















#### In Association with













INTERNATIONAL CONFERENCE ON ADVANCES IN INFORMATION TECHNOLOGY AND MANAGEMENT

# Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat

# **February 08 - 09, 2025**



Thakur Educational Trust's (Regd.)

# Thakur Institute of Management Studies, Career Development & Research

Autonomous Institute Affiliated to University of Mumbai, Approved by AICTE and Govt. of Maharashtra ISO 21001: 2018 Certified • MCA Program Accredited by National Board of Accreditation (NBA) Institute Accredited with A+ Grade by National Assessment and Accreditation Council (NAAC)

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ISBN: 978-81-949693-3-4

Printed in India Thakur Institute of Management Studies, Career Development and

Research, Mumbai, India.

# Our PEOs and POs

### PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

- **PEO-1:** To enable students to gain knowledge across all domains of Information Technology with in-depth understanding of their applications.
- **PEO-2:** To enable students to analyze problems and to design and develop software solutions using emerging tools and technologies.
- **PEO-3:** To enable students to continue Life-long learning, Research and Entrepreneurial pursuit in their chosen fields.
- **PEO-4:** To develop communication, teamwork, and leadership skills necessary to manage multidisciplinary projects and serve the society as responsible and ethical software professionals.

## **PROGRAM OUTCOMES (PO'S)**

- **PO-1:** Foundation Knowledge: Apply knowledge of mathematics, programming logic and coding fundamentals for solution architecture and problem solving.
- **PO-2: Problem Analysis:** Identify, review, formulate and analyse problems for primarily focussing on customer requirements using critical thinking frameworks.
- **PO-3: Design / Development of Solution:** Design, develop and investigate problems with as an innovative approach for solutions incorporating ESG/SDG goals.
- **PO-4:** Modern Tool Usage: Select, adapt and apply modern computational tools such as development of algorithms with an understanding of the limitations including human biases.
- **PO-5:** Individual and Teamwork: Function and communicate effectively as an individual or a team leader in diverse and multidisciplinary groups. Use methodologies such as agile.
- **PO-6:** Project Management and Finance: Use the principles of project management such as scheduling, work breakdown structure and be conversant with the principles of Finance for profitable project management.
- **PO-7: Ethics:** Commit to professional ethics in managing software projects with financial aspects. Learn to use new technologies for cyber security and insulate customers from malware.
- **PO-8: Life-long Learning:** Change management skills and the ability to learn, keep up with contemporary technologies and ways of working.

# **VISION**

Thakur Institute of Management Studies, Career Development and Research will become a premier Institute renowned internationally for providing education in Software Application to graduates from various disciplines.

# **MISSION**

To achieve excellence in providing software education so that students can grasp existing as well as emerging technologies and to inculcate leadership and managerial qualities in them so that they can deliver results in the organization they join.

# EDUCATIONAL ORGANIZATION POLICY

We, the staff, faculty and management of Thakur Institute of Management
Studies, Career Development and Research are committed to offer excellence in
software education, in inclusive and conducive academic environment for holistic
development of our students.

We work as a team and interact with students in pro-active manner to achieve our Educational Organization Objectives and fulfill all academic, statutory and regulatory requirements. We strive for continual improvement of our Educational Organizations Management System.

Website: www.timscdrmumbai.in www.thakureducation.org



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Conferred Jutonomous Status by University Grants Commission (UGC) for 10 years w.e.f. A.Y. 2024-25 Institute Accredited with A+ Grade by National Assessment and Accreditation Council (NAAC) MCA Program Accredited by National Board of Accreditation (NBA) 150 21001;2018 Certified



