The skin becomes red, irritated and swollen, and later it thickens and becomes rough. The mites then spread to all parts of the skin.

Cattle and calves with scabies never do well—they become weak and anemic which predisposes them to many other diseases. When skins of such animals are made into leather, the full extent of the damage is seen. The grain is rough and broken, and does not take the finish properly.

### *Ring Worm Scars*

Ring worm is a contagious skin disease caused by fungus or mold like organism especially during the winter season. The germ molds live in the hair follicles and they cause the hair with its roots to be destroyed. The follicles get inflamed and secondarily infected by other germs present in air. The infection spreads in a circular fashion and results in a loss of hair from the enclosed area. If the infection continues a scar results where each hair follicle was damaged. These run together and finally a large scarred area results. Such areas are usually round with different sizes.

Ring worm lesions cause the animal to itch and rub. It spreads from animal to animal by direct contact; also by rubbing on infected stalls, walls and posts. When such hides or skins are processed into leathers, the finished leathers still show the scars. The scars appear as bright and shiny spots and of the same size as the lesions were during the life time of the animal. These leathers are lowered in value.

### *Pox*

It is an infectious disease of cattle and analogous to smallpox in man. It first appears as small red spots on the more tender parts, such as the inner thigh, abdomen and sides, with general inflammation of the skin. The red spots then develop into small blister-like eruptions. These eruptions at first contain a thin watery serum or lymph which later on becomes thick and pus like. Each lesion begins as a small pin-point size and then grows big. In some cases several original lesions may develop into one large mass.



Due to the itching nature of the disease the animal is inclined to itch or rub the lesions on any object available. This causes the lesions to become raw and bleed. Secondary infections are then acquired and the original lesions become an extended series of skin damages. Very often pigmented materials get deposited on the raised part of the lesions which causes the lesions to become dark brown or black. After becoming fully developed the lesion forms into a scab which later becomes dry and loose and drops off entirely. A very distinct scar results. If however, the lesions become secondarily infected then the resultant scar will vary with the damage done. When such hides are processed into leathers, the finished leathers still show the scars and in this way the full extent of the damage is seen. The scars appear as bright and distinctive spots and of the same sizes as the lesions were during the life time of the animal. These leathers are miserably lowered in value.

#### Defects due to Malnutrition and Old Age

Reasons are of diverse characters for which animal body loses its weight and substance, but chief among them are diseases, malnutrition and old age. As a hide or skin is the covering of the body of the animal, so as the body runs down its covering also gets deteriorated in structure. Deterioration mostly happens towards its fibre-structure and substance. Due to such physiological changes, when the hide or the skin of such an animal is flayed after its death or slaughter, we encounter with a few very serious defects of its hide or skin and they are :

- (1) Rib Marks ; (2) Under weight and poor substance ; (3) Empty flanks and bellies ; (4) Coola.

It has been observed that the portion of the thin skin which rests on the ribs attain permanent marks of the latter in course of time. These marks are called ribs marks and they are prominent even on the raw hide with hairs on. Such defects are the effects of old age or malnutrition. When these poor hides are processed into leathers, the finished leathers still show those permanent marks. They are of extremely unsightly appearance, and they lower the value of the finished leathers.

Similarly, the portions on both sides of the sacrum covering a small area, attain the shape of two geometrical cones, one on each side. The development of these two cones apparently signifies the extreme deterioration of the structure of the living hide with respect to its fibre-structure and substance : and this thing happens due to old age and malnutrition. The bone under the said portions of the living hide acts as mould and helps in the formation of the said two geometrical cones, one on each side. These two cones are called "Coola" in Hindi. In the raw hide they appear as two dark spherical spots on the hair near the root of the tail ; but in the limed hide they show their actual geometrical shapes as cones. They are too obstinate to become plain and smooth in the subsequent tanning and setting out operations. The leathers which such hides produce are of loose and



coarse grained ; and the structure presents an unsightly appearance with two dark spherical spots of fairly big dimension, one on each side near the root of the tail. All these defects help to lower the value of the finished leathers to a considerable extent. Lastly, the defects such as "under weight", "poor substance", "empty flanks and bellies" cause in the production of such leathers which suffer from all the ideal qualities of a good leather. The leathers become loose-grained, spongy, raggy, thinny and papery. Such leathers do not fetch even the cost of the raw hide.

