

18th Anniversary India-Japan Fest
BICON 2023



**Biyani International Conference
on**

Nurturing Academic Entrepreneurs with Industrial Partnerships

26th–30th November, 2023



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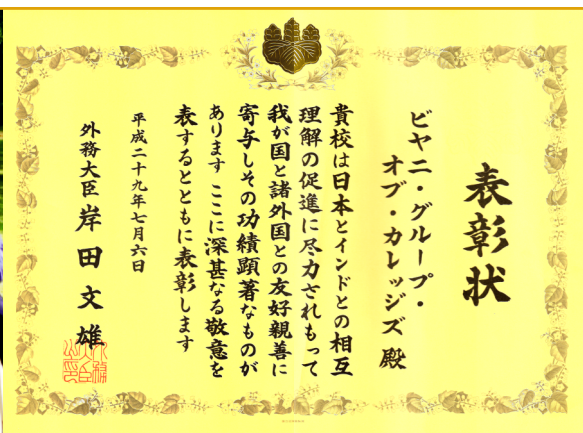
**Department of Commerce & Management and Information Technology
Nexus of Tech and Business for Shaping Emerging Industries**

Organised & Sponsored by :



BIYANI GROUP OF COLLEGES

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Sector No. 3, Vidhyadhar Nagar, Jaipur, Rajasthan (India)*



Minister for Foreign Affairs of Japan extends his deepest regards to **Biyani Group of Colleges** in recognition of its distinguished services in promoting mutual relationship between Japan and India.
— **Fumio Kishida**, Minister for Foreign Affairs of Japan

The 18th Anniversary India-Japan Fest in Pinkcity of India

BICON-2023



NURTURING ACADEMIC ENTREPRENEURS WITH INDUSTRIAL PARTNERSHIPS

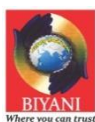


Proceeding of the Conference

DEPT. OF COMMERCE & MANAGEMENT AND INFORMATION TECHNOLOGY

Nexus of Tech and Business for Shaping Emerging Industries

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Organized by:
BIYANI GROUP OF COLLEGES
Jaipur, India

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All papers of the present proceeding were peer reviewed by no less than two independent reviewers. Acceptance was granted when both reviewers's recommendation were positive.

Reviewers:

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- | | |
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| • Mr. Nilesh Sharma | • Mr. Surendra Mathur |
|---------------------|-----------------------|

Welcome to India-Japan Fest in Pinkcity of India!

This year we are celebrating the 18th Anniversary of India-Japan Fest at Biyani Group of Colleges, Jaipur. Since, the first conference in 2006, it has become an annual feature of our institution and has continued to grow. The institution is leaving no stone unturned in encouraging the spirit of research and innovation and strengthening the bilateral academic relationship between India and Japan. Every year, this event receives an increasing number of participants from both the countries, India and Japan, and we continue to evolve, adapt, and develop new collaborative programs between various institutions in India and Japan.

Biyani Group of Colleges is organizing this mega event in collaboration with partner institutes from Japan including Japan Advanced Institute of Science and Technology, Akita Prefectural University, Saitama University, and Kyushu University.

The theme of BICON 2023 is Nurturing Academic Entrepreneurs with Industrial Partnerships guided by different departments including Science, Pharmacy, Nursing, Commerce & Management, Information Technology, Social Science, Law, and Education based on a multidisciplinary-to-interdisciplinary approach.

BICON2023 introduce new partner relationships and foster a symbiotic interaction with academic institutes in Japan and India including Kwansei Gakuin University in Japan; Jai Narain Vyas University, Jodhpur; Metro M.A.S Heart Care & Multi-speciality Hospital, Jaipur; Bhagwan Mahaveer Cancer Hospital & Research Centre, Jaipur; Apply Board; ICSI; ISDC; Rajyoga Education & Research Foundation, Mount Abu.

BICON2023 also introduce new partner relationships with Japanese industries including Kaiho Industry; Sugino Machine Ltd.; InPro Japan; Setolas Holdings Inc.; Innovation Door LLC; Photovoltaic Foundry Pte. Ltd.; and Indian industries including DOITC; iSTART; Pearson VUE; Jaipur Buzz; Paisa on Demand; Dainik Bhasker; ICT Academy; Doordarshan; MY FM; Sach Bedhadak; Jan TV; Somani Industries; Jaipur Rugs; Sidbi. These partnership fosters an all-encompassing approach to knowledge development and innovation by addressing real-world difficulties in addition to academic advancements. This creates impact that goes beyond the event itself and influences the direction of research and industry practices as long as academics and industry continue to engage.

BICON 2023 has decided to call for an Abstract to be published in the conference proceedings with ISBNs. The Organizing Committee is vitalizing with reviewing all abstracts to accommodate the growing number of paper submissions. In a rigorous and time-consuming

review process, the committee members worked hard to ensure the continued high quality of accepted abstract or paper. There are 56 invited talks (10 Japan + 46 India) in BICON 2023.

The months of planning, hard work and team effort by dedicated staff have culminated into the success of this event for which we would like to thank the management committee who trusted us to organize this conference and contributed significant funds to support the event. We would also like to thank the Organizing Committee and the reviewers for their excellent work in reviewing the abstracts as well as their valuable input and advice. We would also like to express our sincere thanks to all the dedicated BICON-Team members for their active role and support in all aspects of this conference from collecting abstracts, assisting in coordination, helping to plan the agenda, recruiting sponsors, and assisting in organizing the conference. I want to thank all the conveners of each symposium: Dr. Rambir Singh (Pharmacy), Ms. Jishu B. George (Nursing), Ms. Kanchan Sharma (Science), Dr. Poonam Sharma (Information Technology), Dr. Shikha Dugar (Commerce & Management), Dr. Shipra Gupta (Education), Ms. Malti Saxena (Humanities), Ms. Kusum Saini (Law) and Graphic designer Mr. Nilesh Sharma for editing the conference proceeding in the last running moments and beautifully designing the brochure and other conference materials.

Finally, we want to express our sincere thanks to all the invited speakers, offline and online, who have joined us from India, Japan, and other countries, for taking out time from their busy schedules to participate in this conference. It has been a great pleasure to interact with them and receive their interest in collaborating in the future.

The venue of this conference is located in Pink City Jaipur and we have tried to promote a sense of the local culture and various Indian Cuisine to the attendees during this conference. We hope that this conference is intellectually stimulating, enjoyable, professionally satisfying, and memorable for all the attendees.

With warmest regards,



Dr. Manish Biyani

Organizing Chair

- Director (Research & Development),
Biyani Group of Colleges, India
- Professor (Research), JAIST, Japan



Dr. Neha Pandey

Conference Convener

Principal,
Biyani Girls College, Jaipur

Prof. Alpana Kateja
Vice-Chancellor



University of Rajasthan
JLN Marg, Jaipur – 302004 (Raj.)
Phone: 0141-2707863, 2256501
Email: vc@uniraj.ac.in/ vcunorj@gmail.com



MESSAGE

I am indeed happy to know about efforts put in by Biyani Group of Colleges, Jaipur in organizing 18th Biyani International Conference (BICON-2023) during November 26-30, 2023.

The theme of the conference “Nurturing Academic Entrepreneurs with Industrial Partnerships” is relevant and pertinent in current scenario. Rajasthan has been benefitted from the special relationship between India and Japan. Since a long time, Rajasthan and Japan have collaborated in both education and industry, and this relationship will continue to grow in the future years.

I am confident that this conference would give an excellent forum to Academicians, Researchers and Industry Professional from India and Japan.

I wish the conference the very best.

A handwritten signature in black ink, appearing to read 'Alpana', with a stylized flourish at the end.

(Prof. Alpana Kateja)

Jai Narain Vyas University, Jodhpur 342 011 India

PROF. KANHAIYA LAL SHRIVASTAVA

Ph.D., M.Tech. (Applied Geology), FGSI (Bangaluru)
FAGID (Brazil), FEEIU (Germany) FIAPG (Italy)

Vice Chancellor



Phone : 0291-2432947 (O)

Email : vcjnvu@gmail.com, vc@jnvu.edu.in

**Res. : Vice-Chancellor's Bungalow,
Residency Road, Jodhpur 342 011 India**



MESSAGE

I am glad to know that the 18th Biyani International Conference (BICON-2023) is being organised on November 26-30, 2023 on the theme "Nurturing Academic Entrepreneurs with Industrial Partnerships".

The theme of the conference will encourage collaboration between Industry and Academia by using futuristic pedagogies and practices in teaching, learning and assessment, as well as deeper engagement between higher education and the industrial ecosystem.

Academicians, industrialists, scientists, and research scholars will have the opportunity to exchange their expertise, build new strategies, and analyse recent advancements in their respective sectors at this four-day conference.

I am sure that the conference through its outcomes will strengthen the knowledge and foster both the Societies-Industry as well as Academia

I extend my best wishes for the BICON-2023 success.

(Prof. Kanhaiya Lal Shrivastava)

Resl. : 504 FF, Umaid Heritage, Umaid Palace Hill, Jodhpur - 342011 India, Mob.: +91-94141-32094, +91-94145-78924, Email: klsgeology@yahoo.co.in

'Excellence in Science and Technology' Awardee, ISCA/Gol

'Bharat Ratan APJ Abdul Kalam Gold Medal' Awardee

'Decree of Merit' Awardee, IBC, Cambridge U.K.

'Special Recognition' Awardee, Atlanta, USA

Chairman & Head (Former), Department of Geology

Jai Narain Vyas University, Jodhpur

President, Earth System Science, ISC Association (2015)

President, JNV University Teachers Assoc.(1997) (AIFUCTO)

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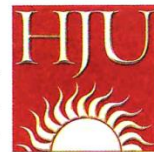
Jai Narain Vyas University, Jodhpur

President, Earth System Science, ISC Association (2015)

President, JNV University Teachers Assoc. (1997) (AIFUCTO)

Prof. Sudhi Rajiv
Vice-Chancellor

हरिदेव जोशी
पत्रकारिता और जनसंचार
विश्वविद्यालय



HARIDEV JOSHI UNIVERSITY
OF JOURNALISM AND
MASS COMMUNICATION

S.No. F()VC/HJU/2023/5671

Date: 30th November, 2023

Dr. Dhyan Singh Gothwal
Dean Administration
Biyani Group of Colleges
Vidhyadhar Nagar, Jaipur

Dear Mr.

I am happy and delighted to receive an invitation for the eighteenth India-Japan International Conference organized by Biyani Group of Colleges, Jaipur from the 26th to the 30th of November, 2023.

It shall provide an opportunity for interaction between two cultures by "Nurturing Academic Entrepreneurs with Industrial Partnerships". The subjects for discussions and deliberations are of great importance and would be addressed by eminent experts. It will improve the over all qualities and virtues in the youth - the future of India.

I wish the conference every success.