#### **Chief Patron's Message for ICAIM-2025**

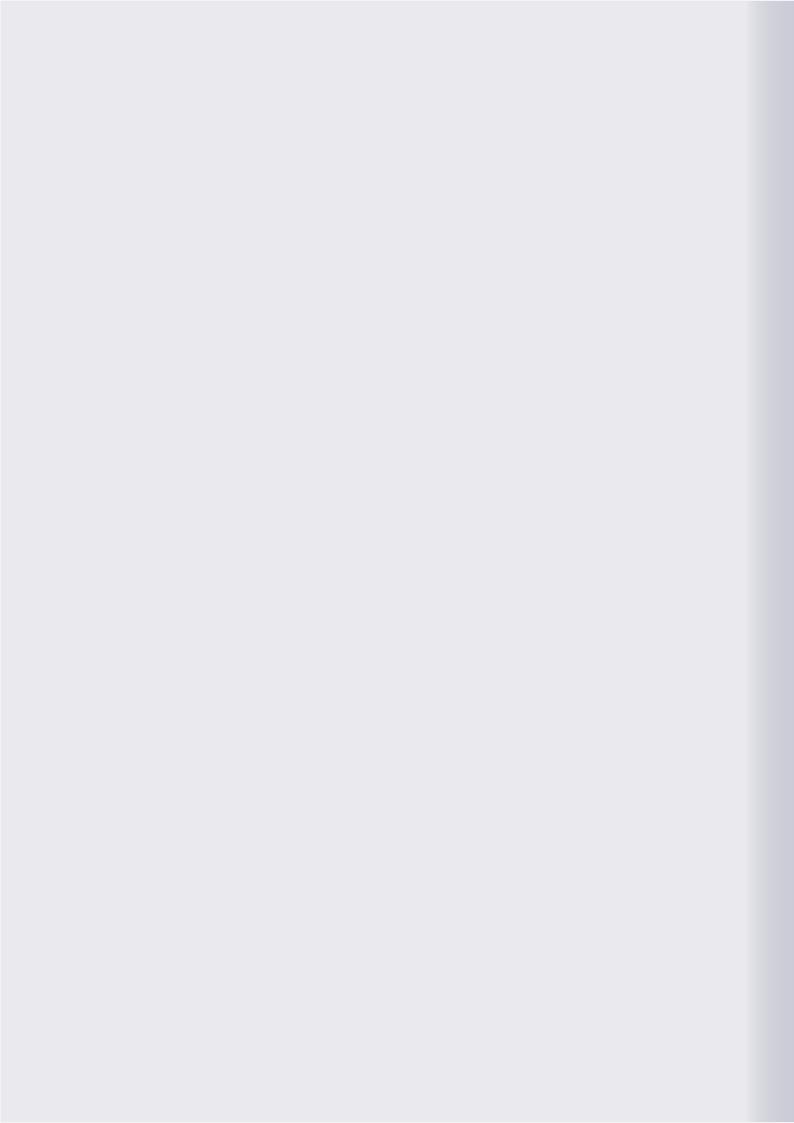
CAIM 2025 International Conference titled – 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat' focuses on a salient topic with global importance. The Thakur Educational Trust empowers many students with quality education. Of these quite a few are women.

TIMSCDR has maintained the zeal of organizing ICAIM 2025 by inviting experts from several domains to share experiences of Women Empowerment. Information Technology plays a crucial role in empowering women in an era of easy access to information. ICAIM 2025 in association with NASSCOM, GIST, MACCIA, NCSH-Sweden and CSI is intensified with workshops and presentations.

I take this opportunity to congratulate the organizing committee for their dedication and hard work for effectively arranging this event. I wish the Conference organizers a huge success in their endeavor of ICAIM 2025.

V. K. Singh

Chairman



Website: www.timscdrmumbai.in



### Thakur Educational Frust's (Regd)

## THAKUR INSTITUTE OF MANAGEMENT STUDIES, CAREER DEVELOPMENT & RESEARCH

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#### CEO's Message for ICAIM-2025

warm welcome to all for the delegates of the International Conference on Advances in Information Technology and Management titled "Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat" organized by TIMSCDR, under the aegis of Thakur Education Group (TEG).

In the present times of fast development in every sector due to the easy access to information and affordable technology, it is necessary to ponder on the topic - Women Empowerment. Are Women in today's world actually empowered? Over the last few decades literacy in women has shown a remarkable upward trend. However, does this allow them to make decisions and put across their views confidently and without suppression.

ICAIM 2025 brings forth a matter of global discussion. The expert sessions and panel discussion on Women Empowerment will definitely enrich the views of the delegates. It is heartening to know that all invited speakers at ICAIM 2025 are women who are playing a pivotal role in empowering other women.