#### **Mechanical Damages Due to Rough Handling of the Living Animals by the Owners**

Such damages are of the following types :

*Scratches* : Animals very often feel the urge to scratch themselves. Barbed wire fences, thorns, nails or any other sharp objects usually give them relief from this urge. But these sharp objects in most cases cut the hides and skins to a great depth. Flies sit upon these wounds and lay eggs, and subject the animals to infection by disease germs. On the other hand, fibroblasts from blood streams immediately migrate to these regions and try to heal up the wounds by producing scar tissues. But it may be noted here that the collagen of the repaired wounds never behave like the normal collagen fibres in the various tannery operations. As a result, leathers produced from these hides are of unsightly appearance, and the damaged portions are very weak in tensile strength.

The buyers of raw stock face extreme difficulties in detecting such scratches as in most cases they remain hidden by the hair. It is, therefore, wise to keep records of the sources from which they are procured and then to avoid them in future.

*Goad marks* : Goad is a kind of special tool made of a bamboo stick at one end of which a sharp pointed wire nail is stuck. It is used by the farmer for poking the bulls whenever they slacken their speed. Innumerable pin pricks are thereby formed on the bullock and the portions are rendered useless. This defect is known as goad mark or "Kecha" in Bengali ; and it often escapes notice of the purchaser of raw hides being covered with hair. It is, therefore, wise to keep records of the sources from which they are procured and then to avoid them in future.

When these hides are processed into leathers, the buttocks which are considered to be the most valuable portions of the hides, are rendered useless for plain uppers. For this reason the value of the finished leather is reduced to a great extent.

*Yoke marks* : The severe damage mark, caused by the constant abrasion of the hide on the neck by the yoke, is called yoke mark or "Kendha" in Hindi. The defect is a severe wound and is easily detected by the purchaser of raw stock. The wound that is first produced by severe rubbing, though later on repaired by scar tissues, leaves an unsightly damaged mark after



the processing of the hide into leather is over. The damaged portion needs trimming off and the leather value is much lowered. The only alternative arrangement that can be done in this case is the cutting of the hide into two sides and then trimming off the abraded neck portion without spoiling the pattern of the side leather. The side leathers assume saleable appearance and can be disposed of without much trouble.

**Branding :** Brand is a special mark made by hot iron on the hide or skin of an animal. It is very often done by the owners of livestock for identification purposes. Brand produces painful burns at the outset and later on, when healed up by the scar tissues, leaves a permanent mark on the hide. All these brands are of different designs and the purchaser of livestock must be careful enough to discard them in toto. They appear as distinct as ever even on the tanned and finished leathers and lower their values to a great extent.

#### **Damages During the Time of Killing the Animal**

**Girau—a Hindi term.** When the killer (butcher) fells the animal on the floor side-ways for slaughtering purpose, a slight defect is caused on a small portion of the hide beside the sacrum which is in contact with the ground. This defect is called "Girau". Usually the hair of the said portion gets damaged but when the defect reaches up to the grain, it becomes a concern of the purchaser. Its depth of damage is then assessed by him in the light of the type of leather that can be made out of the hide.

#### **Damages After Natural Death**

The above damages can be classified into the following categories :

- (1) Scratches and abrasion caused by rough handling of the carcass, i.e. Drag Marks or "Ragar" in Bengali.
- (2) Nail scratches made by birds when they prey upon the dead animals in Bhagar.
- (3) Biological changes on fallen hides.
- (4) Bacterial infection caused by delayed flaying for curing.

The carcass of a naturally dead animal is often taken to the Bhagar by dragging along streets and lanes, and sometimes through thorny jungles which cause irreparable damage to the grain by scratches and abrasion. Such damages may classify them into leathers for samber suedes, printed uppers or patent by chrome tanning but not for plain upper. In case of vegetable tanning of this stock they may be processed for insoles or middle soles of footwear.

