



Global Web Conference

On



**Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)**

(29-30 January 2021)

www.nfedconferences.org

Organized & Powered By

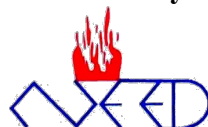


National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfed.in | www.nfedindia.org | www.nfedawards.com | nfed.business.site

Published By



Global Web Conference on Impact of Engineering, Science & Management on Digital Transformation – IESMDT 2021

Editor: Prof. Dr. R. Ganesan

Published By: National Foundation for Entrepreneurship Development (NFED)
Copyright© 2021 by NFED

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author & publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law.

Limits of Liability/Disclaimer of Warranty: The authors are solely responsible for the contents of the paper in this volume. The publishers or editors do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are required to communicate such errors to the editors or publishers to avoid discrepancies in future. No warranty may be created or extended by sales or promotional materials. The advice and strategies contained herein may not be suitable for every situation. This work is sold with the understanding that the publisher is not engaged in rendering legal, accounting or other professional services. If professional assistance is required, the services of a competent professional person should be sought. Reader should be aware that internet website listed in this work may have changed or disappeared between when this was written and when it is read.

INR 750



E-ISBN: 978-81-950075-2-3

DOI: 10.13140/RG.2.2.14807.19367

Month & Year: January 2021

National Foundation for Entrepreneurship Development (NFED)

Coimbatore - 641011, Tamil Nadu, India

Ph: +91-7708647015

E-mail: info.nfed@gmail.com

Website: www.nfedindia.org

Greatness of any Research is only through its Wider Applicability

- R.V.J. Prof. Dr. R. Ganesan

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)

(29-30 January 2021)



Organized & Powered By



National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Acknowledgements

I wholeheartedly thank the honourable international keynote speakers Dr. Reshmy Krishnan, Associate Professor, Department of Computer Science & Engineering and Head of Research, Muscat College, Sultanate of Oman; Ms. Saeeda Ahmed, Founding Director, Education Partnerships UK Ltd., London, United Kingdom; Dr. K. Prakash Vel, Associate Professor, Faculty of Business, University of Wollongong, Dubai, United Arab Emirates and Mr. Nanda Kumar, Founder & Director, Kovaion, London, United Kingdom for their venerated presence and enthralling keynote address.

I heartily thank the distinguished national keynote speakers Dr. Arti Chandani, Associate Professor, Symbiosis Institute of Management Studies (SIMS), Pune, Maharashtra, India and Dr. V. Sasirekha, Professor, Sri Sai Ram Institute of Management Studies, Sri Sai Ram Engineering College, Chennai, Tamil Nadu, India; Dr. K. Kalaiselvi, Associate Professor, Department of MCA, School of Computing Sciences, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, Tamil Nadu, India and Dr. Alka Maurya, Professor, Amity International Business School, Amity University, Noida, Uttar Pradesh, India for their august presence and enlivening keynote address.

I also express my sincere thanks to the Distinguished Valedictory Speakers, Ms. T. Vanadhi Devi, Director, Vista Expedition & President, Southern Industrial Academy for Women Entrepreneur Development, Chennai, Tamil Nadu; Dr. Baby Sam Saamuel, General Manager, InterTech LLC, Sultanate of Oman; Dr. M. Devi, Professor, Department of Civil Engineering & Dean (Student Affairs), Vivekanandha College of Technology for Women, Tiruchengode, Namakkal District, Tamil Nadu and Ms. Harini Ramarathnam, Founder, Vibha Education Services Corp., Bengaluru, Karnataka & Executive Board Member, NFED Business Facilitators Forum (NBFF), Coimbatore, Tamil Nadu.

I extend my profound gratitude to all the Session Chairs from different states of India for their invaluable time and scholarly services.

I express my sincere thanks to the Conference Conveners, Organizing Committee Members, Organizing Secretaries and Facilitators for their continuous support in successfully conducting this international web conference.

I heartily thank all the participants and paper presenters from various states of India and abroad for their enthusiastic participation and research contributions to this global web conference.

I owe my sincere thanks to all the Presidium Members of NFED for their continuous co-operation towards conducting and hosting this international web conference.

I thank the media and friends for their constant encouragement and support to this global web conference.

Sd/-

KVJ. Prof. Dr. R. Ganesan
Conference Chair & Chief Patron, IESMDT '2021
&
Founder & Chairman
NFED, Coimbatore, Tamil Nadu

Contents

S. No.	Particulars	Page No.
1	Conference Prologue	i
2	Conference Objectives	ii
3	About NFED	iii
4	Key Office Bearers	iv
5	Conference Chair & Chief Patron	v
6	Conference Coordinator & Patron	vi
7	Conference Convener	vii
8	Associate Conference Convener	viii
9	Organizing Secretaries	ix
10	Organizing Committee Members	x
11	Keynote Speakers	xii
12	Session Chairs	xiv
13	Valediction	xvi
14	Conference Paper Publications	xvii