I congratulate team TIMSCDR for the zeal and enthusiasm with which they have organized ICAIM 2025. I extend my best wishes to the faculty, delegates, and the organizing committee for excellence in their endeavors.

#### Ms. Karishma Singh

**CEO** 



Thakur Educational Trust's (Regd)

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#### **PREFACE for ICAIM-2025**

ICAIM - International multidisciplinary conference completes a decade. Each edition of ICAIM has attempted to focus on topics of Social relevance and its impact on the domain of Agriculture and Healthcare. Though not limiting research or interventions in other domains. While understanding the impact of social and global issues, ICAIM strives to bring forth the use of Information Technology and its leverage to resolve them.

Our nation, backed by a larger population of youth, gracefully and aggressively strides ahead to realize its vision of Viksit Bharat. ICAIM 2025 addresses the vision of Viksit Bharat as a broader theme; and continues to prioritize the domains of Agriculture and Healthcare. As a nation with the highest population, India, requires enough food to feed a population of more than 144 crores. The agriculture sector of our country needs to have a sustainable support of technology to ensure enough produce to cater to its population.

Further, the healthcare infrastructure of our nation not only needs to be resilient but also sufficient to meet the needs of every individual.

The vision of Viksit Bharat - to make India a developed nation by 2047, which is the 100th year of our independence. Viksit Bharat believes in the success of every individual of our nation. As quoted by our Hon. Prime Minister, Mr. Narendra Modi, "Viksit Bharat is a nation where no one is too small to dream and no dream is too big to achieve. Everyone, no matter who they are, can aspire to reach the heights of success".

ICAIM 2025 encourages young researchers and technocrats to contribute towards ascertaining the vision of Viksit Bharat. With Information Technology innovating at a fast pace, today's youth have to imbibe the agile mindset. They need to explore ways by which information technology can be best leveraged for sustainability, progress and prosperity in general and in the domains of

Agriculture and Healthcare in specific to realize the larger objective of Viksit Bharat.

ICAIM 2025 has experts from the domains of Agriculture, Healthcare and Information Technology to deliberate on how each of these domains can contribute towards achieving Viksit Bharat, the challenges faced, the strategies to be innovated and implemented and the involvement of the bigger

part of our population, our YOUTH.

The proceedings of ICAIM 2025, have research papers and technical posters authored by academicians and experts from the fields of Agriculture, Healthcare and Information Technology. The contents of the proceeding is not limited to the domains of Agriculture and Healthcare or to any particular technology in IT. With the upsurge of AI, most, but not all compositions in the proceedings explain the use of AI in resolving or innovating better solutions for advancements

towards Viksit Bharat.

The journey of ICAIM 2025 has been encouraging in enhancing and broadening the knowledge and skills on several topics through deliberations and research keeping intact the focus of moving towards a Viksit Bahrat together.

Dr. Vinita Gaikwad

Director

## **About TIMSCDR**

The Thakur Educational Group comprises of three Trusts namely Thakur Educational Trust (Regd.), Zagdu Singh Charitable Trust (Regd.) and Zagdu Singh Educational Trust (Regd.) managed by the Thakur family and runs 19 Institutes located in Kandivali, western suburb of Mumbai.

TIMSCDR (Thakur Institute of Management Studies, Career Development and Research) is dynamic institute striving to provide quality higher education. The institute is an ISO 21001:2018 certified providing three years MCA (Master of Computer Application) course. The MCA Course of TIMSCDR is NBA Accredited. All possible ways of acquiring academic insight and undertaking appropriate academic initiatives are explored at the institute. TIMSCDR also has an ISTE (Indian Society of Technical Education) chapter. Residence-cum-study facility is available for boys and girls in secured modern Hostel Buildings with green, clean and healthy ambience situated near the Institute.

TIMSCDR is organizing next International Conference ICAIM-2025 which serves as a platform for gathering all academicians, industrialist, researchers and professionals in the disciplines of Information Technology, Agriculture and Medicine (Nutrition).