The carcass of a naturally dead animal is regarded as obnoxious and disgusting and none but a person of the chamar or muchhi community would touch it. Consequently the carcasses are very often found to be taken to the Bhagar by



dragging along the streets and lanes, or through thorny jungles and kept there until a muchí or a chamar arrives to flay them. Sometimes the carcasses are allowed to be in the fields where the animals have fallen dead until the flaying work is done by a muchí or chamar. In this way a good deal of time elapses between death and flaying with the result that vultures and other birds prey upon the carcasses and the hides are damaged by the scratches of their nails. Such damages also make the hides unsuitable for processing into upper leathers or outer soles. They may, however, be processed into leathers for Samber suedes, painted upper patent insoles and middle soles depending upon the type of hides viz. cow or buffalo.

A striking difference is always noticeable by the practical tanners between the hides taken from fallen animals and those of the slaughtered animals. The leathers prepared from the former are in many respects found to be much inferior to those made from the latter. The leathers made from the hides of fallen animals (irrespective of their breed, sex and age) are invariably found to be loose grained and spongy even when the flaying is done immediately after death. But such defects are not common with the hides of slaughtered animals of same breed, sex and age; particularly when flaying and the subsequent tanning and finishing work are done under identical conditions. It is, therefore, presumed that some structural changes take place in the hide or skin in the process of natural death of the animal. As no such scope for changes in structure exists in the hide or skins of animal slaughtered for food, hence the difference. However, the subject may claim to be a vital project of histological research with a view to ascertain what are the structural changes associated with the death of the animals. However, it is difficult to avoid purchasing hides from the fallen animals because of the fact that such hides, at the present moment, constitute a little above 7/8th of the total Indian production. Due to voluntary abandonment of cattle slaughter in a few states and also by legislature, the cattle are now allowed to die natural deaths. The result is such that the available cattle hides in the market may be roughly estimated 15 : 85, i.e., slaughtered 15% and dead 85%. The former forms the by-product of the meat industry and is therefore superior to the latter which undergoes biological changes in course of death. Hides of fallen animals are therefore treated separately for production of tight-grained full leathers. For this purpose, attempts are being made for the application of modified chrome process, chrome retan or other combination tanning processes.

We know that hides and skins are protein bodies and are subjected to bacterial damages along with the death of the animals. The object of curing hides immediately after the death and flaying of the carcasses is to avoid this bacterial damage. In all cases of slaughtering, the slaughtered body is immediately flayed in the interest of meat and the hide reaches the dealers godown where it is immediately taken care of and cured. But the picture is entirely different in case of a dead animal. A pretty long time rolls away between death and flaying and curing which in most cases is sufficiently long to set bacterial action with consequent loss of hide substance which is mainly responsible for the sponginess and looseness of





the grain of the leathers produced from dead hides. Very often the bacteria develop along the blood vessel systems causing the destruction of hide fibres in the vicinities of blood vessels. Destruction follows the pattern of blood vessels and the leather produced from such stock is called by the tanner to be veiny. When it extends to sweat glands, the leather produced is loose and pipey. For all these reasons, it is a popular saying amongst those engaged in leather industry that dead hides are unsuitable for processing into shoe upper leathers. But we should remember that they being the major part of the production of cattle hides in India, their proper utilisation is of vital importance to the Indian Tanning Industry in particular and Indian Economy in general. Investigations are, therefore, being carried out for finding out a suitable mineral tanning process by means of which these hides of fallen animals can be processed into shoe upper leathers.

—To be continued.



## INDIAN LEATHER PRODUCTS ASSOCIATION

The Indian Leather Products Association (ILPA), established in 1987, is a premiere representative body of manufacturer-exporters of superior quality leather and leather products with head office in Kolkata and a regional office in Chennai.