Conference Papers			
P.S. No.	Paper Track Code	Paper Title & Author(s)	Page No.
Track 2: Scientific Aspects & Global Applications (SAGA)			
1	TR2-SAGA-IESMDT2021-006	A Study on Ultrasound Assisted Synthesis of Nanocomposite Altered with NiO Nanoparticles with Vitamin B1 <i>Dr. Lingaraju</i>	1
Track 3: Management, Commerce, Arts & Humanities (MCAH)			
2	TR3-MCAH-IESMDT2021-001	Pandemics Demonizing the Other - An Exploratory Study on COVID-19 <i>Dr. Shan Eugene Palakkal</i>	2
3	TR3-MCAH-IESMDT2021-002	Pandemics and The History of Contagionism - A Historical Study <i>Dr. Parvathy Menon</i>	3
4	TR3-MCAH-IESMDT2021-003	Exploring Educator's Technostress and Empowering Teacher Agency - A Conceptual Review <i>Ms. Koyel Mallick</i>	4
5	TR3-MCAH-IESMDT2021-005	Competitive Advantage of Store Brands in a VUCA World <i>Ms. Ipsita Padhi & Dr. B. B. Mishra</i>	5
6	TR3-MCAH-IESMDT2021-006	Environmental Pollution and Victimization - A Study on Delhi Inhabitants in the Perspective of Green Victimology <i>Ms. Saundarya Shrotriya & Dr. Rufus D</i>	6
7	TR3-MCAH-IESMDT2021-010	Impact of Technostress on Academic Women's Reproductive Health <i>Ms. K. Ramya & Dr. K. Manimozhi</i>	7
8	TR3-MCAH-IESMDT2021-011	Role of Leadership in Digital Transformation of Organization: A Study in Service Sectors of Odisha <i>Ms. Madhumita Panda & Dr. Umesh C. Panigrahi</i>	8
9	TR3-MCAH-IESMDT2021-012	Pros & Cons of Transformation to Digital Education – An Overview <i>Dr. Selvakumari Sankaranaryanan</i>	9
10	TR3-MCAH-IESMDT2021-013	Impact of Pandemic on Online Education at Schools – An Overview <i>Mr. Jaswin Kumar N. R.</i>	10
Track 4: Entrepreneurship Development & Skill Acquisition (EDSA)			
11	TR4-EDSA- IESMDT2021-004	Entrepreneurial Support Programmes in India – An Overview <i>Ms. Jini Thomas</i>	11
12	TR4-EDSA- IESMDT2021-005	An Approach to the Study of Women Entrepreneurship: A Case of Uttarakhand <i>Dr. Himani Jalal</i>	12

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)

(29-30 January 2021)



Organized & Powered By



National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Prologue

The advent of globalization has necessitated the advancements in terms of science, technology, management, etc., wherein the utility in all spheres of life has to enable sustenance and progression of socio-economic development in the current and future pandemic situation. Also, it is quite important to understand the ergonomic aspects, compatibility and adaptability of such advancements should facilitate to overcome obsolescence with frequent innovation for societal wellness. This in turn, forcefully triggered the new vistas in the research so as to address the emerging trends in digital transformation with time. The contribution of researches towards various facets in the past has witnessed inadvertent growth and development to a large extent. However, it could not wholly gauge the systematic sequences in terms of adaptability and development throughout so as to meet the overall requirements of mankind in terms of achieving utmost stability. The reason could be the integration of researches and its societal integrity in upbringing the wellbeing of humans in totality. This may be due to the achievements in accordance with uni-disciplinary focus, wherein multidisciplinary contributions are not completely addressed. The current scenario is ever-changing and demands growth with balancing every aspect of livelihood and promulgation for effectiveness. This leads to the congregation of research across inter-disciplines and multi-disciplines in terms of socio-economic development. Keeping these paradigms in view, the international conference intends to radically drive on the contemporary researches in the fields like engineering & technology, basic sciences, medical sciences, paramedical sciences, social sciences, management, arts & including humanities so as to facilitate the overall sustenance and phenomenal development to meet the future challenges. Hence, the conference has been officially coined as ‘Global Web Conference on Impact of Engineering, Science & Management and Digital Transformation (IESMDT)’. This global web conference intends to view the impact of research on digital transformation through congregating new vistas and emerging trends through holistic research contributions from various disciplines. The aforementioned global web conference is organized and powered by National Foundation for Entrepreneurship Development (NFED), Coimbatore, Tamil Nadu and officially scheduled on 29-30 January 2021 to garner and gauge the inter-disciplinary and multi-disciplinary research contributions towards Digital Transformation. I am sure this international conference has laid the foundation towards understanding the women empowerment through education, employment and entrepreneurship across the globe.

Sd/-

KVJ. Prof. Dr. R. Ganesan
Conference Chair & Chief Patron, IESMDT ‘2021
Founder & Chairman, NFED

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)



(29-30 January 2021)

Organized & Powered By



National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Conference Objectives

To highlight the holistic research contributions and its impact on digital transformation in accordance with current trends and to meet the future challenges for upbringing global socio-economic development

To congregate the contemporary researches across various academic and industrial / organizational / entrepreneurial domains on digital transformation for survival, sustenance and growth

To act as a platform for global knowledge sharing and information dissemination channel for overall understanding of various research aspects on digital transformation

To encourage and promulgate the research acumen of the students, researchers, scholars, academicians and practitioners from various academia and industry / corporate towards fostering digital transformation

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

(In Pursuance to Create Socio-Economic Sustenance through Entrepreneurship Development)

www.nfedindia.org | www.nfed.in | www.nfedawards.com | www.nfedconferences.org | nfed.business.site

NFED is a unique organization which is predominantly into promulgating entrepreneurship cult across the nation. NFED is driving and thriving on socialistic notion with righteous academicians, corporate citizens and entrepreneurs in its fold, which is established as virtual organization, since 2003 and registered as a Trust on 7th November 2013 towards accomplishing its mission 'In Pursuance to Create Socio-economic Sustenance through Entrepreneurship Development'. It is headquartered at Coimbatore District, Tamil Nadu and pertinent information regarding activities is floated in its aforementioned official websites.

NFED primarily aims in creating enterprising communities at large in Schools, Colleges and Varsities through its training and development activities, faculty development programmes on research and entrepreneurship development, awareness, workshops, refereed conferences, seminars, etc. pertaining to Management Development, Research Emancipation, Technology Innovation and Entrepreneurship Development. It frequently engages in research and development activities by publishing research articles, book chapters and edited books on holistic research, which congregates the disciplines like, engineering, technology, sciences, management, arts and humanities and women development. It also recognizes the talents of teachers, academicians, researchers, professionals, entrepreneurs (including social entrepreneurs), practitioners, freelancers, etc. throughout the globe through its National Awards since 2010.

NFED encourages the entrepreneurial spirit of youths and facilitates them with opportunity guidance. Also, serves under a glocal perspective to bring in prosperity by and large to foster entrepreneurial progression amongst all communities in general and women in particular, across the nation. It has associated and collaborated with academia including, schools, colleges, varsities, etc. and also with national and international organizations. It has instituted numerous programmes hitherto towards promulgating entrepreneurship development, career development, employability skills, research publications, women empowerment, etc.