(Professor Sudhi Rajiv)

Vice Chancellor

Haridev Joshi University of Journalism
and Mass Communication, Jaipur &
Dr. Bhimrao Ambedkar Law University, Jaipur

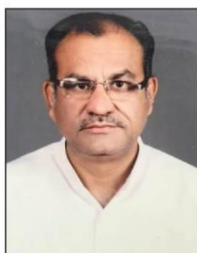
राजीव गांधी विद्याभवन | Rajiv Gandhi Vidya Bhawan
सर्वपल्ली राधाकृष्णन शिक्षासंकुल, जवाहरलाल नेहरू मार्ग | Sarvepalli Radhakrishnan Shiksha Sanikul
जयपुर 302 017 (राजस्थान) | JLN Marg, Jaipur 302 017 (Rajasthan), India
+91 141 2710123 | registrar.hju@gmail.com | www.hju.ac.in

HJU, A UNIVERSITY ESTABLISHED BY AN ACT OF THE RAJ. STATE LEGISLATURE, IS A NATIONAL CENTRE FOR TEACHING, TRAINING AND RESEARCH IN JOURNALISM, MASS COMMUNICATION AND ALLIED FIELDS
पत्रकारिता, जनसंचार और संबंधित विषयों के शिक्षण, प्रशिक्षण और शोध के लिए राजस्थान विधानमंडल के अधिनियम द्वारा स्थापित राष्ट्रीय संस्थान



RAJASTHAN TECHNICAL UNIVERSITY, KOTA

राजस्थान तकनीकी विश्वविद्यालय, कोटा



Message

I am glad to know that Biyani Group of Colleges, Jaipur in organizing 18th Biyani International Conference (BICON-2023) on November 26-30, 2023.

The theme of the conference “Nurturing Academic Entrepreneurs with Industrial Partnerships” is very much relevant to budding engineers, managers and industrialists. The association of speakers from Japan in the conference is commendable. For a long time, Rajasthan and Japan have collaborated in both education and industry and such activities shall help growing this relationship in the future.

I am confident that this conference shall provide an excellent forum for the students, academicians and industrialists of both the countries to explore the Academia Industry Interface Model.

I wish the conference all the success.

Prof (Dr.) Dhirendra Mathur

Naveen Jain, IAS

नवीन जैन, आई.ए.एस.



**Secretary to Government
School Education, Language, Library
And Panchayati Raj (Elementary Education),
Government of Rajasthan**
शासन सचिव

स्कूल शिक्षा, भाषा, पुस्तकालय,
पंचायतीराज (प्रारम्भिक शिक्षा) विभाग
राजस्थान सरकार

D.O. No.: DS/Secy./School Edu./2023/ 313
Jaipur, Dated: 20-11-2023

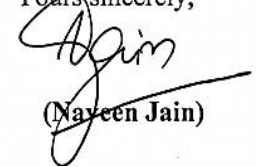
Message

I am elated to learn about the 18th India-Japan Bilateral conference on "Nurturing Academic Entrepreneurs with Industrial Partnership" from 26th to 30th November, 2023 at Biyani Girls College, Jaipur. I am optimistic about the results to be generated when leading academicians, industrialists, scientists and research scholars will assemble and disseminate their learnings.

I am hopeful that it will pave the way in providing an unparalleled platform for many ground breaking possibilities in the field of innovative ideas and prototypes.

My sincere and best wishes for the endeavour!

Yours sincerely,


(Naveen Jain)

Anand Kumar
I.A.S.



Principal Secretary
Government of Rajasthan
Department of Home, Home Guard, Jail,
RSIB, Transport, Chief Vigilance Commissioner,
& Chairman RSRTC



MESSAGE

I am happy and delighted for inviting me to the of 18th India-Japan International Conference organized by most prestigious and pioneer Biyani Group of Colleges, being held in Jaipur from 26th to 30th of November, 2023.

It shall provide an opportunity to participants to interact on topic "Nurturing Academic Entrepreneurs with Industrial Partnerships". Topics for discussions and deliberations during this conference are of great importance and would be addressed by eminent experts. It would overall improve the virtues and qualities in the youth - the future of India.

I wish the conference a grand success.


(Anand Kumar)

DR. VATHSALA MANI

Academician



It provides me an immense pleasure to find out that Biyani Group of Colleges is organizing an Indo-Japanese conference BICON-2023. The conference is going to enlighten so many young minds and feed them with knowledge and new experiences. Along with this the conference is going to establish even more cordial relationships With japan

I would like to congratulate the organizers for choosing such unique and appropriate themes. I would like to wish them all the best and they are going to perform a commendable task by organizing such an intellectual event Which is going to be remembered for it's academic contribution.



(Dr. Vathsala Mani)

FROM THE CONVENER'S DESK

It gives me great pleasure to extend to you all a warm welcome on behalf of Department of Science and Nursing, Biyani Girls' College. We are grateful to all the speakers, delegates, organizers and guests, who have accepted our invitation to participate in the BICON 2023.

It is an opportune time for you to renew contacts and discuss opportunities of mutual interest with delegates from both Japan and India bilaterally.

It is gratifying to note that the agenda of the Seminar covers a wide range of very interesting items relating to higher education frontiers in India and Japan, and resulting opportunities for both countries.

No matter how much we can do by ourselves on the national level, whether it be research or development, it is never enough. In a spirit of true cooperation, we in Asia, and particularly in Japan and India, are proud of nurturing past and present civilizations and cultures. We must join in an action-oriented effort to recognize and capitalize on the bilateral opportunities in the higher education sector in both countries.

The utter sincerity and dedication of the management, the teaching faculty, non-teaching staff and the students at Biyani Girls' College have brought this event to fruition. It is an outcome of the hard work and persistent efforts of all our colleagues. We hope that their efforts shine through, and all the delegates and participants have a fulfilling and rewarding experience here, that carries forward long after the event itself is over. Once again, a very warm welcome to you all.



Dr. Poonam Sharma
(Dept. of IT)
Convener



Dr. Shikha Dugar
(Dept. of Commerce & Management)
Convener

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- Mr. Sikander Tak
- Mr. Jhabarmal Saini

PROGRAMME AT A GLANCE

Date: November 27, 2023; Monday

Theme: Nexus of Tech and Business for Shaping Emerging Industries

Standard Time	Schedule
Inaugural & Japan Industry Session, 08:00 AM-11:15 AM	
08:00 AM - 09:00 AM	Registration
09:00 AM - 09:15 AM	Lighting of the Lamp by Dignitaries and Saraswati Vandana
09:15 AM - 09:25 AM	Welcome address by Organizing Chair- BICON-2023 Prof. Manish BIYANI Director (Research & Development), Biyani Group of Colleges, India
09:25 AM - 09:35 AM	Inaugural Address by Chief Guest Prof. (Dr.) K.L. SRIVASTAVA, VC, JNVU, Jodhpur, India
09:35 AM -10:05 AM	Japan Industry Keynote Speaker-1 Mr. Kazuo YOSHIMURA (Mr. Tomio KOMORI) Photovoltaic Foundry Pte. Ltd., Singapore & InPro Japan Ltd., Japan
10:05 AM -10:25 AM	Japan Industry Keynote Speaker-2 Mr. Takayuki KONDO (Mr. Yuki MIYAGAWA) Kaiho Industry Co. Ltd, Japan
10:25 AM -10:45 AM	Japan Industry Keynote Speaker-3 Mr. Takahiro MASUDA (Ms. Seema DUA) SUGINO Machine India Pvt. Ltd, Haryana, India
10:45 AM - 10:50 AM	Address by Guest of Honour Prof. Dharendra MATHUR, Controller of Examination, RTU, Kota, India
10:50 AM -11:05 AM	MOU Signing Ceremony with JNVU, Jodhpur
11:05AM -11:10 AM	Vote of Thanks by Director (Acad.) Dr. Sanjay BIYANI Director (Acad.), Biyani Group of Colleges, Jaipur, Rajasthan, India
11:10 AM - 11:20 AM	Memento Distribution & Group Photo
11:20AM - 11:35AM	Hi-Tea Break

Invited Academic Talks, 11:35 AM – 01:05 PM Chair: Dr. Neha PANDEY and Dr. Nandini SHARMA	
11:35 AM - 11:55 AM	Academic Keynote Speaker-4 Prof. N.D. MATHUR Dean, School of Humanities and Social Sciences, JECRC, Jaipur, India Expert, Soft Skills Trainer, Academic Consultant
11:55 AM - 12:15 PM	Academic Guest Speaker-5 Prof. Bindu JAIN Dept. of Business Administration, University of Rajasthan, Jaipur, India
12:15 PM - 12:35 PM	Academic Guest Speaker-6 Prof. Mamta JAIN Dept. of Economic Administration and Financial Management University of Rajasthan, Jaipur, India
12:35 PM -12:55 PM	Academic Guest Speaker-7 Mr. Subhajit BHATTACHARYA Associate Vice President-Innovation Principal Accenture, Delhi, India
12:55 PM - 01:05 PM	Vote of Thanks, Memento Distribution & Group Photo Dr. Poonam SHARMA , Day Convener Biyani Girls Colleges, Jaipur, Rajasthan, India
01:05 PM -02:05 PM	Lunch Break
India Industry Session, 02:05 PM - 03:55 PM Chair: Dr. Smriti TIWARI	
02:05 PM - 02:20 PM	India Industry Guest Speaker-8 Mr. Dhawal SINGHAL , I-start Mentor DOIT&C, Dept of Information Technology & Communication, Jaipur, India
02:20 PM - 02:35 PM	India Industry Guest Speaker-9 Mr. Ashutosh MISHRA AGM-HR, Jaipur Rugs, Jaipur, India
02:35 PM - 02:50 PM	India Industry Guest Speaker-10 Mr. Rohit TODWAL Founder, Startbit IT Solutions Pvt. Ltd., India

02:50 PM - 03:05 PM	India Start Up/Entrepreneur Talk-11 Ms. Manika KARNAWAT Founder, Jaipur Buzz, India
03:05 PM – 03:25 PM	Q/A session
03:25 PM – 03:40 PM	MOU Signing Ceremony
03:40 PM – 03:45 PM	Vote of Thanks, Memento Distribution & Group Photo Dr. Shikha DUGAR, Day Convener Biyani Girls Colleges, Jaipur, Rajasthan, INDIA
03:45 PM - 03:55 PM	Tea Break
Oral Presentations, 03:55 PM - 05:35 PM Judge: Dr. Sumedha BAJPEYI & Dr. Pawan PATODIYA (C & M) Judge: Dr. Poonam SHARMA & Mr. Rahul AGARWAL (IT)	
03:55 PM - 05:15 PM	Total 8 Young Oral Presentations (10 min. to each paper with Q & A)
05:15 PM - 05:25 PM	Award Ceremony and Group Photo
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Invited Lecture 1

Solar Sharing - A game changer for local and global economy



Kazuo Yoshimura

Affiliation & Contact:

- Photovoltaic Foundry Pte. Ltd.
Block81 Ayer Rajah Crescent #02-48 Singapore 139968
Phone +65-9368-7720
Email: kazuo.yoshimura@pvfoundry.com
- KYCOM Asia Pte. Ltd.
5 Jalan Rumbia #12-06 The Imperial Singapore 239618
Phone +65-9368-7720
Email: kazuo.yoshimura@yahoo.com.sg