### IMPORTANT ACTIVITIES OF ILPA :

- Brings together manufacturer & merchant exporters on a common platform.
- Stimulates growth & development of the industry as a whole.
- Promotes export of leather & leather products.
- Develops & maintains symbiotic liaison with international trade bodies & Chambers of Commerce.
- Organises trade delegations to international fairs & seminars.
- Organises various Seminars/workshops both the benefit of its members and industry.
- Promotes International Fairs and RBSMs like IILF Kolkata, ILPA Buyer Seller Summit.
- Organises the ILPA SHOW : Leather on the Ramp , one of the most prestigious and sought after Fashion event in Eastern India.
- Closely involved in setting up the Calcutta Leather Complex(CLC).
- Runs and manages the Freya Design Studio : a CLE award winning Design Studio both for leather goods and footwear.
- Runs and manages the ILPA INFRASTRUCTURE DEVELOPMENT FOUNDATION (IIDF) – a state of the art Common Facility Centre.
- Imparts Skill Development Training through ILPA Technical School.



Common Facility Center



Design Studio



CAD CAM Center



ILPA Technical School



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### RBI Vs GOVERNMENT IN 2018 : A 'HUSBAND-WIFE' RELATION THAT TURNED STORMY



The relation between the Reserve Bank and the government is akin to that of 'husband and wife', former Prime Minister Manmohan Singh once famously said but that bond turned sour in 2018, leading to unprecedented episodes that culminated in the abrupt resignation of Urjit Patel as the governor. Differences between the Centre and the RBI over easing of lending restrictions for certain sectors and the appropriate size of reserves to be maintained by the central bank, among other issues, spilled out. It was further aggravated when deputy governor Viral Acharya spoke of maintaining autonomy and independence of the central bank. It soon unravelled that the government had cited a never-used-before provision of the RBI Act to get the central bank to discuss issues it considered of public importance.

This seemed to have been the culmination of a series of events that began with the government getting persons considered close to its ideology being appointed as directors on the RBI's central board. Swadeshi ideologue S Gurumurthy vigorously pushed the government's cause especially with regard to taking a more liberal view on issues such as reserves the central bank must maintain. Soon enough there was speculation that the then Governor Patel would resign but he chose to stay on to see if there was a resolution and quit when there wasn't a common ground found even over names of an expert committee the RBI and government had agreed to constitute to look into appropriate size of reserves the central bank must maintain.

The government quickly moved in and appointed a former bureaucrat who from day one showed a willingness to consider all issues on the table and take a more consultative approach rather than being a confrontationalist. Winds of changes are already visible at Mint Street as Shaktikanta Das has held at least three consultations with bankers over different issues, a trend which was a rarity during Patel's tenure.

Many blamed the pressure brought by the government on the central bank to ease lending restrictions and release more of its capital to bolster the economy for Patel's resignation. Patel became the first since post economic liberalisation in 1991 to resign as the RBI governor. In independent India, the first governor to resign was Benegal Rama Rau in 1955 during the tenure of the Jawaharlal Nehru government. Indira Gandhi got S Jagannathan to resign after he refused to give an enhanced loan to Maruti in 1975. During Chandra Shekhar government (1990), R N Malhotra had to resign due to differences with the government. Patel was hand-picked by the BJP-led government after his predecessor Raghuram Rajan was denied a second-term. A Kenyan national who acquired Indian citizenship prior to being appointed as Deputy Governor of the RBI in January 2013, Oxford-trained Patel was initially seen as toeing government line after he backed the November 2016 shock decision to overnight junk 86 per cent of the currency in circulation. Since then, he was seen waging a war to get the struggling banking system in order and punish defaulting borrowers. The genesis of differences between the RBI and the government was one-day default norms announced by the central bank on February 12, 2018. The RBI aligned the revised norms with the Insolvency and Bankruptcy Code (IBC) as it also recognised the one-day default norms.

According to the RBI, the revised framework tried to reduce the arbitrage the borrowers are currently enjoying while raising funds through borrowing from banks vis-a-vis from the capital markets. Besides, there were some disagreements on weak bank norms, Prompt Corrective Action (PCA). Of 21 public sector banks, 11 are under PCA framework due to declining profit and rising bad loans.

The PCA framework kicks in when banks breach any of the three key regulatory trigger points — namely capital to risk weighted assets ratio, net non-performing assets (NPA) and return on assets (RoA). The government wanted the RBI to align its PCA framework with global norms, which recognises only slippage on capital to risk weighted assets ratio. The differences came out in the open when Deputy Governor Acharya, in a hard-hitting speech in October, talked about the independence of the central bank, arguing that any compromise could be "potentially catastrophic" for the economy. Subsequently, Economic Affairs Secretary Subhash Chandra Garg and government nominee on the Board took an apparent dig at Acharya's 'wrath of financial markets' comment in a tweet saying vital indicators of the economy were showing improvement.