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)



(29-30 January 2021)



Organized & Powered By

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Conference Chair & Chief Patron

KVJ. Prof. Dr. R. Ganesan

Founder & Chairman

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

Conference Coordinator & Patron

Ms. Ramya Kandavel

Director

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

Conference Convener

Dr. Usha Seshadri

Faculty Member

VIT-AP School of Business (VSB)

VIT-AP University – Amaravati Campus

Amaravati, Andhra Pradesh, India

Associate Conference Convener

Mr. Owaiz Khan

Founder

Cynaris Solutions Pvt. Ltd.

Bengaluru, Karnataka, India

Conference Chair & Chief Patron **KVJ. Prof. Dr. R. Ganesan**



Karma Veer Jyoti. Prof. Dr. R. Ganesan earned his doctorate from the reputed IIT Delhi with a special focus on Entrepreneurship Development. He possesses more than two decades of research experience in the field of entrepreneurship and management. He has served in different academia ranging from Deemed Varsities, Engineering Colleges, Arts & Science Colleges, B-Schools and International Varsities. He has more than 70 research contributions to his credit, which are published in refereed and indexed journals, books, book chapters, monographs and conferences. He is a global author in Women Entrepreneurship, whose research papers are listed in Google Scholar and indexed in ISI (AHC & ESCI), MLA Citations, Scopus, EBSCO, ASOS, Cabells' Directory etc. He has authored two books on women entrepreneurship development and insurance management, which has been published at Germany. He is serving as editorial member and reviewer for numerous journals and possesses more than 18 years of editorial experience. He has edited more than 520 research articles to his credit, which includes his editorial experience across refereed and indexed journals, conferences and book chapters at national and international levels. He has organized and hosted 3 refereed and indexed national conferences and 2 international conferences (including one web conference) and conducted more than 37 faculty development programmes (FDPs) including webinars focusing on Research & Development (Research Insights, Research Structuring, Publication Strategies, Statistical Insights, Crafting Literature Review and Publication Prospects), Entrepreneurship Development, Digital Marketing, etc., at national and international levels. He has delivered more than 170 sessions on Research Insights and Publication Strategies, Entrepreneurship, Managerial Skills, Career Development, Employability Skills, etc. across the nation. In commemorating his laudable academic, research and societal transformational services through upbringing entrepreneurship development he has been conferred with the prestigious title Karma Veer Jyoti (KVJ) by Indian Confederation of Non-Governmental Organizations (iCONGO), New Delhi, India on 22nd March 2015. He is the recipient of PFLA Excellence Award for his 'Outstanding Service to Education and Entrepreneurs' community from People First Leadership Academy (PFLA), Bengaluru, Karnataka on 19th January 2019. He has been conferred with 'Order of Eminence' the highest honour for his global contribution to research, teaching and training in Entrepreneurship Development by the Presidium of NFED in its 10th National Teachers' Day Awards on 5th September 2019 at Coimbatore, Tamil Nadu. He has been conferred with the Prestigious MTC Global Distinguished Teacher Award in Entrepreneurship Development in the 9th World Edu Summit organized by Management Teachers Consortium (MTC) Global on 7th September 2019 at Bengaluru, Karnataka. He is the Founder and Chairman of the renowned National Foundation for Entrepreneurship Development (NFED) and Founder & Chair of NFED Business Facilitators Forum (NBFF), Coimbatore, Tamil Nadu.

Conference Coordinator & Patron Ms. Ramya Kandavel



Ms. Ramya Kandavel earned her Master's in Statistics from University of Madras, Chennai and Master's in Applied Psychology from Bharathiar University, Coimbatore. She holds a Diploma in Transactional Analysis from South Asian Association of Transactional Analysts (SAATA). She is a Psychological Counsellor and a Master practitioner in Neuro-Linguistic Programming. Her expertise as a counsellor includes Personal One-to-One Counselling, Stress Management, Psychotherapy and Dream Interpretation. She has published papers and book chapters in Edited Books. She commenced her professional career in the ITES Sector and possesses more than 17 years of administrative experience at various corporates and academic institutes. She joined as an active member in the renowned National Foundation for Entrepreneurship Development (NFED) and has facilitated its national events as Event Anchor, Programme Coordinator, Programme Director and Chief Coordinator. She has organized and hosted 2 refereed and indexed international conferences (including one web conference), 12 webinars and 8 faculty development programmes (FDPs) focusing on Research & Development (Research Insights, Research Structuring, Publication Strategies, Statistical Insights, Crafting Literature Review and Publication Prospects), Entrepreneurship Development, Digital Marketing, etc., at national and international levels. She is also the co-editor of Award Compendium of all NFED's national ceremonies since 2019. She is currently serving as the Executive Chairman and Director, wherein she oversees the entire administrative activities and also promulgates NFED's social sensational programmes across the nation and globe.

Conference Convener

Dr. Usha Seshadri



Dr. Usha Seshadri holds a Masters in International Management with a Gold Medal for Academic Excellence and earned the Doctorate from the reputed Pondicherry University (Central University). She is a UGC NET qualified management faculty with over twelve years of corporate and teaching experience. She has worked with several premier institutes including Pondicherry University, IIM Indore and Bahrain Training Institute, Bahrain. Her area of interest includes Research Methodology, Digital Marketing, Marketing Analytics, Consumer Behaviour, Retail Management and Rural Marketing. Over the years, she has gained wide experience in classroom instruction, contemporary pedagogical practices, curriculum development and project guidance, etc. She is into coordinating Faculty Development Programs and providing marketing research consultancy for small start-ups. She possesses hands on experience working with various tools like SPSS, AMOS, NVIVO and SmartPLS. She has been actively involved in training students on every aspect of Research Methodology and Data Analysis. She has presented several papers in refereed conferences and published papers in peer reviewed journals at National and International level. Also, she is actively involved in peer review of top Scopus journals. She frequently conducts webinars on Research Methodology and Digital Marketing. She is the Honorary Professor (i/c) in Centre for Research & Training (CRT), Distinguished Fellow of NFED and also serves as the Executive Board Member of NFED Business Facilitators Forum (NBFF). She is the recipient of coveted National Senior Woman Educator & Scholar Award in the 9th National Teachers' Day Awards organized and powered by the renowned National Foundation for Entrepreneurship Development (NFED), Coimbatore, Tamil Nadu on 5th September 2018. She is currently working as a Marketing Faculty at VIT-AP School of Business under VIT-AP University Amaravati Campus, Andhra Pradesh, India.