Research Interest:

Regional Economy Revitalization, Community Creation, Distributed Renewable Energy, Solar Sharing, Preventive Healthcare, Education especially Japanese language education

Education & Professional Career:

1975-1979	Bachelor Tokyo University (Economics)
1979-1982	Industrial & Commercial Banker at Industrial Bank of Japan
1983-1989	Senior Economist at Industrial Bank of Japan
1990-1996	Senior Investment Banker at Industrial Bank of Japan
1996-2000	Managing Director of Asian Infrastructure Development Company
2001-2009	CFO and Managing Director at Middleware Development Company

2010-present	Serial entrepreneur and investor focusing regional economy revitalization and community creation/ Managing Director of KYCOM Asia Pte. Ltd.
2020-present	Director of Impro Japan, Ltd
2020-present	Senior advisor of PvFoundry Pte. Ltd
2022-present	Senior advisor of Japan Research Institute
2023	CFO and Representative Director of Community Creation Company

Profile and Background:

Industry veteran in project financing with over 40 years of experience which he accumulated at notable financial institutions in various capacities including Industrial Bank of Japan (IBJ), Asian Infrastructure Development Company (AIDEC-a PE fund invested by GIC, JBIC and ADB with a mandate for PPP projects). As a senior investment banker in IBJ he led over 10 mega project financing deals including a US\$2.5 billion IPP project in Indonesia, US\$2 billion LNG project in Malaysia and over US\$1 billion oil refinery as well as petrochemical projects. In his 5-year tenure as Managing Director of AIDEC, he reviewed over 300 projects including power and energy, transportation, water supply, public housing and telecommunication sector across over 15 countries. He had successfully led the IPO of high-tech middleware development company at its peak market cap over US\$1 billion.

Abstract

Solar Sharing - A game changer for local and global economy

Kazuo Yoshimura

Senior Advisor of Photovoltaic Foundry Pte. Ltd and Japan Research Institute

Local and global economy is heading towards uncertainty and grave concern is common in people. We have to prepare to protect our family, community and country. Food and energy are most important for human beings however the self-sufficiency of food and energy are at critically low for safety. Japan's self-sufficiency for food is only 38% (calories base) and one for energy is merely 11%. Japan has no security for food and energy. How about India? How about other Asian nations?

Under modern capitalism economy the agriculture sector tends to decline because of its lower value-added and less newcomers join nor remain in this industry. Simply because agriculture is not profitable business. How we can make agriculture into a profitable business is ultimate and only solution.

Solar Sharing (known as Agri Photovoltaic in native English) was originally invented by Japanese Professor, Dr Akira Nagashima. Solar Sharing is the simultaneous use of areas of land for both solar panels and agriculture. As solar panels and crops share the sunlight, the design of Solar Sharing facilities may require trading off such objectives as

- Optimizing crop yield and quality and energy production
- To increase land productivity and economic profitability with minimal negative interactions and optimal positive interactions
- For example, in some cases crop yield increases due to the shade of solar panels mitigating negative impact by high temperatures and UV damage, at the same time crops reduce high temperature of solar panel which keeps solar panel power production performance better

Solar Sharing together with other distributed solar power generation emerges as game changer for sustainable local and global economy. One stone kill six birds in Japanese municipality so as in other Asian nations. It achieves 1) transforming agriculture as profitable industry, 2) increasing self-sufficiency food and energy through local production and local consumption, 3) maintaining lower electricity price and decarbonization, 4) stimulating regional economy for better corporate and household income as well as government revenue, 5) providing good investment and loan assets for local financial institutions and 6) increasing confidence and autonomy for local municipal government through successful experience.

Capitalism is facing great difficulties globally. Solar Sharing and distributed renewable energy is one of the effective ways to transform local and global economy and society for more sustainable, democratic, and humanistic manner.

Japan is often referred to as “the land of the rising sun” since ancient era. We are very happy to work together with India and other Asian nations for creating better world.

Keywords: Solar Sharing, distributed renewable energy, food and energy self sufficiency



Invited Lecture 2

Mid-Career recruitment of talented Indian IT engineers in Japan



Tomio Komori

Affiliation & Contact:

- INPRO Japan Ltd
2-1401, WADA-HIGASHI, FUKUI-shi, FUKUI-ken, Japan 918-8237
Phone +81-776-26-2101; Fax +81-776-27-8853
Email: tommyk@unico.co.jp

Research Interest:

Digital Transformation (DX) in the business fields including Retail distribution, factory and building solutions, sports facilities and healthcare service as well as personnel development of International IT professionals

Education & Professional Career:

- | | |
|-----------|--|
| 1976 | B.E. The University of Electro-Communications (Electronics) in Japan |
| 1980 | Joined The KOMORI Electric Company |
| 1984 | CEO of UNICO System Co. Ltd. |
| 1988-2018 | Launched The KOMORI United Group and founded four companies of various business fields, such as factory and building solutions, sports and training facilities and healthcare service. |
| 2019 | Founded INPRO Japan Ltd. for personnel business in India |
- Currently, the Chairman of the Fukui Prefecture System Industry Association

Abstract

Mid-career recruitment of talented Indian IT engineers in Japan

Tomio Komori

INPRO Japan

I serve as the chairman of INPRO Japan, which stands for India Project Japan. We established this business in December 2019 to dispatch Indian IT professionals to Fukui Prefecture and Japan as a whole. However, we had to go dormant soon after due to the COVID-19 pandemic.

It is said that Japan currently faces a shortage of about 400,000 IT professionals, and we believe the demand will continue to increase. We consider India's abundant and highly skilled IT talent to be the best for our business, and we feel it is necessary for Japan to utilize this resource. However, in Japan, communication is primarily in Japanese, and English is still not widely used. Therefore, we would like to strongly request the establishment of a Japanese language teaching department at Biyani University to deepen Indo-Japanese interactions [*1) An introduction article about an employee is attached as Appendix 1].

Another mission I would like to propose is the promotion of Internet 3. At the Internet Governance Forum (IGF) held from October 8-12, 2023, we introduced a technology developed by ConnectFree. This technology, which enables secure and peer-to-peer IPv6 connectivity without the need for the contract with Internet service provider. It would be particularly valuable for countries in the Global South, where IPv4 address is becoming scarce. ConnectFree is an advanced venture company, and our group companies have invested in and act as agents for it [*2) For a detailed explanation about Internet3 please refer to Appendix 2].

Keywords: Shortage of IT professionals, Japanese language education, Internet3, Secure and peer-to-peer IPv6 connectivity

□□□

Invited Lecture 3

Car recycling system towards circular economy in India



Kondo Takayuki

Affiliation & Contact:

- Kaiho Industry Co., Ltd
1-25, Higashikagatsumemachi, Kanazawa-shi, Ishikawa-ken, Japan
Phone +81-076-238-7754; Fax +81-076-237-1950
Email:soumu@kaiho.co.jp

Research Interest:

- Automobile recycling
- Export and sales of used auto parts

Education & Professional Career:

1996	Graduated from Kanazawa Technical College
1996	Joined Kaiho Industry Co., Ltd
2006	Executive Director of Kaiho Industry Co., Ltd
2009	Vice President of Kaiho Industry Co., Ltd
2015	Representative Director and President of Kaiho Industry Co., Ltd

Invited Lecture 4

Car recycling system towards circular economy in India



Yuki Miyagawa

Affiliation & Contact:

- Director, Abhishek K Kaiho Recyclers Pvt Ltd, India
- Chief, Business Development Division, Kaiho Industry Co., Ltd., Japan

Abstract

Car recycling system towards circular economy in India

Kondo Takayuki¹ and Yuki Miyagawa²

¹Kaiho Industry Co., Ltd.; ²Abhishek K Kaiho Recyclers Pvt Ltd, India

Kaiho Industry was founded in 1969 and grown from a small factory into a global company exporting used auto parts and engines to about 90 countries today. In 2017, Kaiho was approved as a member of Business Call to Action lead by UNDP as the first Japanese SMEs. In 2018, Kaiho won the Deputy-chief Award (by Foreign Minister) at the 2nd Japan SDGs Award organized by the Japanese Ministry of Foreign Affairs. In 2017, Kaiho Recyclers Alliance has been established and they organize network of automobile recycling companies throughout Japan and about 100 companies have joined them, aiming to create a “circular economy” and improve reuse and recycle of End-of-Life vehicles (ELVs) with all Japanese automobile recycling industry. Not only in Japan, Kaiho has set up joint venture company in India for car recycling business under the name of Abhishek K Kaiho Recyclers Pvt Ltd. Kaiho provides a comprehensive automobile recycling system comprising 3 components which are; 1. Factory equipment, 2. Quality control and 3. Recycling technology and Management know-how according to the local context. Kaiho aims to build a ELVs recycling value chain to properly recycle End-of life Vehicles (ELVs) which contributes to create local employment for future generation of India, reduce air pollution caused by old cars etc.

Keywords: Car recycling, End-of-Life Vehicle (ELVs), RVSF, used auto parts, scrap policy in India



Invited Lecture 5

Role of Technology in Start ups & Small Business



Takahiro Masuda

Affiliation & Contact:

- Sugino Machine India Private Limited
Unit No. 202, Second Floor, Time Tower, MG Road
Gurgaon – 122002, Haryana (INDIA)
Tel : 0124 – 4831900; Mobile : 7042265990
www.sugino.com

Education & Professional Career:

2002-2006 Nihon University (International Relationship)

Invited Lecture 6

Role of Technology in Start ups & Small Business



Seema Dua

Affiliation & Contact:

- Sugino Machine India Private Limited
Unit No. 202, Second Floor, Time Tower, MG Road
Gurgaon – 122002, Haryana (INDIA)
Tel : 0124 – 4831900; Mobile : 7042298942
www.sugino.com

Education & Professional Career:

B.Sc. (Allahabad University)
1997-1999 MBA in HR (IMS Ghaziabad)

Abstract

Role of Technology in Start ups & Small Business

Takahiro Masuda¹ and Seema Dua²

^{1, 2} *SUGINO Machine India Pvt. Ltd, Haryana, India*

“With its robust intervention, technology is pushing startups beyond traditional tactics and has become the most important factor in their success. Technology is critical to startups, levelling the playing field and making more resources available to new businesses than ever before. Because of its immense value, businesses are using it not just as an efficient solution but rather as an investment to scale their business and differentiate themselves. Here’s how technology is helping startups walk far, walk fast, and lead the pack.

Walking far- sustainability for scale and surroundings : In today’s business environment, success in sustainable business practices is critical. Some businesses have grown and established themselves in India and around the world with a healthy dose of technology. Often, innovation needs technology to be relevant for sustainable businesses to offer competitive prices to all of their customers.

In the long run, technology helps not just to sustain businesses but to maintain a steady level of growth. Sustainable enterprises also take environmental and social issues into account. The sustainable Startup technology applies to global firms like Infosys, Wipro, Tata Consultancy Services (TCS), and Microsoft, as well as small and medium-sized enterprises.