"The autonomy for the central bank, within the framework of the RBI Act, is an essential and accepted governance requirement.



Government of India has nurtured and respected this," the finance ministry said in a statement. However, there was truce on two issues, including with regard to reserves. It was agreed that an expert panel to examine the Economic Capital Framework (ECF) of RBI in its central board meeting on November 19.

The RBI, while deciding to retain the CRAR at 9 per cent, agreed to extend the transition period for implementing the last tranche of 0.625 per cent under the Capital Conservation Buffer (CCB), by one year, up to March 31, 2020. Despite reaching some common ground on contentious issues, Patel in a surprise move resigned on December 10 leaving government perplexed.

(Financial Express – 31/12/2018)

**TAXPAYERS BEWARE! NEVER FALL FOR THIS INCOME TAX REFUND FRAUD – WARNS IT DEPT.**

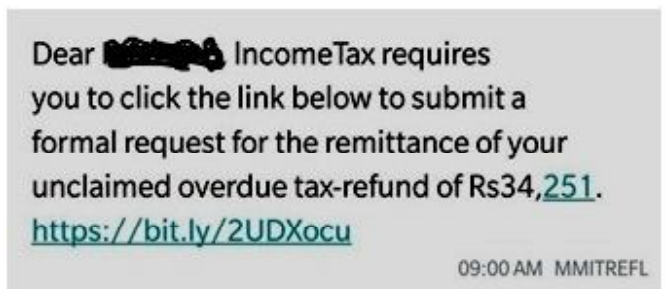


**Income tax payers beware!** If you have received an email or SMS from someone asking you to share your debit card details to be able to get your tax refund in your bank account, then alarm bells must start ringing in your head. The Income Tax Department never asks for your debit card details or CVV number in order to process your income tax refund. Therefore, if you have received an email or SMS from someone asking you to share your debit card details to be able to get your tax refund in your bank account, then alarm bells must start ringing in your head. For, this is a new method adopted by fraudsters to extract your debit card details.

Thankfully, in a bid to educate the taxpayers about such scams, the Income Tax Department keeps sending email/SMS alerts to them. One of the latest messages being sent to the taxpayers states, "Beware of fake messages claiming to be from the I-T Department. We will never ask for your debit card details or CVV number in order to process your refund. Don't share your number with anyone."



Tax experts say that in such cases a fake email or SMS is sent to the user stating that his/her income tax refund has been approved. "The amount of refund sanctioned also looks genuine as they don't mention a round figure, but an exact figure with decimals. (See a sample message below). The fraudsters then mention that for the Income Tax Department to transfer the refund to his bank account, the user is required to share their bank details with the income Tax Department. The common man, thus, gets excited that his refund has been approved and shares all his bank details. He also furnishes his debit card details as well as the CVV No. which was never required," informs CA Karan Batra, Founder & CEO of CharteredClub.com.



It is important to note here that for the refund to get processed, only bank details are required, and not debit card details. However, in the above-mentioned case, if the user furnishes his debit card details as well, then the fraudsters will have access to his banking passwords.





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And in some cases, rather than the amount getting refunded to their bank account, the very amount actually gets deducted from the user's bank account. The fraudsters, in fact, disguise such transactions in such a manner that rather than the refund getting approved, a payment transaction gets processed for this amount. Rather than the person receiving this money, he ends up paying this money. "This is a scam which has been happening at large. The Income Tax Department has been trying its best to educate the taxpayers that the I-T Department does not ask for debit card details, but only for the bank account details. However, any taxpayer receives such a message from someone, then he should not fall for such messages and should cross-check with his ITR if he was even eligible for this refund. And even if he was eligible, he should not furnish his debit card details," says Batra.