Associate Conference Convener
Mr. Owaiz Khan



Mr. Owaiz Khan has earned his bachelor's degree in Electronics & Communications and Masters in Marketing Management. He has over 15 years of experience in IT industry. He has spent most of his IT career in IBM and possesses more than 9 years of professional experience. He has supported clients in North America, United Kingdom and Australia. He is a Master Black Belt, Prince 2, Design Thinking, Agile Scrum practitioner, etc. He provides business support to improve their process, identify new opportunities and implement new technologies. During his career, he has conducted multiple interviews and found that there is a huge gap in students' skill set to what is required by an organization. As an entrepreneurial initiative, he founded Cynaris Solutions Private Limited (CSPL) at Bengaluru, Karnataka in 2018 and since then has been providing software support to companies and industrial knowledge / support to students as well as colleges in Bengaluru. He has conducted numerous technical sessions on digital transformation, business development, social media marketing workshops & demos, data analytics & statistical insights, entrepreneurship development, placement drives, cultural events, seminars, webinars, etc. He is the recipient of National Young Entrepreneur Award from the renowned National Foundation for Entrepreneurship Development (NFED) in its 6th National Entrepreneurs' Day Awards on 7th November 2019. He is the Life Member and Distinguished Fellow of NFED and also serves as the Honorary Dean (Training & Development) & Technical Head of NFED and Programme Director & Executive member of NFED Business Facilitators Forum (NBFF), Coimbatore, Tamil Nadu. His mission is to provide righteous skills and to groom the students to bring out their best talents. He is also a motivation speaker and student counsellor, wherein he facilitates youth communities to choose the right career path or entrepreneurial journey by guiding and mentoring them.

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)



(29-30 January 2021)



Organized & Powered By

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Organizing Secretaries

Mr. Jaswin Kumar N. R.

Youth Facilitator & Deputy Technical Head

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu

Ms. D. Susmitha

Founder & Managing Director

Suntowa Technologies Pvt. Ltd. (STPL)

Chennai, Tamil Nadu

&

Distinguished Fellow

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)



(29-30 January 2021)

Organized & Powered By



National Foundation for Entrepreneurship Development (NFED)
Coimbatore, Tamil Nadu, India
www.nfedconferences.org

Organizing Committee Members

Dr. J. Indumathi

Professor

Department of Information Science & Technology (DIST)
Faculty of Information & Communication Engineering
Anna University
Chennai, Tamil Nadu, India

Dr. B. Surekha

Professor

Department of Electronics & Communication Engineering
K.S. Institute of Technology
Bengaluru, Karnataka, India

Dr. Farida Virani

Professor & Head - HR & Behavioural Sciences
MET Institute of Management
Mumbai, Maharashtra, India

Dr. Meghna Chhabra

Associate Professor

Faculty of Management Studies
Manav Rachna International Institute of Research & Studies
(Deemed University)
Faridabad, Haryana, India

Dr. Meghdoot Ghosh

Senior Assistant Professor & Head of Department (Data Science)
IMS Business School
Kolkata, West Bengal, India

Dr. N. Sarulatha

Assistant Professor
Department of Business Administration
D.G. Vaishnav College (Autonomous)
Chennai, Tamil Nadu, India

Dr. Sailaja. V

Assistant Professor of Zoology
Vikrama Simhapuri University P.G. Centre
Kavali, SPSR Nellore District, Andhra Pradesh, India

Dr. Sheeba Khalid

Assistant Professor – Sociology
Department of Legal Studies
The Neotia University
Kolkata, West Bengal, India

Dr. G. Subhalakshmi

Faculty, School of Law
Pondicherry University
Puducherry, India

Dr. Rufus D

Assistant Professor
Department of Criminology & Police Studies
Sardar Patel University of Police, Security & Criminal Justice
Jodhpur, Rajasthan, India

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)

(29-30 January 2021)



Organized & Powered By



National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Keynote Speakers

Day I (29th January 2021)

Dr. Reshmy Krishnan

Associate Professor & Head of Research
Muscat College, Sultanate of Oman

Ms. Saeeda Ahmed

Founding Director
Education Partnerships UK Ltd.
London, United Kingdom

Dr. V. Sasirekha

Professor
Sri Sai Ram Institute of Management Studies
Sri Sai Ram Engineering College
Chennai, Tamil Nadu, India

Dr. Arti Chandani

Associate Professor
Symbiosis Institute of Management Studies (SIMS)
Pune, Maharashtra, India

Day II (30th January 2021)

Dr. K. Prakash Vel

Associate Professor
Faculty of Business
University of Wollongong
Dubai, United Arab Emirates

Mr. Nanda Kumar

Founder & Director
Kovaion
London, United Kingdom

Dr. Alka Maurya

Professor
Amity International Business School
Amity University
Noida, Uttar Pradesh, India

Dr. K. Kalaiselvi

Associate Professor
Department of MCA
School of Computing Sciences
Vels Institute of Science, Technology & Advanced Studies (VISTAS)
Chennai, Tamil Nadu, India

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)



(29-30 January 2021)



Organized & Powered By

National Foundation for Entrepreneurship Development (NFED)
Coimbatore, Tamil Nadu, India
www.nfedconferences.org

Session Chairs

Track 2: Scientific Aspects & Global Applications (SAGA)

Dr. J. Indumathi

Professor

Department of Information Science & Technology
Faculty of Information & Communication Engineering
Anna University, Chennai, Tamil Nadu

Dr. B. Surekha

Professor

Department of Electronics & Communication Engineering
K.S. Institute of Technology, Bengaluru, Karnataka