Walking Fast : Every part of business is becoming more and more reliant on technology, and businesses are finding it hard to keep up with the changes. As a result, we see startups, SMEs, and MSMEs gain a late mover advantage by starting from scratch with a completely new thought process, using technology as a force multiplier to build new business models, products, and customer experiences.

Leading the pack : Furthermore, the use of cutting-edge technology gives the company a competitive advantage, making it a better organisation than the rest of the market’s competitors. This enhances the brand’s overall reputation and perception among consumers, which is critical for expansion.

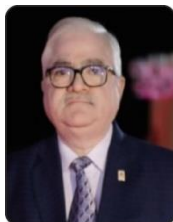
Aside from that, technology allows them to keep tabs on their competitors. It helps them keep an eye out for their moves and take the necessary precautions to adopt the latest market trends. Technology has transformed the way we do business by allowing small businesses to compete with larger organisations through various small startups.

Small businesses use a wide range of technology, from servers to mobile devices, to gain a competitive advantage in the marketplace. Small start-up business owners should consider incorporating technology into their planning process for streamlined integration and to allow for future expansion, allowing for sustainable business growth.



Invited Lecture 7

Industry Academia Partnership



N.D. Mathur

Affiliation & Contact:

- Dean, Jaipur School of Economics,
JECRC University, Jaipur (INDIA)
Email: dean.humanities@jecrcu.edu.in; M: +91 9414071144
C-129, Anand Bhawan, Mangal Marg, Bapu Nagar, Jaipur-302015

Research Interest:

- Globalization, Public sector management

Education & Professional Career:

- M.A. (Economics) Univ. Of Rajasthan, Jaipur, 1977
- M.Com (Economic Administration) Univ. Of Rajasthan, Jaipur 1979
- M.Phil.(Economics) Univ. Of Rajasthan, Jaipur 1982
- Ph.D. Topic “Price Policy in Public Enterprises” Univ. Of Rajasthan, Jaipur Awarded In 1988

Presently Professor N.D.Mathur is senior Professor in the department of Economics, Dean School of Humanities and Social Sciences and Jaipur School of Economics, at JECRC University Jaipur. Professor Mathur has been senior Professor in the department of Economics and former Director School of Humanities and Social Sciences, at Manipal University Jaipur. He had been a senior faculty member of the Department of Economic Administration and Financial Management, University of Rajasthan, Jaipur.

Professor Mathur is an inter-disciplinary expert in the field of economics, commerce, management, academic training, administrative training and coaching. He has around 45 years teaching experience in various colleges and Universities. Professor Mathur has published around 70 research papers to his credit in reputed research journals including SCOPUS indexed journals.. Thirty six students have been awarded Ph.D. degree and post-doctoral degree under his supervision. . He is a

prolific author and authored around 7 textbooks and 20 reference books / edited books in the field of Commerce/Management/ training. He is an expert academic trainer who imparts soft skill training to the trainers. He is an extensive visitor of various UGC HRD Centers of the country.

Abstract

Industry Academia Partnership

N.D. Mathur

Dean, Jaipur School of Economics, JECRC University, Jaipur

The term "industry-academia partnership" refers to a framework for cooperation between universities and businesses with the goal of maximizing each party's resources. The scope of the partnership extends to several activities, including collaborative projects in the realms of R&D, technology transfer, skill building, and joint events. Collaborations of this kind can have a positive effect on economic growth by, among other things, encouraging new ideas and innovations, speeding up the process of turning research into marketable products, reducing project costs, increasing efficiency, and fostering a more varied and talented work force.

In practice, these collaborations frequently take the form of combined research initiatives that meet the interests of both the academic community and the business world. Working together hastens the creation of innovative technologies and makes it simpler to use the findings of scientific study in practical settings. Academic institutions receive insights into industrial demands, which improves the relevance of their educational programs, while businesses gain access to academic resources, such as laboratories and expertise.

The partnership also includes opportunities for students to get experience and enhance their skills in the workplace through internships and placements. Collaborative activities like workshops and conferences provide a venue for networking and information sharing between academia and industry personnel.

Effective communication, common objectives, and a dedication to ongoing collaboration are the cornerstones of fruitful industry-academia collaborations. When governments, funding agencies, and organizations see the potential for collaboration in this way to spur innovation, economic growth, and the cultivation of a trained workforce to meet the industry's ever-evolving demands, they play a crucial role in creating an atmosphere that is favorable to it.

Keywords: technology transfer, academic resources, economic growth, industry-academic partnerships.



Invited Lecture 8

Synergies in Action: Unveiling the Key Learnings from Successful Industry-Academia Partnerships



Bindu Jain

Prof. Bindu Jain is a Professor at University of Rajasthan, Jaipur. She has led charge as the Vice principal of Maharani College for the last 7 years. She also serves as the Vice President of the Rajasthan University Teachers Association.

Abstract

Synergies in Action: Unveiling the Key Learnings from Successful Industry-Academia Partnerships

Bindu Jain

Professor, University of Rajasthan, Jaipur, India

In the landscape of Indian academia and industry, the dynamics of collaboration are undergoing a profound transformation. This research aimed at exploring the intricate tapestry of industry-academia partnerships, with a focus on understanding the synergies that propel successful collaborations. As India positions itself as a hub of innovation and economic growth, deciphering the nuances of these partnerships becomes crucial for sustainable development of education.

Purpose

The primary purpose of this study was to identify and analyze the key factors contributing to the success of industry-academia partnerships in the Indian context. By delving into diverse case studies, our goal was to extract practical insights and learnings that can inform and enhance future collaborations. Understanding the symbiotic relationships between academia and industry is pivotal for fostering an environment that nurtures innovation and educational growth.

Methodology

The author employed a multifaceted approach to comprehensively analyze industry-academia partnerships. Through extensive literature review and qualitative assessments of knowledge exchange, innovation initiatives, and overall impact, the researcher aimed at providing a nuanced understanding of collaborative dynamics and ever-evolving industry-academic relationships.

Conclusion

The findings of this study had shed light on the intricate web of successful industry-academia partnerships. From facilitating technology transfers to driving skill development initiatives, the research emphasizes on actionable insights for stakeholders seeking to optimize their collaborations. As India navigates its trajectory of innovation and educational growth, this study stands as a valuable guide, offering practical strategies for fostering and sustaining effective industry-academia synergies for future researchers, industry experts and educational practitioners.

In concluding this exploration of industry-academia partnerships in the Indian context, several key learnings have emerged. The identified factors contributing to successful collaborations underscore the importance of a well-defined knowledge exchange framework. Effective communication channels and collaborative platforms are pivotal in navigating the complex terrain of academia-industry relationships.

Furthermore, the study reveals that fostering innovation requires a strategic approach, encompassing technology transfers and interdisciplinary initiatives. The adaptability of academic institutions and industries to evolving trends and demands emerges as a critical determinant of success. Skill development initiatives play a central role, not only in bridging existing gaps but also in shaping a workforce equipped for the challenges of tomorrow. By incorporating these insights into future initiatives, stakeholders can not only optimize their partnerships but also contribute to the broader tapestry of innovation and economic progress in India.

Keywords : Synergies, Industry-Academia Partnerships, Knowledge Exchange, Collaborative Dynamics, Innovation.

□□□

Invited Lecture 9

Modern Technology and its Impact on business Development



Mamta Jain

- Professor, Department of Economic Administration and Financial Management, University of Rajasthan, Jaipur.
- 27 years of teaching and research experience of UG, PG, M.Phil, Ph.D. and Professional courses.

Education Qualification : M.Com., M.Phil., MBA (throughout First Class) and Ph.D.

Abstract

Modern Technology and its Impact on business Development

Dr. Mamta Jain

Professor, University of Rajasthan, Jaipur, India

Technology plays a pivotal role in modern business, driving innovation, improving operational efficiency, and enabling organizations to adapt to a rapidly changing business environment.

Technology advancements have had a profound impact on the business landscape, transforming the way organizations operate, interact with customers, and compete in the global market. Businesses have undergone a digital transformation, moving from traditional, paper-based processes to digital workflows. This has streamlined operations, reduced costs, and increased efficiency. Technology has facilitated global business expansion by breaking down geographical barriers. Companies can now easily connect with suppliers, partners, and customers worldwide through the internet, enabling global collaboration and trade. The rise of e-commerce has revolutionized the way businesses sell products and services. Online platforms allow for 24/7 sales, reaching a global customer base, and providing a convenient shopping experience. The abundance of data and advancements in data analytics have empowered businesses to make data-driven decisions. Companies can analyze

customer behaviour, market trends, and operational metrics to gain valuable insights. Cloud technology has changed the way businesses store, access, and manage data. It offers scalable and flexible solutions, reducing the need for physical infrastructure and allowing for remote access to resources. Mobile devices and applications have transformed how businesses operate. Mobile technology enables employees to work remotely, access information on the go, and interact with customers through mobile apps .Social media platforms have become essential for marketing, customer engagement, and brand building. Businesses leverage social media to connect with their audience, gather feedback, and promote products and services. Technology allows businesses to personalize customer experiences. Through data analysis, companies can tailor products, services, and marketing efforts to individual preferences, enhancing customer satisfaction and loyalty. Automation and AI have automated routine tasks, improving efficiency and reducing errors. AI applications, such as chatbots and virtual assistants, enhance customer service and support functions. Technology has improved supply chain management through real-time tracking, inventory optimization, and data-driven insights. This results in faster delivery times, reduced costs, and better overall efficiency .As businesses increasingly rely on technology, the need for robust cyber security measures has grown. The rise of cyber threats has led to increased investments in cyber security to protect sensitive data and maintain trust .Technology has driven rapid innovation and disrupted traditional business models. Companies that embrace innovation can gain a competitive edge, while those resistant to change may face challenges in staying relevant .In essence, technology has not only changed the way businesses operate internally but has also reshaped their relationships with customers, suppliers, and the broader market. Adaptation to these technological advancements has become a critical factor for success in today's business environment.