Tax experts say that at a time when technology is helping people in many ways, it is also being misused sometimes. For instance, "many a time we receive phishing scam messages via SMS, e-mails etc, which promise a refund, either for an LIC policy refund or an 'Income Tax Refund'. Many of the taxpayers are getting such messages which seem to be from the I-T Department that their 'Income Tax Refund' has been issued and they are just one step behind of 'Confirmation of Bank Detail' from the refund, which can be done from the link attached in the same message. Once the taxpayer opens the link and fills the details, it gives the right to the hacker to access the account and transfer the amount," says CA Abhishek Soni, Founder, tax2win.in.

Taxpayers should note that the Income Tax Department, from time to time, keeps warning and making the taxpayers aware of such fake SMS, e-mails. Further, if the department asks for something, then they will mail you the reason and also the process for doing the same. However, there will be no link attached in the mail regarding the 'Confirmation of Bank Account' or ATM Card details. So, be careful and never share your bank or debit card details to anyone, including your banker.

*(Business Standard – 12/12/2018)*



### **PAYTM PAYMENTS – BANK POSTS RS. 207 MILLION LOSS IN F.Y. 20217-18**

Banks registered net loss of Rs 207 million for the financial year ended March 31, 2018 through Paytm Payments, according to regulatory documents. Although Bank's total income grew to Rs 7.21 billion in the financial year ended March 31, 2018

ts total loss stood at Rs 307 million during August 22, 2016 to March 31, 2017, the documents filed with the corporate affairs ministry showed. Paytm Payments Bank, which was incorporated in August 2016, formally began its operations in 2017.

The total income grew to Rs 7.21 billion in the financial year ended March 31, 2018 compared to Rs 24.7 million in August 22, 2016 - March 31, 2017 period, the documents sourced by business intelligence platform, Tofler showed.

Tofler said Paytm Payment Bank's total expenses for the financial year were reported as Rs 7.4 billion. Most of the income of the bank (about Rs 6.5 billion) is earned as commission, exchange and brokerage, including that earned on wallet utilisation, it added.

"The expenditure of the bank to the tune of Rs 6.6 billion has not been clearly explained and has been clubbed as other expenditure. Most the deposits with the bank have been invested in government securities," it said.

Paytm Founder Vijay Shekhar Sharma holds 51 per cent share in Paytm Payments Bank, while the rest is held by One97 Communications.

*(The Statesman – 16/12/2018)*

### **INCREASING NUMBER OF NEW BUSINESSES BOOSTS DEMAND FOR CO-WORKING SPACES : REPORT**





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The demand for co-working spaces is increasing also because there are several benefits of working in a co-working environment. The co-working option is quite viable for the small start-up and corporate occupier alike because it comes bundled with the promise of a plug and play facility. India today is witnessing a proliferation of start-ups and SMEs, buoyed by the government's concerted efforts to create a sustainable ecosystem for entrepreneurs in the country. On their part, the entrepreneurs—a large number of them being millennials—believe in harbouring global aspirations with a staggeringly ambitious mindset that was not in evidence a few years back. This provides a perfect platform for dynamic co-working business centres to cater to the office space needs of these aggressive growth-seeking start-ups, as per a recent research report by Knight Frank.

Besides companies, people such as business nomads, expats or those travelling to the country for a limited period are amongst those preferring to work out of plug-and-play co-working spaces. Another constituent is the growing volume of freelance workers (gig economy) who support corporate entities with specialised outsourced services in the advisory, consulting and designing domain such as recruiting and advertising. In fact, with the increasing number of new and growing businesses, there is a palpable demand for co-working spaces in metro cities that had hitherto been lying untapped.

The demand for co-working spaces is increasing also because there are several benefits of working in a co-working environment. Start-ups are characteristically capital poor and need to keep their cost structure at the bare minimum. Real estate expenses make up approximately 9% – 12% of overall operating costs (can differ from market to market) for an established corporate and could account for more in a start-up. Co-working spaces also enable the typical start-up to bypass the fixed rental cost with the additional capex requirements of fit outs and operational hassles of a traditional office space and opt for the flexibility of a co-working office.