Dr. A. N. Jayanthi

Associate Professor

Department of Electronics & Communication Engineering
Sri Ramakrishna Institute of Technology, Coimbatore, Tamil Nadu

Track 3: Management, Commerce, Arts & Humanities (MCAH)

Dr. Tanuja Agarwala

Professor

Faculty of Management Studies, University of Delhi, Delhi

Dr. Mary Cherian

Professor, KCT Business School

Kumaraguru College of Technology, Coimbatore, Tamil Nadu

Dr. Meghna Chhabra
Associate Professor
Faculty of Management Studies
Manav Rachna International Institute of Research & Studies (Deemed University)
Faridabad, Haryana

Dr. J. Arthi
Associate Professor, Department of Business Administration
Avinashilingam Institute for Home science & Higher Education for Women
(Deemed University), Coimbatore, Tamil Nadu

Dr. Sheeba Khalid
Assistant Professor - Sociology
Department of Legal Studies
The Neotia University, Kolkata, West Bengal

Dr. S. Gomathi
Assistant Professor
Department of Business Administration
St. Thomas College of Arts & Science, Chennai, Tamil Nadu

Dr. G. Subhalakshmi
Faculty, School of Law
Pondicherry University, Puducherry

Dr. N. Sarulatha
Assistant Professor, Department of Business Administration
D.G. Vaishnav College, Chennai, Tamil Nadu

Track 4: Entrepreneurship Development & Skill Acquisition (EDSA)

Dr. Meghdoot Ghosh
Senior Assistant Professor & Head of Department (Data Science)
IMS Business School, Kolkata, West Bengal

Ms. D. Susmitha
Founder & Managing Director
Suntowa Technologies Pvt. Ltd. (STPL)
Chennai, Tamil Nadu
&
Distinguished Fellow
National Foundation for Entrepreneurship Development (NFED)
Coimbatore, Tamil Nadu

Global Web Conference
On
Impact of Engineering, Science & Management on Digital Transformation
(IESMDT)



(29-30 January 2021)

Organized & Powered By



National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

www.nfedconferences.org

Valedictory Address

Chief Guests

Ms. T. Vanadhi Devi

Director, Vista Expedition

&

President, Southern Industrial Academy for Women Entrepreneur Development (SIAWED)

Chennai, Tamil Nadu, India

Dr. Baby Sam Saamuel

General Manager

InterTech LLC

&

Chairman, Board of Directors - Indian Schools

Sultanate of Oman

Guests of Honour

Prof. Dr. M. Devi

Principal

Vivekanandha College of Technology for Women

Tiruchengode, Tamil Nadu, India

Ms. Harini Ramarathnam

Founder

Vibha Education Services Corp.

Bengaluru, Karnataka, India

Vote of Thanks

Mr. Jaswin Kumar N. R.

Youth Facilitator & Deputy Technical Head

National Foundation for Entrepreneurship Development (NFED)

Coimbatore, Tamil Nadu, India

Conference Paper Publications

A Study on Ultrasound Assisted Synthesis of Nanocomposite Altered with NiO Nanoparticles with Vitamin B₁

Dr. Lingaruaju
Assistant Professor
Department of Physics
Government First Grade College
Tumkur, Karnataka, India

Abstract

The recent years have drawn considerable attention on production of nanostructured metal oxide materials. In the gamut of nanostructured metal oxides Nickel Oxide (NiO) nanoparticles gains significance. The researches studies have shown NiO have been successfully synthesized. Hence, the NiO nanoparticles (NPs) are used as a suitable filler to fabricate the blend nanocomposites (NCs) with desired properties. Keeping in view, the research study focuses on blending the polymers, poly (N-vinyl-2-pyrrolidone) (PVP) and poly (vinyl alcohol) (PVA) to produce a novel composite material possessing the benefits of both. Firstly, the surface of NPs has been modified with vitamin B₁ (VB₁) as a bio-safe coupling agent. Then, the blend NCs with various ratios of modified NiO (2, 4 and 6 wt percent) have been fabricated under ultrasonic irradiations followed by casting method. These processes are fast and green way to disperse the NPs sufficiently. Furthermore, several techniques have been applied for characterization of the obtained NCs. This followed by morphology examination, which demonstrated the morphology of NCs and compatibility of NPs with the blend polymer. The Energy Dispersive X-Ray Analysis (EDX) results indicated the weight and atomic percentage of the achieved materials. In furtherance, the Thermo Gravimetric Analysis (TGA) analysis verified that the NCs show higher thermal properties than the neat blend polymer. Also, embedding the modified NPs into the blend polymer has showed effect on optical absorbance of the obtained NCs. The contact angle measurements confirmed that the hydrophilicity has been decreased for different proportions of modified NPs loaded in the blend polymer. Finally, NCs showed better bactericidal effects against gram-positive than gram-negative bacteria.

Pandemics Demoning the Other - An Exploratory Study on COVID-19

Dr. Shan Eugene Palakkal

Assistant Professor

Department of History & Tourism
Stella Maris College (Autonomous)
Chennai, Tamil Nadu, India

Abstract

An invisible foe has swept the globe, catching countries by surprise with its deadly virulence. The travellers who spent time in countries where the Novel Corona Virus and SARS-CoV-2 was present unwittingly took it with them far and wide. Many countries, some faster than others, threw a shield around their travel points when the transmission of virus that causes COVID-19 disease became very clear. The United States of America, most European countries, Canada and Japan among others imposed various levels of curbs on the entry of foreigners and non-essential travel. The frantic effort was to halt the virus on its tracks. As the virus rages on, the challenge of containing the pandemic within national borders looms. Also, public places are sanitized and people are stopped from gathering in large numbers. Interestingly, the cities whichever powerhouses of economy have become the focus points of risk overnight. Moreover, the impact of some global outcomes with regard to economies have started to emerge. It is to be noted that among sectors worst affected by the prevailing situation is the Tourism and Hospitality industry. Furthermore, in this context the present research focuses towards a brief overview on history of pandemics since time immemorial and effects of COVID-19 on humanity with special reference to Tamil Nadu. The study provides an understanding on diseases do not care for race or class but whenever there is a pandemic, deep-rooted social prejudices resurfaces. Also, the paper discusses ways to explore the world without leaving home through online mode and managing such situations by examining how the pandemic affects global economy, lifestyle and tourism respectively through digital aspects.