□□□

Invited Lecture 10

Futuristic Technology DNA with Next Generation AI



Subhajit Bhattacharya

Affiliation & Contact:

- Accenture
Gurugram, Haryana
Website: www.accenture.com

Research Interest:

Artificial Intelligence, Data Science and Analytics, Intelligent Systems, IoT, Entrepreneurship Management, Innovation

Education & Professional Career:

- Since 2021 Associate Vice President, Accenture
- 2018 – 2021 Senior Group Program Manager, Accenture
- 2015 – 2018 Program Manager – Innovation & Automation, Accenture
- 2012 – 2015 IT Project Manager, Accenture
- 2011 – 2012 IT Applications Manager, Bank of America
- 2007 – 2011 Senior Software Engineer & Technology Consultant, TATA Consultancy Services
- 2003 – 2004 Software Engineer, IBMBachelor Tokyo University (Economics)

Education:

- Executive Business Management (Dual specialization Marketing & HR), Indian Institute of Technology, Bombay
- Master of Business Administration (International Business), Indian Institute of Foreign Trade, New Delhi
- Master of Computer Applications, Vellore Institute of Technology, Vellore
- Bachelor of Computer Applications, National Institute of Technology (NIT), Patna

Major Publications:

Sr. No.	Publications	Publisher	Dated
1	Chapter: AI in Talent Management for Business Excellence Book: Industry 4.0 Technologies for Business Excellence	Taylor & Francis Group, Florida, USA	January'22
2	Smart Systems: Innovations in Computing	Springer, Singapore	March'21
3	Idea as a Project Framework	Project Management Institute, Pennsylvania, USA	August'17
4	Unified Resource Descriptor over KAAS Framework	Springer, Singapore	December'15
5	Project Management as a Service (PMaaS)	Project Management Institute (PMI), Pennsylvania, USA	September'14
6	Concept Prototyping over PMAAS Suite	Project Management Institute (PMI), Pennsylvania, USA	September'14
7	Management Information System - A Journey to Information Intelligence	SlideShare (https://www.slideshare.net/mariastellasolon/management-information-system-78403154)	July'17

Abstract

Futuristic Technology DNA with Next Generation AI

Subhajit Bhattacharya

Associate Vice President-Innovation Principal Accenture, Delhi, India

Today when the technology is playing a pivotal role globally, digital first has become the fundamental necessity for every organization to grow. While influencing across the industries, technology has become the prime neural system for exchanging and processing information at the lightning speed to accelerate market reach and quick business deliveries with quality, security, and privacy. Further advancement of Artificial Intelligence has remarkably induced the technology DNA to an extent that today we are moving towards the converged AI models. A revolutionary advantage we have got over a past decade post the advent of cloud technology is to adopt

everything-as-a-service technology paradigm, it has further given completely a new transition to a business model.

While we have been engaged with the data to train the models for machine learning and deep learning, we have witnessed another turn when the GenAI has emerged as a new generation AI which can generate several insightful, holistic, and creative information to answer end user queries in different ways of representation on the console, and thus it has given a birth to a new field of engineering called “Prompt Engineering”. Gen AI clubbed with advanced analytics models, can further produce efficient predictive scenarios helping the end users to take right suggested actions proactively. Leading software organizations are working to develop next generation semantic web technologies, which can replace the tabular search results with summarized search results alike wiki pages. Industries are using Internet of Things and block chain extensively for data transmission, automating data processing, enabling more security, privacy, and authenticity. Today organizations are using Industrial Intelligent of Things to further automate their industrial operations and processes at scale.

Technologies like immersive reality and Metaverse equipped with AI, NLP, and computer vision augmented with sensors, intelligent cameras (including camera enabled drones), remote monitoring devices (including satellites) etc., have significantly brought a new wave to the digital transformation.

Today we are exploring the potentials of data and quantum atoms to reach to the possibility of infinity to figure out the core meta structures of the knowledge cuboids. Quantum computing will likely to play a prominent role in this journey wherein several possibilities can be explored parallelly while considering every quantum of data to its atomic level for relational and referential knowledge mapping.

Keywords: Technology, Data Analytics, AI, GenAI, IoT, Immersive Reality, Quantum Computing, sustainable & green technologies.

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Invited Lecture 11

Role of Technology in Start-ups and Small Business



Rohit Todwal

Founder, Startbit IT Solutions Pvt. Ltd., India

He is B.Com., MCA, Azure Certified Project Manager. He has more than 18 years of work experience. He started his career with NIIT Ltd. as faculty and moved to software development and after 3 years of job, he started his own software development company in 2008 - Startbit IT Solutions Pvt. Ltd.

He along with his partner acquired on Logistics based IT Product Company in 2016 to focus on product line and operating that company "AngelTech LogiSol Pvt. Ltd." successfully since then.

In 2022, he along with his team, achieved 4th position in Innovation based Startup company competition organized by Maruti Suzuki + GHV and got working contract from MSIL.

His expertise is in client management, networking, resource management, business planning, strategic development and startup consultancy. He has good vision for business process automation and RPA, he is helping many manufacturing industries to automate their processes with innovative and best in class IT solutions. He is handling clients from more than 42 countries with average NPA score of 4.8 out of 5.

He along with his team works in SAP SuccessFactors, Salesforce, Shopify, Ruby on Rails, .Net core with Azure, DevOps, PowerBI and their USP is ecommerce solutions and customized web/mobile app development. His company is registered partner of Microsoft, Amazon web services, Shopify, Salesforce.

Abstract

Role of Technology in Start-ups and Small Business

Rohit Todwal

Founder, Startbit IT Solutions Pvt. Ltd., India

In today's competitive world, everyone wants to focus on growth and fast paced success, technology plays a very important role in this journey. Startups and Small businesses have limited budgets/resources, but in this scenario, these entities can use technology in best possible way to achieve the goals/target in short span of time and can focus on the growth and innovations.

In this session, Rohit Todwal is going to explain how technology can help startups and small businesses to change the game and push themselves to go beyond the traditional way of doing the business and differentiate themselves from others to win the race.



Invited Lecture 12

Government Initiatives to support Start-ups



Dhawal Singhal

Dhawal, possess 11+ years of work experience in Government Consulting, Strategic Marketing & Communications, Business Development and Client Servicing. He is a MBA graduate from Grenoble Graduate School of Business, France and is certified in Incubator Manager Training Program organized by NEXUS, The Innovation Hub American Center, New Delhi. Being proficient in documentation, reporting, analysis with respect to Government functioning and processes and helped state governments frame policies and initiatives around IT and startups, Dhawal is also well aware of the brewing start-up culture and have mentored and worked with multiple startups at various stages of their lifecycle. He is also been regularly contributing to bring partnerships with various venture capitalists, investors, trade associations and other financial and academic institutions from across the country and facilitating direct connect of start-ups with these stakeholders and streamlining the deal flow pipeline and make start-ups business ready & improve their chances of funding and success.

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Invited Lecture 13

Importance of Holistic Development of Employees



Ashutosh Mishra

*Assistant General Manager
Human Resources (AGM-HR),
Jaipur Rugs, Jaipur, India*



Invited Lecture 14

Digital India : A Key to Entrepreneurial Success



Manika Karnawat

26 Years of experience in Advertiser, Marketer, Brand Influencer. Completed her education from MGD Girls School and St. Xavier's College. She started Jaipur Buzz in 2016. 7+ years of work experience in the field of social media marketing. During her journey she has received a lot of awards for excelling in the field of advertising & marketing & for being a young women entrepreneur. She has also been a part of magazine shoot, modelling for various brands, podcasts, interviews, newspaper headlines, calendar shoot & judge in various competition.



CONTRIBUTED PAPERS

Changing Dynamics of Women Entrepreneurship in India: Its Problems and Prospects

Anupama Goyal

Associate Professor in Botany, Jayoti Vidyapeeth Women's University (JVWU), Jaipur

ABSTRACT:

Over the decades, women in India have crossed countless stones to regain their potential. But nowadays women are coming out of their shell and the wind of change is being observed as they have come a long way from being just a homemaker to entrepreneurs. Entrepreneurship, which is a fundamental driver of growth and prosperity not only for individuals but also for society and the nation as a whole, its promotion and development in a developing country like India is essential, especially for the empowerment of women. From Kiran Mazumdar Shaw of Biocon Biochemicals to Radhika Ghai Aggarwal of Shopclues, women entrepreneurs in India are vehemently trying to pave their way by guarding the glass ceiling. There has been a remarkable change in the demographic scenario of Indian business with the presence of women entrepreneurs who not only encourage others but also contribute to the country's economy. However, female entrepreneurs face a unique set of challenges and, embodied as the primary caregivers of Indian households, the shackles of domestic commitment continue to handicap the spirit of many women. The lack of self-censorship and lower arrogance that women have continues to be a serious concern. This study aims to bring to light the challenges that women entrepreneurs continue to face, as well as highlight the silver linings that weigh on their entrepreneurial spirit.

Keywords: entrepreneurship, female entrepreneurs, problems and prospects

I. INTRODUCTION

Late Prime Minister of India, Pt. Jawaharlal Nehru once remarked, "You can tell the state of a nation by the state of its women", emphasizing the need to empower women who have been burdened with domestic responsibilities under patriarchy for centuries. With entrepreneurship becoming a necessary condition to accelerate the development of any nation, the participation of women in this field becomes imperative (Baumol & Schramm, 2007).

II. BRIEF LITERATURE REVIEW

Jean-Baptiste Say, the French economist who coined the term "entrepreneur", stated the definition that "An entrepreneur moves economic resources from an area of lower to an area of higher productivity and greater return".

Dating back to the late 17th century, the concept of entrepreneurship has seen rapid progress in its development and importance to the global economy. As women create ripples in the entrepreneurial

race, a male-dominated field, researchers have conducted countless studies to define women entrepreneurs and their challenges and prospects.

In their study, Deshpande and Sethi (2009) acknowledge the growth of women entrepreneurs and highlight the fact that this has been possible due to a change in social structure, increased government support and renewed self-confidence of women.

In their study, Goyal and Prakash (2011) mentioned the breaking of glass ceilings and the evolution of women entrepreneurs from the 3Ps of Pickle, Pappad and Powder to the 3Es of Energy, Electronics and Engineering, depicting the expansion and development of women. entrepreneurial skills and their adaptability.

Kumar (2014) while emphasizing the necessity of women entrepreneurs for economic development pointed out the differences prevailing on the basis of emotional intelligence and predisposition between male and female entrepreneurs in the country which act as obstacles in the way of development. business women.

Acknowledging the various gender-specific and gender-neutral biases faced by women entrepreneurs, Tiwari (2017) in her study appealed for an urgent call to decode policy imperatives and interventions to increase women's participation in entrepreneurial ventures.

Samantroy and Tomar (2018) highlighted the urgency of addressing the needs of women entrepreneurs in terms of their overall empowerment to meet the global commitment to achieve the United Nations Sustainable Development Goals (SDGs) by 2030. The study further highlights the need for an inclusive and sustainable industrial development plan to harness potential of women entrepreneurs in India.

III OBJECTIVES OF THE STUDY

The main objectives of the study are

- i. To investigate the factors that encourage a woman to become an entrepreneur;
- ii. To study the challenges faced by women entrepreneurs in their businesses; and
- iii. To analyze ways to develop women's entrepreneurship.

IV RESEARCH METHODOLOGY

Research Design: The research design is descriptive in nature as it addresses the questions of “what” – “what” factors encourage women to become entrepreneurs and “what” challenges they face during their entrepreneurial journey as well as “what” ways to grow women’s business.

Data Collection: Primary data was collected through a structured questionnaire (Google Forms) that was distributed on digital platforms. Secondary data was collected from journals, books and research articles.