This not only allows the new business to occupy a contemporary workplace on a per seat basis but also the flexibility to increase,

reduce or to exit the workplace. This is a critical feature in early stage businesses particularly. More importantly, it allows them to focus on their core business rather than non-core operational areas such as real estate. This is also why additional services such as print-room and repooftered within co-working facilities are an attractive proposition, says the report.

Co-working players are adopting aggressive pricing strategies in order to poach the large occupier and showcase their service focused real estate offering as a turn-key business solution for all their real estate requirements. As evidenced by the rates for dedicated desks offered by a prominent co-working operator in BKC (New CBD) and Andheri (Prominent SBD) in Mumbai, the occupier actually gets a deal that is 5%-15% lower priced in the serviced workspace than if he leased in a similar property in the vicinity.

Thus, the co-working option is quite viable for the small start-up and corporate occupier alike because it comes bundled with the promise of a plug and play facility. Single occupancy cost (No CAM, OPEX etc) and the wider added benefits of adding further capacity as required and perks such as being able to access other office spaces of the operator across different locations, only sweeten the deal further. Thus, ease of working in such pocket-friendly and hassle-free set-ups is quickly increasing the popularity of co-working space across occupier groups, says the Knight Frank report.

Talking about this segment, Nakul Mathur, MD, Avanta India, says, "Co-working spaces are another leading segment which provides massive benefits like optimum and productive use of office spaces. In co-working we can avoid the idle and waste spaces of office and convert them into productive one by using it for meeting, to learn something new, training sessions and many more. Earlier, while selecting spaces, companies had to project the manpower of the next couple of years, prepare the budget accordingly and acquire space in commercial buildings. However now, corporates can acquire space as per the current scenario and can extend the office when required. This is not only cost-effective, but also ensures more flexibility as per the trending market."

*(Financial Express – 18/12/2018)*

### **-: JILTA :-**

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# ILTA PUBLICATION

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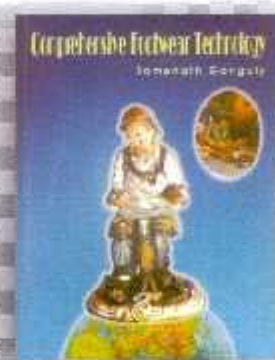
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# History and Activities of Indian Leather Technologists' Association

Registration No. KOL RMS/074/2019-21

The Indian Leather Technologists' Association (ILTA) was founded by Late Prof. B. M. Das, the originator of Des-Steinoy theory and father of Indian Leather Science on 14<sup>th</sup> August, 1950.

The primary objectives of this Indian Leather Technologists' Association which celebrated its Diamond Jubilee year in the 2019, are

- ✦ To bring all concerned with this broad spectrum of the leather industry under one umbrella.
- ✦ To organize seminar, symposium, workshop in order to create information, knowledge and skill development for the benefit of all concerned. To offer a common platform for all to interact with each other in order to understand each other's problems and practices.
- ✦ To publish monthly journal as a supplement to these above objectives. The monthly journal of ILTA is known as Journal of Indian Leather Technologists' Association and is the most widely distributed technical journal concerning leather technology.
- ✦ To publish text books for the benefit of students at various levels of study, for the researchers and industry.
- ✦ To have interaction between urban and rural sector.
- ✦ To assist Planning Commission, various Government Institutions, Ministry and autonomous bodies to formulate appropriate policies acceptable and adaptable to the industry.
- ✦ To organize on job training and to provide skilled manpower and to motivate good students for study.
- ✦ To conduct activities related to the growth of the support of leather and leather goods from India.
- ✦ As the part of many social activities ILTA has donated Rs. 1 lac to Central General of Nepal towards relief of earthquake effected of Nepal in 19<sup>th</sup> Sept, 2015.

## INTERNATIONAL & NATIONAL SEMINAR

- ✦ ILTA is the Member Society of International Union of Leather Technologists & Chemists Societies (IULTCS), a 115 years old organization and for the first time the IULTCS Congress was organized in January 1999 outside the developed countries in India jointly by ILTA and CILRI.
- ✦ 2017 IULTCS Congress is scheduled to be held in India again.
- ✦ As an International Conference on Leather Science & Technology (IACLEST) was organized by ILTA in 2010 during its Diamond Jubilee Celebration year.