Pandemics and The History of Contagionism - A Historical Study

Dr. Parvathy Menon

Assistant Professor

Department of History & Politics

All Saints' College

Thiruvananthapuram, Kerala, India

Abstract

In many ancient societies, people believed that spirits and gods inflicted disease and destruction upon the people. This unscientific perception or belief often led to disastrous responses that resulted in deaths of millions. The term 'contagion' was used to describe a disease transmissible only by direct physical contact. In the present times, this term has been broadened to include any communicable or infectious disease. The present pandemic, in turn, has triggered four other contagions such as information, economy, psychology and behaviour. We need to manage the information contagion by encouraging only true information about the current outbreak status, learning from other countries' experience, effective treatment options and so on, towards helping individuals make better decisions. The economic contagion exhibits the financial and stock market slump as a leading indicator, which is already posing massive policy challenges and will continue long after the virus is contained. The psychology of fear, uncertainty and doubt is contagious too. Now, there is an intense consciousness, collective emotion, a new cultural emotion that rules the world is 'Fear'. Moreover, there is no class distinction in this universal evolution of fear. Finally, there is a contagion of human behaviour too, both good and bad. The good part is when washing hands and working from home is done religiously. The bad is when people isolate victims, attack groups suspected of transmitting the virus, avoid screening, escape quarantine, hoard medical supplies, etc. The humanity's understanding of the causes of pandemics has improved, which resulted in a drastic improvement in response to modern pandemics. There is an effective and efficient response system by governments all over the world. The pandemic is actually a lesson for all of us, wherein relationships have become genuine and there is more bonding of family. Furthermore, we are learning self-sufficiency, understanding the heightened community spirit, healthy lifestyle changes, new wave of tools, remote working, cleaner environment and more time for us to think. The pandemics are great historical pauses. It is neither the beginning nor the end but there is confinement in spite of all advancements more precisely digital transformation for survival and growth. Although the virus does not show any discrimination in attacking humans, the vulnerability of poorer sections is very much visible. Moreover, the man's obsession with technology is also very evident through enabling online platforms.

Exploring Educator's Technostress and Empowering Teacher Agency – A Conceptual Review

Ms. Koyel Mallick
Assistant Professor
Department of Humanities
Heritage Institute of Technology
Kolkata, West Bengal, India

Abstract

Edu-tech's prominent gift of blended teaching-learning reinstated the indispensable nature of digital platform during or in the ongoing pandemic scenario. It has been observed that when online teaching and its deliberations took many shapes and facets, the under proficient user-educators were caught off guard; it also noticed that the mounting learning gaps resulted from wide digital divide. Moreover, it has drawn attention towards the insufficient rearrangement of familiar teaching skills pitted against conventional infrastructure. Interestingly, the point that most academic policy administrators and digitally unsound educators ignore is the transforming demands of conventional classroom teaching, when compared to deliberations on digital plane. Now, developing nations with their population of grappling technology users comprising of both educators and learners face such challenges a notch higher than normal. Especially, educators, who by braving role-conflict (reference to work-from-home condition), facing minimal training and need assessment under uncharted strategies further fall prey to such aggravating situations due to lacking benefits in terms of any collaborative outcome from technocrats and academic policy-makers. The reason being, such teaching-learning situation demands educator to interact over myriad digital applications, tools of ICT (Information and Communication Technology) and to function simultaneously by fulfilling the pedagogical needs. Consequently, it not only affects learners' interests but also induces stress for such educators resulting in initiation of 'Technostress'. Technostress is a burgeoning research area, wherein the researchers in the past and recent times have explored for its negative interface between user and technology influencing employee's performance, work-life balance, behavioural dispositions and job contentment. This conceptual research intends to focus on this indispensable area and suggests an association of Technostress to Teacher agency (i.e. how educator's experience, exposure, skill, potential in a teaching context may aid them to proactively plan and execute deliberations). This in turn will necessitate the interdisciplinary research avenues for Edu-tech in developing countries thereby strengthening more inclusive digital teaching-learning environment.

Competitive Advantage of Store Brands in a VUCA World

Ms. Ipsita Padhi

Research Scholar

&

Dr. B. B. Mishra

Professor

Department of Business Administration
Utkal University, Bhubaneswar, Odisha, India

Abstract

The recent pandemic has hit hard on the backbone of many industries and market sectors across the world. Human beings have been crippled with choices to work from home and stay at home until normalcy returns. Numerous unprecedented incidents can be accounted within the larger realm of unparalleled hopelessness and despair that the global pandemic has brought in. There have been stories of fear of unthinkable, anxiousness for uncertain future, feeling overwhelmed towards ambiguous employment scenario, feelings of despair living in a volatile world and being unsure of the stability that existed before pandemic. Keeping all of these in a single acronym becomes VUCA (Volatile, Uncertain, Complex and Ambiguous) within this globe. Besides, the gloom that has set in the world around us due to pandemic, there have been sectors, which have kept hopes alive by taking the challenge head-on, changing business practices in a fortnight, recruiting new workforce in a week and setting up new businesses to cater to the need of millions of consumers. The store brands are one such example that has risen to the cause ever since the pandemic seeped in. It has been one of the new entries in the retail innovation, wherein these brands are either manufactured or marketed by the retailer and are sold exclusively in their stores including online promulgation. The present research study is an attempt to understand the growth trajectory of FMCG sector during pandemic times and its transformation using store brands. Also, to know, how these store brands have managed to keep up a steady consumer loyalty despite the odds of the lockdown, supply chain disruption and low workforce turnout. A qualitative study has been conducted across ten departmental store employees and their responses are analyzed to provide a framework for understanding whether product innovation (price and quality) and packaging of the product ensured a competitive advantage for store brands in the market. The findings from the study suggested that there exists a strong correlation between the constructs of the aforementioned framework. It has been inferred from the findings that product innovation and packaging are one of the critical attributes, which influence competitive advantage for store brands in the retail market.