### **About AMC**

The Association of Medical Consultants (AMC) was established in 1972 by a small group of energetic active and concerned medical consultants from distant suburbs who often assembled and animatedly discussed their common problems. Over the years, the immense need rose for an organisation of this nature and the Association grew rapidly. It is now one of the fastest growing Associations of Specialist Doctors in Mumbai and boasts of a membership strength of more than 9000 Medical Consultants. AMC represents Consultants practicing at corporate and non corporate Tertiary care referral Hospitals (both Government and Private) and individual Consultants practicing through their own consulting rooms, Clinics & Nursing Homes spread across Greater Mumbai, Navi Mumbai and Thane districts. It is recognized as a frontline Medical Organization and is an important opinion making body which addresses vital public health and professional issues facing the medical profession in general and medical consultants in particular. AMC has effectively brought together consultants of various disciplines on one platform and aims to highlight and offer solutions to all the important day to day problems faced by consultants.

## **About MACCIA**

Maharashtra Chamber of Commerce, Industry & Agriculture (MACCIA) is the Apex Chamber of the State. The Chamber plays a pivotal role in supplementing and augmenting the efforts of Government for the economic development of the State and advancement of its people. With more than 3500 direct Members, comprising of large, medium and Small-Scale Industries, Traders, Agriculturist and Professionals, MACCIA is the only Chamber in Maharashtra, which has deep-roots in all the 35 Districts encompassing 355 Talukas of Maharashtra. In addition over 800 Local Trade and Industry Associations and professional bodies having collective membership of over 700,000 business organizations from all over the State are affiliated to the Chamber and thus it virtually functions as the State's Apex Chamber.

## **About NCSH**

Nordic Center for Sustainable Healthcare (NCSH) is a cross-sectoral arena and network involving stakeholders, organizations, projects and expertise in the area of sustainable healthcare, all sharing the goal to create a more sustainable healthcare sector. The network of NCSH includes companies, hospitals, regions, universities, NGOs, clusters and more. Together they form an arena which generates collaborations, projects, business, knowledge and new innovative ideas.

## **About GIST**

Global Indian Scientists & Technocrats Forum (GIST) is a visionary organization that was formed to become a key platform to bring together scientists and technocrats from the Indian diaspora from across the world, who are maestros in their fields.

## **About MMA**

Malad Medical Association is one of the oldest (since 1964) and one of the largest and most active association in Mumbai covering Consultants, General Practitioners and having more than 2200 members and rendering health related services to the community through the discipline of modern medicine. Malad Medical Association plays a crucial role in fostering collaboration, education, and excellence in healthcare within our community. We carry out multiple projects for the community as well as for the members welfare.



"Wishing the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat' great success. Integrating technology into these vital sectors will drive innovation, efficiency, and sustainability for a healthier and self-reliant India. May this platform inspire transformative solutions for a brighter future. Best regards!

**Dr. Sabyasachi Sengupta**Ophthalmologist, Founder, Future Vision Eye Care,

Founder - Chief Medical Writer - Lead Biostatistician at Sengupta's Research Academy

"I am glad to extend my best wishes for the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat.' Embracing digital innovation and emerging technologies is key to fostering sustainable growth in these vital sectors. May this event spark impactful collaborations and groundbreaking solutions for a brighter future."



Dr. Shivam Gupta

Manager - Business Technology Advisory, Detecon International, Berlin (Germany)



Best wishes for the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat.' AI and emerging technologies hold immense potential to transform these sectors, enhancing efficiency, innovation, and sustainability. May this platform spark insightful discussions and drive meaningful solutions for a brighter future

Dr. Anand Rao

GIST, Global Artificial Intelligence Lead in PwC, Leads AI and Emerging Technology - Al and Blockchain Applications in Healthcare

"I feel proud to wish the organizers and participants of the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat' much success. Digital technologies are vital in driving sustainability and innovation within these sectors. May this conference ignite meaningful collaborations and inspire transformative solutions for a more sustainable future."



Mr. Dinesh Kumar Singh

Group Leader, Digital Farming Initiative (Fisheries and Livestock), TCS



"Congratulations to the organizers of the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat.' Embracing digital innovation is key to driving sustainable transformation in these vital sectors. Wishing this platform great success in fostering groundbreaking ideas and impactful solutions for a better future."

**Dr. Suresh A. Shan**CIO | Head - Innovation & Future Technologies Business
Mahindra & Mahindra, BITS

"Congratulations to the organizers of the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat.' The integration of AI, quantum computing, and emerging technologies will drive innovation and sustainability in these critical sectors. Wishing the event great success in fostering visionary ideas and impactful collaborations."