## SEMINAR & SYMPOSIUM

ILTA organizes Seminar & Symposiums on regular basis to share information, knowledge & latest development and interactions for the benefit of all concerned. Few areas under:

- ✦ Prof. B. M. Das Memorial Lecture every year during the Foundation Day Celebrations on 14<sup>th</sup> August every year.
- ✦ Sanjoy Sen Memorial Lecture on 14<sup>th</sup> January every year, the birthday of our late President for several decades.
- ✦ Prof. M. B. Banerjee Memorial Lecture on 12<sup>th</sup> March every year, the birthday of this icon personality.
- ✦ Seminar on the occasion of India International Leather Fair (IILFA) at Chennai in February every year.

It has also organized:

- ✦ Prof. V. Nagendram Memorial Lecture.
- ✦ Series of Lectures during "Programme on Implementing Emerging & Sustainable Technologies (PILST)".
- ✦ Seminars on occasion of India International Leather Fair, 2014 and 2015 at Chennai etc. Many reputed scientists, industrialists and educationists have delivered three prestigious lectures. Foreign dignitaries during their visits to India have addressed the members of ILTA in various times.

## PUBLICATION

ILTA has published the following books:

- ✦ An Introduction to the Principles of Physical Tanning of Leather by Prof. S. S. Datta
- ✦ Practical Aspects of Manufacture of Upper Leather by... M. Dey
- ✦ An Introduction to the Principles of Leather Manufacture by Prof. S. S. Datta
- ✦ Analytical Chemistry of Leather Manufacture by P. K. Senka
- ✦ Chromophore Formers Technology by Mr. Somnath Ganguly
- ✦ Treatise on Pathogens and Pathogenicity of Leather by Dr. Sanjay Dasgupta
- ✦ Synthetic Tanning Agents by Dr. Sanjay Dasgupta
- ✦ Handbook of Tanning by Prof. B. M. Das

ILTA has a good Library & Archives enriched with a few important Books, Periodicals, Journals etc.

## AWARDS OF EXCELLENCE

- ✦ ILTA awards Prof. B. M. Das Memorial, Sanjoy Sen Memorial, J. M. Dey Memorial and M. B. Banerjee Memorial Medals to the top rankers at the University / Technical Institute graduate and post graduate levels to encourage the brilliant to evolve with the Industry.
- ✦ J. Srinivas Ray Memorial Award for the author of the best contribution for the entire year published in the monthly journal of the Indian Leather Technologists' Association (IJLTA).

## LEXPDS

To promote and provide marketing facilities, to keep pace with the latest design and technology, to have better interaction with the domestic buyers, ILTA has been organizing LEXPDS fairs at Kolkata from 1977, Siliguri from 1992 and Durgapur from 2010. To help the try, cottage and small scale owners industries in marketing, LEXPDS is give the exposure for their products. Apart from Kolkata, Siliguri & Durgapur, ILTA has organized LEXPDS at Shikha (near), Gorakhpur, Guwahati, Jammu and Baramulla.

## MEMBERS

The Association's present (as on 31.03.2018) strength of members is more than 600 from all over India and abroad. Primarily the members are leather technologists posted out from Govt. College of Engineering & Leather Technology, Anna University, Chennai, Harcourt Butler Technological Institute, Varanasi, B. R. Ambedkar National Institute of Technology, Jalandhar and Scientists from Central Leather Research Institute.

## ESTABLISHMENTS

In order to strengthen its activities, ILTA have constructed its own six storied building at 44, Shanti Pally, Kasta, Kolkata - 700 107 and have named it "Sanjoy Bhavan".

This Association is managed by an Executive Committee duly elected by the members of the Association. It is absolutely a voluntary organization working for the betterment of the leather industry. None of the Executive Committee members gets any remuneration for the services rendered but they get the satisfaction of being a part of this esteemed organization.



68 YEARS OF SERVICE TO THE INTERNATIONAL LEATHER FRATERNITY



ILTA  
Since 1950

## Indian Leather Technologists' Association

[A Member Society of International Union of Leather Technologists' and Chemists Societies (IULTCS)]

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