Table 1: Showing the demographic profile of the respondents

Variable	No.	%
AGE:		
Below 25 years	02	4%
25-35	03	6%
36-45	21	40%
46-55	19	37%
55 & Above	07	13%
MARITAL STATUS:		
Married	36	69%
Unmarried	08	15%
Widow	05	10%
Divorcee	03	6%
CHILDREN:		
Yes	38	73%
No	14	27%
EDUCATION:		
Under Matriculation	Nil	
Under Graduate	39	75%
Post Graduate	08	15%
Others	05	10%
WORK EXPERIENCE:		
Yes	33	63%
No	19	37%
FAMILY TYPE:		
Nuclear family	37	71%
Joint family	15	29%
CATEGORY OF BUSINESS:		
First Generation Entrepreneurs	40	77%
Parents as Entrepreneurs	05	10%
In-Laws as Entrepreneurs	07	13%
LOCATION OF PLACE OF BUSINESS:		
Within Home premises	29	56%
Separate office/factory/outlet	23	44%

WORK TIMINGS:		
Upto 5 hours	06	12%
From 5 – 8 Hours	32	62%
From 8 – 12 hours	13	25%
More than 12 hours	01	01%

Interpretation of the 52 respondents included in the study, 40% belong to the age group of 36-45 years. Regarding marital status, 69% are married and 73% have children. 75% have completed their studies up to graduation and 63% have work experience. In terms of family type, 71% have nuclear families and 77% of women entrepreneurs are first generation entrepreneurs, 56% have a business as part of their home. 62% of women spend 5-8 hours on their business.

Table 2: Showing the challenges of women entrepreneurs

S.No.	Variables	Responses	
		Rank	%
1	Stiff competition	1	15
2	Family Restrictions	2	12
3	Role Conflict	3	11
4	Difficulty in maintaining work life balance	4	11
5	Lack of Entrepreneurial ability	5	10
6	Lack of Information regarding government incentives and subsidies	6	10
7	Lack of finance	7	8
8	Limited Mobility	8	7
9	Lack of self confidence	9	5
10	Problem of marketing	10	3

Interpretation: The study illustrates that 15% of the respondents rated “Tough Competition” as a key challenge for women entrepreneurs. It was followed by "Family Restrictions" which accounts for 12% and "role conflict" which is in third place with 11% answers. .

FINDING

Based on Objective I

1. Innovative thinking encourages women entrepreneurs to explore the whole possible arena and gives them the satisfaction to show their creativity.
2. Women desire their own identity through their work in this patriarchal society and have succeeded in creating it through their own business.
3. The success stories gave them inspiration to try their luck and achieve their dream through their business.

4. The need for additional income also encourages them to venture into their own business to help their husband and family financially.
5. Constant encouragement from family and friends also helps them in building their confidence to start their own business.
6. Another encouraging factor for many women is the availability of attractive government incentives and subsidies for women entrepreneurs.
7. Leveraging funds that are lying idle also convince women to start their own business.

Based on objective II

8. Fierce competition acts as a major hurdle for women entrepreneurs in marketing their products and services in an organized sector that is mainly dominated by their male counterparts.
9. They don't get full support from their family which adds to their problems in their entrepreneurial journey.

Playing different roles at the same time is another limitation that adversely affects their functioning as entrepreneurs

Suggestions and Conclusion :

India has come a long way in increasing women's participation in education and the economy. In recent years, we have witnessed a gratifying paradigm shift in demographics against the backdrop of corporate India. There has been a gradual transition in the Indian business scenario and the existence of gender stereotypes has taken a huge turn where women are seen in the business dome walking side by side with their male counterparts. While this is a wonderful sight, female entrepreneurs have their own challenges in addition to the normal struggles that prevent them from flourishing. Women should be given more exposure to break the conventional barrier and achieve better results in a male-dominated business environment. Women do not realize their potential but if properly molded with entrepreneurial traits and skills, they will overtake men to face changes in trends, challenges in global markets and also be competent enough to maintain and strive for excellence in the business arena.

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Digitalization : A Renaissance of Entrepreneurial progress

Varsha Dhabhai

Jagannath University, Jaipur

Abstract:

Digital India is a flagship program of the Government of India to transform India into a digitally empowered society and knowledge economy. Digital India program is focused on 3 prime vision areas : 1. Digital Infrastructure as a Core Utility to Every Citizen: make digital infrastructure available to every citizen of India by providing high speed internet to the last frontier of the nation. 2. Governance and services on Demand by providing seamlessly integrated service across departments or Jurisdictions. Making available of services in real time from online and mobile platform to improve ease of doing business in India digital transmitted service has been introduced, making financial transactions electronic and cashless. 3. Digital Empowerment of Citizen via Digital India initiative by Government has made all digital resources available and accessible which has helped to improve universal digital literacy. Now the citizens are not required to submit Government documents and certificates physically. To bypass the limitations of physical world almost all size and shape of organizations are adopting digital technology. New advancement in the digital technology helps an organization to release their product and services to the market faster, offering near perfect user experiences and also acts as a helping aid to reach the right customer. Organizations are continuously working hard to adopt ongoing stream of data, implementing strategic business plan, to make sure that the organization remain on top of the current trend. The motto of the Digital India Mission is 'Power to Empower'. There are three core components to the Digital India initiative. They are digital infrastructure creation, digital delivery of services, and digital literacy. Digitalization in business helps to improve the efficiency of its operations, making automation possible. There are fewer human errors and operational costs are reduced, due to the decreased need for human resources. Benefits of Digitalization -Increased efficiency of all operations, Fewer human errors , Safer data storage in the cloud, Reduced operational costs , enables data analysis.

Keywords : Digital Empowerment



Digital India: A key to Entrepreneurial Success

Parul Bhargava

Assistant Professor, S.S. Jain Subodh Management Institute, Jaipur

Abstract:

The Government of India has initiated a campaign called "Digital India" to ensure that all government services are made available to residents electronically, either through better online infrastructure and increased Internet connectivity, or by giving the nation digital empowerment in the technology sector. Plans for connecting rural areas to high-speed internet networks are part of the effort. Three key elements make up "Digital India". The national e-governance plan has been amended and expanded as part of Digital India. It aims to electronically supply all government services. Dreamed up by our honourable Prime Minister Sri Narendra Modi, Digital India is a dedicated programme to get India ready for the knowledge-based change and to give the people good governance through coordinated and synchronised interaction with both the central and local governments.

Digital India is a campaign launched by the Government of India to ensure the Government services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology. The initiative includes plans to connect rural areas with highspeed internet networks. Digital India consists of three core components. Digital India is a modified and expanded version of the national e-governance plan. It seeks to deliver all government services electronically. Dreamed of our honourable Prime Minister Sri Narendra Modi, Digital India is a committed program to prepare India for the knowledge-based modification and providing good governance to people by synchronized and coordinated involvement with both central government and local government. On 20th Aug 2014, the Digital Indian program was accepted by the Union Cabinet under the management of India's Prime Minister Shri Narendra Modi. The Digital India program has been imagined by Division of Electronic and Information Technology and contains all the current schemes being run by the Telecommunications Division & Rural Growth Ministry. Digital India is an initiative or a campaign by the Government of India in order to transform India into a digitally empowered society and a knowledge economy. The main objective of the government was to make all the services of the government electronically available by enhancing the internet connectivity and the online infrastructure to the citizens of India. The vision of Digital India programme is inclusive growth in areas of electronic services, products, manufacturing and job opportunities etc. and it is centred on three key areas – Digital Infrastructure as a Utility to Every Citizen, Governance & Services on Demand and Digital Empowerment of Citizens.

Keywords : Digital, India, Make in India Online infrastructure, Digital India, Vision & Objectives, Empowerment.



Emerging Technologies: Stimulant for Start-ups and Small Businesses

Raju Agarwal

Director, S.S. Jain Subodh Management Institute, Jaipur

Abstract:

India has emerged as the world's second largest startup ecosystem next the US. India is a hotspot for startup and spacing forward at an exponential rate. The Indian startup ecosystem has expanded quite rapidly mainly through private investments including seed, angel, venture capital, and private equity funds, with technical support from incubators, accelerators, and the government. The government, for its part, is creating an enabling environment through its flagship Startup India initiative, which came into force in 2016. Sustained Government efforts through BIRAC have resulted in increasing the number of recognized startups in India from 442 in 2016 to 92,683 in 2023 (as on 28th February 2023). The technology plays an important role in establishment and growth of startups and small businesses. The some of the emerging technologies in Industry 5.0 are Artificial intelligence (AI) and machine learning (ML); Blockchain and Web3 technology; Intelligent automation and robotic process automation (RPA); Internet of things (IoT); and Quantum computing. More than 4,000 recognized startups are engaged in sectors relating to emerging technologies such as Internet of Things (IoT), robotics, artificial intelligence, analytics, etc. These emerging technologies can transform a wide range of industries and significantly impact the way we live and work. The potential uses for these emerging technologies are vast, and as these technologies continue to mature, the industries can expect to see even more innovative and transformative use cases emerge. These technologies will expand next year as more companies adopt these solutions to automate a wide range of business processes and improve efficiency.

Keywords: Artificial Intelligence, Blockchain technology, Internet of Things, Startups, Web3 technology



Skilling for Self-Employment

Supriya Agarwal

Associate Professor, S.S. Jain Subodh Management Institute, Jaipur

Abstract:

Self-employment contributes to employment growth and innovativeness and many individuals want to become self-employed due to the autonomy and flexibility it brings. Using “subjective well-being” as a broad summary measure that evaluates an individual’s experience of being self-employed, the chapter discusses evidence and explanations why self-employment is positively associated with job satisfaction, even though the self-employed often earn less than their employed peers, work longer hours and experience more stress and higher job demands. Despite being more satisfied with their jobs, the self-employed do not necessarily enjoy higher overall life satisfaction, which is due to heterogeneity of types of self-employments, as well as motivational factors, work characteristics and institutional setups across countries

The study found that Business Education students needed skills such as time management skills, self-motivation skills, interpersonal skills, human resource management skills, financial management skills and customer service skills for self-employment and national development. The hypotheses tested revealed that there was no significant difference in the mean responses of Business Education students on the time management skills, self-motivation skills, interpersonal skills, human resource management skills, financial management skills while there was significant difference in the mean responses of Business Education students on the customer service skills needed for self-employment. It was recommended among others that conferences, workshops, seminars and symposia should be organised by the ministry of education and they should be focused on the human resource management skills needed for self-employment and that Business Education students should be made to see it as compulsory to come up with feasible business plan before graduation in order to build their abilities in establishing businesses on their own for themselves and for the nation at large.

In a comparison of self-employed graduates with a growth orientation to those who do not intend to grow their firms, it was observed that those who had planned growth had also acquired certain skills to a greater extent than those that did not plan to grow their firms. Important skills to have in self-employment were identified as technical skills, perseverance, communication skills, managerial skills, leadership, innovation, pro-activity, financial skills, and information-seeking skills. All the listed skills were more prevalent among those who had the intention to grow their firms than those who did not have this intention, with the exception of technical skills.

Keywords: self-employment, entrepreneurship, subjective well-being, job satisfaction, life satisfaction.



Why Technology Integration is vital for Holistic Development of Emerging Industry

Jyotsna Diwan Mehta

S.S. Jain Subodh Management Institute, Jaipur

Abstract:

This paper aims to explore the need and importance of effectively and efficiently converting the outcomes of research generated technology into products, services and ideas that are able to satisfy the market needs along with creating products, services and ideas that address the problems of communities and apply technologies to provide solutions to the issues that communities face. The idea is to draw attention to the need to work towards creating an eco-system that nurtures research and develops sustainable markets for technologies without infringing upon the interests of the people, rather integrating technology advancements with social, cultural and environmental interests of communities.