**Mr. Utpal Chakraborty** Chief Technology Officer, AI & Quantum Scientist, IntellAI NeoTech Ltd



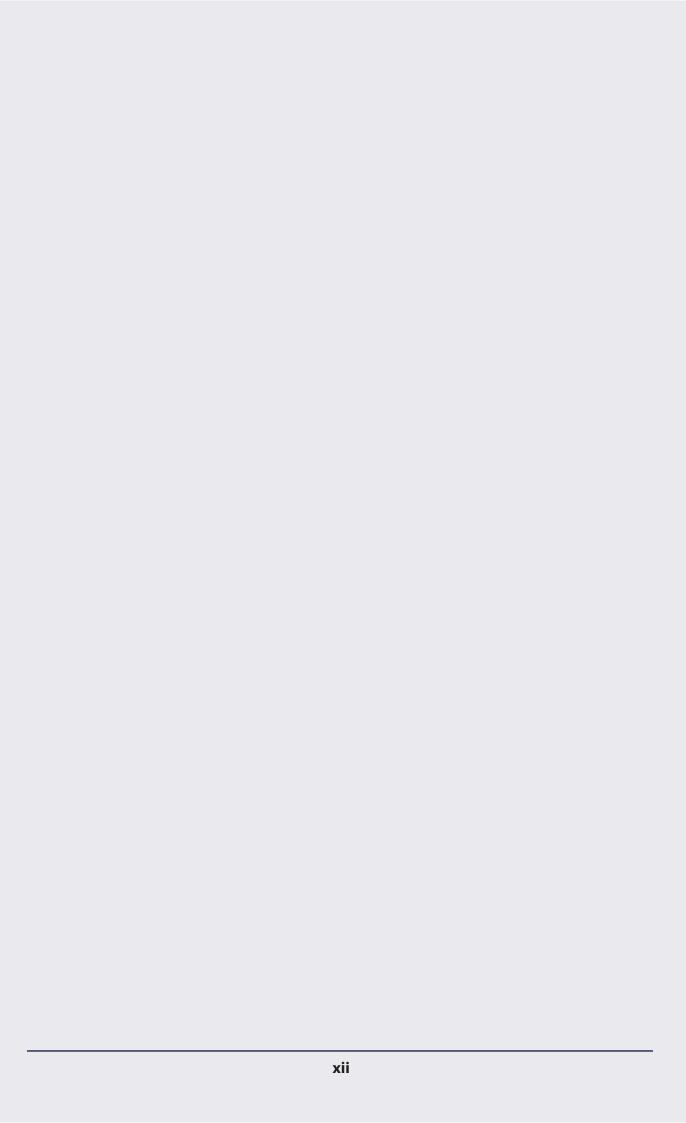
"Best wishes to the organizers of the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat.' The adoption of IT solutions is key to driving sustainable growth and innovation in these vital sectors. Wishing the event great success in inspiring impactful collaborations and pioneering solutions for a prosperous future."

Mr. Jyotish Kumar Ghosh Chief Sales Officer (CSO), 3i Infotech Ltd.

"I am glad to know about the conference on 'Leveraging Information Technology for Sustainability in Agriculture and Healthcare – Viksit Bharat.' The intersection of IT with agriculture and healthcare is pivotal for creating sustainable and impactful solutions. Wishing the event great success in fostering innovation and collaboration for a better future."



**Dr. Prakash Jha**Agriculture Climatology Professor | Director | Scientist



# Well Wishers of

# **ICAIM - 2025**



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Chairperson-Media &
Communication Cell, AMC,
Founder Director - LeNest,
Gynaecologist & Obstetrician



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International Project Coordinator
at TEM/Nordic Center for
Sustainable Healthcare



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Orthopaedic Surgeon



**Dr. Shalin Soni** President, MMA, Physician & Surgeon



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Founder and CEO at Innosapien
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**Ms. Rasika A. Phatak** Farmer and Social Worker

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Mr. Johannes Brundin, Energy and Climate Manager, Nordic Center for Sustainable Healthcare, Sweden
Mr Sudhanshu Ojha, General Manager, D-Link India Ltd.

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