Environmental Pollution and Victimization – A Study on Delhi Inhabitants in the Perspective of Green Victimology

Ms. Saundarya Shrotriya

Former M. Sc. Student (Criminology & Police Studies)

&

Dr. Rufus D

Assistant Professor

Department of Criminology & Police Studies

Sardar Patel University of Police, Security and Criminal Justice

Jodhpur, Rajasthan, India

Abstract

The forms of pollution like Air, Water, Land, Light and Noise have a fervent inclination towards the bigger picture, i.e., Climate Change. In furtherance, the issues such as causation of environmental pollution in the area like Delhi, Capital of India, is clear enough to be addressed as a crime. However, the level, nature and onus of victimization due to environmental pollution in Delhi remains unexplored, which stands as the central objective of present study under the umbrella of Green Victimology. The lack of research studies in the green victimological aspects constitutes the significance to undertake an academic study in this area. The two approaches used in the study are: 1) Experts call on the problem and 2) Data collection through survey method directly from Delhi inhabitants. The data collection has been conducted through online google forms from respondents and experts' emails respectively due to COVID-19 pandemic lockdown. The study adopted snowball sampling method, wherein a total of 87 residents of Delhi responded to the form. The data collected have been analyzed and represented in both tabular and graphical form using Google sheets. The results indicated that all five pollution types are on the peak and respondents understood the shift of responsibility and reported health impacts of pollution. Keeping the aforesaid aspects in view, it has been suggested that there is a need for scientific studies in the area of green victimology to solve the problems of environmental pollution in a multidisciplinary way and through proper awareness creation using digital transformation.

Impact of Technostress on Academic Women's Reproductive Health

Ms. K. Ramya

Doctoral Research Scholar

Department of Women's Studies

&

Dr. K. Manimozhi

Professor

Department of Resource Management

&

Controller of Examinations (i/c)

Avinashilingam Institute for Home Science & Higher Education for Women

Coimbatore, Tamil Nadu, India

Abstract

Women's reproductive system is intricate and they experience menstrual cycle, which is a natural process that occurs along with changes in the levels of ovarian hormones and other biological and psychological variations. There are numerous aspects that affects a woman's reproductive system, which causes abnormal functions of its corresponding organs. Various researches conducted have shown that hereditary factors, certain medical conditions and hormonal imbalance, stressful events, lifestyle changes and other psychological, social, economic and cultural factors act as contributors to women's reproductive health. However, the technostress aspect in the pandemic and post-pandemic scenarios remain unaddressed. The technostress is a new dimension of stress, which emerges due to online teaching. This a different type of stress, which aggravates in academic sectors particularly women who are into teaching and research. The reason being, understanding ICT and its utility by acquainting themselves towards digital transformation itself develops a stress. The women across academia are subjected to continuous online platforms / classrooms and / or research activities due to pandemic impact. This in turn deters their reproductive health, more precisely in case of women who experience severe hormonal fluctuations, irregular menstrual cycle, pre-menstrual syndrome (PMS), polycystic ovarian syndrome (PCOS) and other conditions. Hence, the present study intends to understand the impact of technostress on women's reproductive health who are working in the academic sector.

Role of Leadership in Digital Transformation of Organization: A Study in Service Sectors of Odisha

Ms. Madhumita Panda

Assistant Professor

&

Dr. Umesh Chandra Panigrahi

Professor

Department of MBA

Kalam Institute of Technology, Berhampur, Odisha

Abstract

Leadership is one of the important aspects with regard to initiating and establishing of any organization. Furthermore, the leadership styles accounts for the vibrancy of the organization. The leadership in industrial sectors more precisely service sectors accounts for a drastic change in the recent years. Especially, in the pandemic scenario, the changes have induced many organizations to undergo a phenomenal transformation digitally. This also provided them the platform for survival, sustenance and existence in the pandemic period and post-pandemic scenario. Hence, it is indispensable to study the role of leadership in service sectors and understanding their contribution towards digital transformation so as to meet up the upcoming challenges. The specific research literature in this area has been addressed and provided a framework for this issue, including the types of leadership styles which are commonly used. These styles influenced large-scale decisions within an organization. In addition, the success of this transformation is being evaluated in the context of leadership styles occurring naturally within an organization. In this backdrop, the research findings indicate that leadership style is highly impactful in transforming organizations. Moreover, employee-based involvement and input played a critical role in the success of the change effort. In addition to this, it has also been observed that organizational leaders lacked some aspect of technical knowledge required to lead the digital projects. In furtherance, leadership styles are quite influential in organizations and can implement norms, expectations and desirable outcomes during large-scale transformative projects. The present study intends to identify the appropriate leadership styles that can influence the digital transformation of an organization. Also, in this information technology era leader's role is very dynamic in transforming any organization from the centralized authoritative to participative employee centric form. Keeping this in view, the study included 30 information technology leaders from healthcare, insurance, banking and education sectors who have initiated digital transformation across their organizations within the state of Odisha. A qualitative research design using semi-structured interviews has been administered to determine the impact of digitalization and how leadership style influenced an organization's direction regarding its digital transformation. The data collected is organized for clarity and to understand the underlying patterns in leadership styles that are evident in the process of digitalization.