Background:

While the first Industrial Revolution that lasted from the mid-18th century to about 1830 was confined to Britain, the second Industrial Revolution took place in Britain, continental Europe, North America and Japan. America assumed global leadership in the 20th century on the strength of its economy, innovation and military strength. The third Industrial Revolution revolved around an electronics boom and the production of nuclear power. The new millennium has ushered in the fourth Industrial Revolution powered by the internet and the rapid strides in technology. Technology has changed the world so quickly and in so many ways that it cannot be disputed that the key factor for any company's competitive edge in the market is identified by the technology it uses. Technology is the result of the quality and quantity of Research and Development that is being invested in. While large companies invest in R&D, many government funded institutions and organizations also invest in research and development of technology. Academic enterprise and excellence is nowadays judged by the research that the institution produces. Whether companies work towards betterment of technology on their own or buy the best available technology out there, companies understand that the ability to integrate the company's R& D efforts with its production department is the key to its success in the market place. On the other hand, it is also true that in spite of so much development, technological advancements and inventions, the world continues to be confronted with several challenges including climate change, hunger and inequality. These multi-dimensional, deep rooted issues require long term risky investments, innovation and equitable solutions that may not give returns in the short term, nor yield the kind of profits that venture capitalists need to justify investment in research and development. In fact, typically, a company would measure R&D productivity by assessing the returns the company gets on the investment

made on the R& D. This is why continued government support and public investment in R&D accompanied with efforts to integrate the research outcomes into public interest applications is so important.

What is Technology Integration?

Technology Integration refers to the process of aligning research and development with the needs of the market and ensuring feasibility of manufacturing the developed products and ensuring that these products reach the target market ahead of the competitors and also they effectively satisfy the needs they were produced to fulfill. It is really a bridge between the field of research and the actual application of the results of the research. We would like to extend the meaning of technology integration to go beyond the financial interests and extend to the integration of new technologies to the social, cultural and political well-being of the public.

Why is it difficult to ensure Technology Integration?

Research findings are considered useful if they lead to financially viable, socially acceptable and technologically feasible products, services, processes and ideas. In recent years it has become even more challenging to integrate inventions and innovations with application. There are several reasons for this:-

1. The technology used in various sectors of business and industry has changed dramatically and several options in technology are available for choosing. New technologies are coming up every day. For example, Microsoft had an extremely demanding task in creating Windows 95 operating system because the requirement was to create an operating system that could function seamlessly with a very large number of hardware and software combinations. The company had to come up with a product that could work reliably after sifting through numerous technological approaches.(Reddy 2002)
2. The sources of technology have also rapidly increased. In fact it has become very important for companies to keep abreast of the latest technology. An important source of the latest research findings is the work that takes place in the top universities of the world. It is important for companies to stay connected with vibrant academic networks around the globe so that they can access the best and latest sources of suppliers of innovative technology.
3. The rapid changes that are being witnessed in technology have led to the shortening of the product life cycle. This means companies are pushed to develop and commercialize new technologies very fast. The change in technology has been accompanied by a changing marketplace-one that is ridden with uncertainty. For example in the mid-1990s no one could predict how the internet could impact or shape consumer demands.(Rosentiel,2006)
4. While it is important to create the latest technology, it is even more important to identify and choose the best technology available. Take the example of Unilever. In the 1990s the detergent

market was mature and highly competitive. Unilever was looking for a combination of compounds that would improve the quality of wash and out of the various options that were generated, Unilever chose manganese compounds but in 2023 HUL is readying new detergent making tech in green drive (ET Bureau,2023) Choosing from the array of technologies available and making the right choice is important.

Technology Development must be aligned with application

When we examine why performance of companies varies, factors like techniques and methods of project management, leadership styles and types of organization structure are identified. But the most important factor in the current scenario is the process of integrating technology development with application. There are several points to consider before it can actually carry out this integration.

- i) Technology adoption is a key method of gaining competitive advantage. The methods of organizing and managing projects are easily replicated and it is only by using technology that the outcomes of organization efforts can be greatly improved.
- ii) If the organization fails to use the most suitable technology at the right time or chooses an inappropriate technology the project is sure to run into problems regardless of other factors.
- iii) While companies will seek to use the latest technology, they may not want to invest in the R&D required to create such technology.
- iv) The companies will in all likelihood focus only on how the technology can be translated into financial profits. The application of the technology for social and public good is likely to be ignored or only paid minimum interest.
- v) Most public interest applications of technology are led by government led funding, partially or wholly.

Investment in technology and innovation in the right direction has contributed to the world's most used applications in several fields. Take the example of healthcare; the lifesaving drugs, innovative medical procedures and promising medicines are the result of research. The concept of the internet originated from ARPANET, a program funded by the Defense Advanced Research Project Agency of USA. The GPS (Global Positioning System) that we use today emerged out of a 1970's US Military research project that worked on creating what was known as Navstar GPS. A Professor and his doctoral student at the University of Delaware gave the concept of touchscreen technology that was used in the iPhone. DARPA had researched and created project pal (Personalized Assistant that Learns) that was later worked upon and refined to create Apple's Digital Personal assistant 'Siri'.

In fact, The Satellite Instructional Television Experiment by ISRO and NASA had arranged for 2400 black and white community television sets in the villages of six Indian states at a point when most Indian urban homes also did not have a television and through this experiment the power of media communication was studied.

Methodology:

The research undertaken for this paper was exploratory and included going through secondary data of companies and industry that create, develop and adopt technology. Secondary data review was undertaken to find out who had funded the investment in and the application of public interest technology. The objective of this paper was to-

- Understand the relationship between technology creation and adoption and its actual application
- Highlight why technology integration is important in the current scenario
- Identify what must be done to ensure that the latest breakthrough technology is also used for the greater good of communities and countries.

Result and Discussion

Investment in research & development continues to be very important for growth and development and while companies do look to adopting the latest technologies, they do not always want to spend on actually creating them. It is therefore not sufficient to assume that because growth is fuelled by technology, the market forces will drive research and development. Besides, market forces are blind to societal and environmental concerns. Governments across the globe are reducing their expenditure in R&D in the hope that the wave of technology innovations is strong enough to take it forward. If technology is to be used in public interest applications then the governments must not only facilitate, regulate and administer market forces to allocate resources to research and technology innovation but also support and fund its own research especially in areas of public interest technologies. The phenomenal success of ISRO as Chandrayaan 3 successfully landed on the moon is a stellar example of the power of well applied research. ISRO is directly funded by the Department of space (DoS) which is a Department of the Government of India.

Conclusion

It is not enough to hope that the needs of the market and the push of market forces will be sufficient to push companies to invest in research and development. Nor is it enough that the government works towards finding technology solutions to government and non- profit problems. It is imperative that –

- Investment in R&D stays a priority for both the corporate sector and the government sector
- Sufficient attention must be given to integration of technology invention and its application
- Not only must the governments support public interest technologies but they must incentivize corporates to seek ways to align social, environmental, political and cultural interests with their technologies.
- Systems are established to integrate technology based solutions.
- New Academia is designed for technologists that helps in the study of the social, economic and political ramifications of new technology

- A thrust must be given to creating jobs for relevant technologies, and nurturing networks that support and enable investment and interest in R&D.

Keywords: Technology Integration, R&D, Holistic Development, Public Interest Innovation.

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A study of Economic Development and Indian Environment

Yogesh¹ and Sunil²

²*Extension Lecturer, Deptt. of Commerce, Govt. College Narnaul*

Abstract:

Environment and Economic and Agriculture Development are closely related and depend on each other. If there is the environment of any country, state or a region is not protective, it will surely disturb to economic development as well as agriculture development of a state and region in India. In the Indian constitution under article 48A contains provisions regarding environmental protection. Under the directive principles of the constitution. It has been written that every citizen should endeavor to protect the natural environment of the country, contribute for the development of rivers, lakes, forests, animals etc. These provisions shows the socialistic concern of our society towards environment, but the implementation of these provisions have been show.

Underground water, river, lakes and glaciers have come under the grip of pollution. Stagnation of soil fertility, decreasing agricultural production, pollution of water & air, vibrating earth, terrible & horrible sea the Tsunami, changing weather, and high intensity cyclones of all such phenomena are the alarm of danger. Infect the conservation of environment and ecological balance has become the most challenging problems of the 21st century. A healthy body possesses a healthy mind; likewise the development of the nation can take place only in a clean & pollution free environment.

Economic and agriculture development is a complete process consisting of many steps and environment is a critical factor of this process. If environment of a state is not included in the development plan, the state cannot develop. For maximum development of agriculture forests, animal wealth and industries, environment becomes a critical factor. Environment protection is also necessary for sustainable development.

With the special reference in Indian economic and agriculture development, we should control the using of chemicals in agriculture as well as proper protection of environment and aware the population also. There should be extension of moral education, government policies and other things they protect to the environment. In India, the largest democracy of the world, environmental issues must be given priority over economic issues.

Keywords : Environment, democracy, sustainable development, Tsunami and ecological balances.

Introduction : India Is a high populated and democratic country. The Climate changing is the corrector of Indian nature. Development is the continuous process which indicates the level of Development of any nation. The new concept of sustainable development has compelled us to ponder over the utilizing the resources. We have to development the present resources keeping in mind the future development.

Underground water, river, lakes and glaciers have come under the grip of pollution. Stagnation of soil fertility, decreasing agricultural production, pollution of water & air, vibrating earth, terrible & horrible sea the Tsunami, changing weather, and high intensity cyclones of all such phenomena are the alarm of danger. Infect the conservation of environment and ecological balances have become the most challenging problems of the 21st century. A healthy body possesses a healthy mind; likewise the development of the nation can take place only in a clean & pollution free environment. Hence a clean & pollution free environment is the pre-condition for Nation's Development.

To make India a clean, pretty, prosperous and pollution free country achieve co- operation of its citizens in greatly required. Infect it may be a matter of population control or literacy or conservation of environment or keeping the children healthy or any other matter, our active co-operation is needed. To take swachh Bharat mission of Modi, sabka saath sabka vikas and sustainable development we should maintain the un-polluted development.

Observation : Today we see pollution in almost each village, town or city. Today we find no field of human life unpolluted. Hence it is high needed for the recommendation of the country that such

factors which induce pollution should be checked. In this context the consignment of rural roads & schools, maintenance & repair of lakes & ponds, connecting canals in flood prone areas & a forestation, construction of common latrines, Garbage & waste collection spaces & biogas plans under MNREGA scheme is warmly mentioning; by introducing such programmes the environmental pollution & degradation may be checked upto same extent.

Today about 5 crore hectare of land is lying barren and vacant in India. It may be caressed into arable land by providing inputs like water manures and fertilizers and by applying suitable soil treatment. It will lead to economic development of the country by increasing the agricultural production as well as the National income. Pollution free agriculture is also very much required today. Today the biotic balancing the soil has badly disturbed.