Pros & Cons of Transformation to Digital Education – An Overview

Dr. S. Selvakumari
Senior Biology Teacher
Unison World School
Dehradun, Uttarakhand, India

Abstract

In the current digital learning era, there are numerous educational tools and quality educational content. Furthermore, for an inspired student, the availability of content and ease of access has never been better. Despite numerous benefits of online learning such as learning from home, immediate access to various learning resources etc. there are several disadvantages too. However, still understanding and inspiring the students is a very significant task in academia, wherein the teachers play a vital role. The transformation from gurukul learning to digital learning is possible because of their strenuous efforts. They are the pillars to empower students to follow their passion right from gurukul days until now. Interestingly, during gurukul days, students were residing with their teachers, wherein they had ample time to understand and analyze the character of each student and their skillset(s). The teacher had a reverential and devotional engagement with their students. The gurukul education is not possible or desirable in the present scenario, given the enormity of seekers and also due to some inherent discriminations within gurukul system. The students need to be inspired by a devoted teacher who creates a cognitive environment and impresses the formative minds of its young seekers. It is important to note that the teacher not only imparts the subject knowledge but also, he or she should inculcate value-based ecosystem. Hence, the students need to be inspired a) by creating a competitive environment, which pushes them further in enhancing their learning and b) by making them to realize the true purpose of learning. The use of educational tools and appropriate content delivery along with gamification software(s) keep the students engaged and creates a competitive encouragement for progressive learning. Furthermore, in the current pandemic scenario digital learning acts as one of the great accelerators. Thus, it necessitates the teachers to be trained so as to act as catalysts of learning and inspiration to their respective students. The most important duty of the teacher is to instil passion towards education and introduce perennial joy of learning in the minds of their students. Keeping the aforementioned aspects, the present study intends to understand the pros and cons of transformation towards digital education.

Impact of Pandemic on Online Education at Schools – An Overview

Jaswin Kumar N. R.

Grade XI

Stanes Anglo Indian Higher Secondary School

Coimbatore, Tamil Nadu, India

Abstract

The COVID-19 pandemic has been a major blow to various sections of society across the globe. It is important to note education sectors is one of the major sectors that has been affected. The effect is such that the schools are delayed in reopening due to lockdown and many schools are still functioning in online mode due to panic situation upon seeing to the pandemic effects until now. Therefore, it is quite true that online education has been widely adopted in almost all private schools and few government schools. The platforms like Zoom, Google Meet and Microsoft Teams have been used to manage the functioning of online education. The State government has introduced education through Television, such as “Kalvi Tholaikatchi” in Tamil Nadu, India. However, the effectiveness of this implementation is still questionable due to the content coverage, monitoring aspects and adaptability. Furthermore, the teachers who have been accustomed to teaching at school on live classes do not find online education as a convenient method. The important reason being some teachers are unaware of various features of online apps used for teaching students. The other reason could be students get distracted easily and cheat their presence in the online classrooms and falsify the attendance. Moreover, the students belonging to lower-middle and low-class families are still unable to afford the technical gadgets and internet requirements for attending the online education without any glitches. The pandemic is still at large whilst education has become nearly stagnant for a lot of students irrespective of their location. While some parents and students want the schools to be reopened amidst this pandemic, majority of them fear the spread of the virus, which they believe to be existent despite of vaccine and other sanitizing measures at schools.

Entrepreneurial Support Programmes in India – An Overview

Ms. Jini Thomas
Assistant Professor

Department of Commerce
Mar Athanasius College, Kothamangalam, Kerala, India

Abstract

Entrepreneurship is considered as the most powerful economic force known to humankind. The reason being it facilitates us to survive, keep pace with the speed of advancements and lead in the challenging world, as it opens up new and unexplored doors of opportunities and also empowering individuals to seek these opportunities. With the advent of globalization, it plays a significant role in the economic development of many countries by contributing significantly to its Gross Domestic Product (GDP). Entrepreneurship and innovation are the two important parameters for ensuring the growth of any nation's economy. The successful entrepreneurial initiatives lead to sustainable development of a country. It is because of these reasons; several government policies and support programmes have been implemented for the promotion of entrepreneurship in several countries across the globe. In the Indian context, entrepreneurial activities with adequate support of family, friends, government and macro social systems can enhance individuals' self-reliance and bring in the overall socio-economic development. The ministry of Micro, Small & Medium Enterprises (MSME) runs numerous schemes for supporting the MSME sector for providing credit and financial assistances, skill development training, infrastructure development, marketing assistance, technological and quality upgradation, etc. Also, the MSME Sector has undertaken different programmes to strengthen the budding entrepreneurs like include Credit Guarantee Trust Fund for MSEs (CGTMSE), Scheme of Fund for Regeneration of Traditional Industries (SFURTI), Scheme for Micro & Small Enterprises Cluster Development Programme (MSE-CDP), Prime Minister's Employment Generation Programme (PMEGP), ASPIRE, Udyog Aadhaar Memorandum, MSME Data Bank, CPGRAMS, Financial Support to MSMEs in ZED certification, CLCSS, etc. so as to come up with skill based vibrant and innovative entrepreneurial ideas. These programmes are devised to address the problems of unemployment and underemployment in the Indian Economy. However, the proportion of entrepreneurs to that of India's population is relatively small. Hence, the present study intends to understand the entrepreneurial programmes initiated by Government of India to create an entrepreneurial friendly atmosphere.

An Approach to the Study of Women Entrepreneurship: A Case of Uttarakhand

Dr. Himani Jalal
Assistant Professor
Department of Commerce
Kumaun University, D.S.B. Campus
Nainital, Uttarakhand, India

Abstract

Entrepreneurship being multi-dimensional in nature provides immense opportunities to women in the dynamic world of today. Thus, women are actively participating in almost all fields of human activities viz. politics, military services, medical services, statistics, economics, finance and technology. The main reason behind the social revolution is the spread of education, increase in awareness, family support, urge of self-employment, government support and willingness of women to explore the world. The present study intends to evaluate the women entrepreneurial activities in Uttarakhand with regard to role of education in development of an enterprise, access to financial institutions and difficulties faced by the women entrepreneurs. Also, suggests the guidelines for growth of women enterprises in Uttarakhand in accordance with current trends. Keeping these aforementioned aspects, secondary data from various sources have been studied, wherein the observations by the researchers indicated that level of education and age of women entrepreneurs are inversely related to each other. Interestingly most of the women entrepreneurs are established themselves as sole proprietrix and over years they shifted to partnership firms and private limited companies due to increase in their entrepreneurial exposure. Furthermore, it is important to note that the women entrepreneurs included are the ones who emerged as entrepreneurs through self-financing and financing by their family members.