Japanese farmer 'Masa Nobu Fukuoka' had shown a new way to the world practicing pollution free agriculture. It is a kind of new revolution which is being popularized in the various parts of the globe. In India, a variance of this technique called "Zero Village" is being popularized.

In India, about 100 million small farmers, 100 million landless labors and about 550 million animal wealth sustain their lives on natural agricultural products; for sustaining such a huge population, there is need to enlarge the practice of national agriculture. For harvesting the full potential of such practices, joint efforts of centre and state are required cooperative agriculture and land consolidation can be also helpful.

Unbalanced industrialization and urbanization has adversely affected our environment. Though urbanization is a sign of development for a country, but in our country urbanization has adversely affected the rural areas and common men.

Objectives : The present study aims at examining the interstate disparities in the agriculture development and growth rate of population in the year wise and rural and urbanized situation. The broad objectives of the present study are –

1. In India the disparities of growth rate of population and agriculture development state wise.
2. Rural and urban temperature and environment in year wise.

Hypothesis : There are following determined to study :

1. Production increasing and employment in agriculture is decreasing.
2. Environmental changes are increasing.
3. Socio economic factors (Poverty, unemployment, education, health, etc.) are affecting the development of agriculture.
4. Agriculture production depends on monsoon still.

Methodology : In the present study we have scattered in state wise & year wise as well as rural and urban areas environmental conditions. We have collections from secondary data from census and books etc.

Characteristics of research area: As the country develops, the population also develops but since development has adversely affected the rural areas, our 70% population has been badly affected by the environment. The rate of economic development is different for rural and urban areas. Rural area consists of agriculture. This difference is show in the following table:-

Table-1 : Average Annual growth rate of urban and rural population and urban rural growth differentials (URGD) in major states of India 1971-2010.

Country	Rural			Urban			URGD		
State	71-81	81-91	91-01	71-81	81-90	91-01	71-81	81-91	91-01
Andhra Pradesh	1.57	1.84	1.36	3.96	4.32	1.46	2.39	2.48	0.10
Assam	2.00	2.26	1.67	3.27	3.96	3.62	1.27	1.70	1.95
Bihar ²	1.88	2.26	2.13	4.37	3.02	2.55	2.49	0.76	0.42
Gujarat	2.01	1.52	1.71	3.47	3.44	3.27	1.46	1.92	1.56
Haryana	2.00	2.29	2.06	4.67	4.34	5.08	2.67	2.05	3.02
Himachal Pradesh	2.06	1.94	1.61	2.98	3.78	3.24	0.92	1.84	1.63
Jammu & Kashmir	--	2.44	2.87	--	4.59	3.62	--	2.15	0.75
Karnataka	1.75	1.77	1.21	4.10	2.96	2.89	2.35	1.19	1.68
Kerala	1.46	0.36	1.01	3.5	6.10	0.76	1.73	5.74	0.25
Madhya Pradesh ²	1.76	2.24	1.82	4.45	4.39	3.13	1.74	2.02	1.61
Orissa	1.46	1.79	1.38	5.22	3.62	2.98	3.76	1.83	1.60
Punjab	1.61	1.77	1.23	3.68	2.90	3.76	2.07	1.13	2.53
Rajasthan	2.43	2.55	2.75	4.62	3.96	3.12	1.19	1.41	6.37
Tamil Nadu	1.22	1.33	0.52	2.47	1.96	4.28	1.25	0.63	4.80
Uttar Pradesh ⁴	1.88	2.26	2.13	4.47	3.87	2.82	2.94	1.61	0.69
West Bengal	1.85	2.30	1.69	2.76	2.095	2.02	0.91	0.65	0.33
India	1.78	1.80	1.70	3.83	3.09	2.70	2.05	1.29	1.00

2. Including Jharkhand, 3. Including Chhattisgarh, 4. Including Uttarakhand

Source : Census of India 1991-Series-I India General Population.

Table – Part-II A. (i) & census of India, Provisional Population, Tables Paper-2 of 2001 of states rural – urban distribution.

Urbanization in India has been relatively slow as compare to many developing countries. The percentage of annual expediential growth rate of urban population, reveals that in India it grew at faster pace from the decade 1921-31 to until 1951 thereafter, it registered a sharp drop during the decade 1951-61 the decade 1961-71 & 1971-81 showed significant. Improvement in the growth which has thereafter steadily dropped to the present level. The annual growth rate of population by residence has been depicted with the help of above Table.

The above table confirms that the urban population growth rate has declined continuously during the next two decades in most of the states of India as compared to the decade 1971-81. However, some, states shown an increase in the urban population growth in the some way function ting trends were obtained in various states with regard to the rural population growth rate.

Increasing urban population and urbanization adversely affected rural development, when rural people became educated and skilled, they migrate to urban areas and do not contribute in rural development, so due to vast difference of living conditions of rural and urban areas. The skilled and educated rural population migrates to urban areas.

Speed of urbanizations in India is increasing, it can be measured as change registered in the level or degree of urbanization over the years in the country has not been uniforance shown fluctuationing trend the speed of urbanization has decline during 1981-91 and 1991-2001. It also depends upon the policies of Governments the facilities. Provided by them at various places or region. The speed of urbanization can be show in various decades with the help of the following table:

Table-2

Decades	Growth rate of percent Urban (Temp. of PR)	Growth rate ofpercent Rural (Temp. of PR)
1901-11	(-)0.5240	0.6184
1911-21	0.8250	(-)0.000815
1921-31	0.7054	(-)0.0924
1931-41	1.4444	(-)0.2139
1941-51	2.2160	(-)0.4072
1951-61	0.3846	(-)0.0823
1961-71	0.1492	(-)0.0329
1971-81	2.4629	(-)0.6434
1981-91	0.7724	(-)0.3161
1991-2011	0.7714	(-)0.2815

Source- Computed figures from population census.

The above table shows for the last 100 years that the rate of growth of urban population is different from the rate of growth of rural population. This directly affects to rural growth rate.

Analysis of study : The data indicates most environment and economic & agriculture development are closely related and dependent on each other. If the environment of any state region of are disturbs. It will surely disturb the economic development of the region. In the Indian constitution under article 48A contains provisions regarding environmental protection. Under the directive principles of the constitution. It has been written that every citizen should Endeavour to protect the natural environment of the country, contribute for the development of rivers, lakes, forests, animals etc. These provisions show the socialistic concern of our society towards environment, but the implementation of these provisions have been show.

Environmental pollution not only affects a particular state or nations, but adversely affect the whole world; though the impact may vary from one region to another. Though advanced countries are more developed, but they also lack modern methods to contain the adverse effects of environmental pollution. So all the countries of the world should adopt common policies for environment issues.

Economic development is a complete process consisting of many steps and environment is a critical factor of this process. If environment of a state is not included in the development plan, the state cannot develop. For maximum development of agriculture forests, animal wealth and industries, environment becomes a critical factor. Environment protection is also necessary to development & agriculture development as well as for sustainable development.

In India, the largest democracy of the world, environmental issues must be given priority over economic issues. For regulating the environment, the following acts have been enacted.

- Water (Pollution Control and Regulation) Act. 1974.
- Air (Regulation and control of pollution) Act, 1984.
- Environment (Protection) Act, 1986.
- Wild life protection Act. 1972.
- Minerals and Mining (Regulation and maintenance) Act. 1974.
- Industries control and regulation Act. 1851.
- Atomic Energy Act. 1962.
- Radiation Protection Act. 1972.
- Toxic Act. 1919.
- Insecticide Act. 1962.
- India Fisheries Act. 1997.

So many other acts have been enacted in India, but their full implementation have not been possible so the priority should be on implementing the acts already framed not on enacting new acts.

At the international level, India has also initiated many steps, cooperated in the international treaties, but global consensus on the environmental issues have not been achieved. Following events have been significant at the global level.

- International Environmental Conference, Stockholm 1972.
- Helsinki Conference, 1974.
- London Conference, 1975.
- Vienna Conference, 1985.
- Rio Conference, 1992.
- Nairobi Reclamation, 1997.
- Kyoto Conference, 1997.
- Malmö Reclamation, 2000.
- Earth Conference, Johannesburg 2002.
- World conference on environment- New Delhi- 2017

Such events - Conferences and declarations have been held at various places of the earth to raise concern about environment. Earth Summit 2002 has been a landmark achievement in bringing all the environmental issues under one umbrella within the framework of privatization and globalization.

Suggestions :- On 16th September (the ozone day), the Prime Minister has said, “Our forefathers gave us impact ozone layer. We have to protect it for coming generations” So we all have to make integrated efforts to save it. The first effort to protect the ozone layer began in 1972 with the UN conference on environment 16 September was declared as ozone layer day. We have to follow following points to protect the ozone layer and environment.

1. Implement the various environmental laws.
2. Strict punishments for violating the environmental laws.
3. A surveillance cell over police and administrative machinery.
4. Awareness among common people about the importance of environment protection.
5. Mandatory environmental education in schools.
6. Environmental education at every level of education.
7. Creating awareness among rural population about the pollution and its various causes.
8. Complete ban on the use of polythene.
9. Saving the water bodies, rivers etc. from pollution.
10. Establishing those industries polluting less.
11. Recycling of polluting waste materials.

12. Controlling the urban population.
13. Controlling the migration of rural population to urban cities by providing urban amenities in rural areas.
14. Providing the establishment of new industries in deserted areas and thus preventing industrial cancelation.
15. Enhancing the fund for research & development related to the pollution controlling projects.

So it can be concluded that national development will be partial measure of environment is not included in its ambit.

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Impact of Social Infrastructure on Economic Development

Takdeer Singh¹ and Sunil²

¹*Lecturer in Commerce, S. K. V. Moti Bagh-1, Delhi*

²*Extension Lecturer, Deptt. of Commerce, Govt. College Narnaul*

Abstract:

The infrastructure is an important concept for faster economic growth and an improvement of human's scarcity in the country. The sufficient infrastructure in the structure of road and railway transport system, ports, power, airports and the efficient working is also needed for combination of the nation. The social infrastructure refers to those factors which provide the human resources of the nation suitable for productive work; when considering a country to enter into staples should evaluate whether the country has an adequate social infrastructure to faster economic growth. Social

infrastructure can consist of physical structures, transport system, institutions, human needs and facilities. While economic infrastructure accelerates the method of growth, social infrastructure accelerates the process of human development.

Keywords : Social infrastructure, Communication and Economic Development

Introduction: Social infrastructure is the basic require of economic development. It does not directly produce any goods and services but facilitate invention in the primary, secondary and tertiary economic activities by creating external economics. It is an admitted fact that the level of economic development in any country directly depends on the development of social infrastructure. Social infrastructure of the Indian economy plays a major role in the growth and development of the country's wealth. India is the world's largest democracy, is the seventh largest country in terms of land area and the second most populous country in the world.

The infrastructure of India concentrates on transportation, banking and finance, telecom, energy resources, mining, and urban as well as rural infrastructure. Infrastructural development is one of the major sources for economic development of any country. The proper quality and adequate infrastructural facilities ensure the high standard of living as well as also helps in improving productivity and efficiency.

According to the World Bank, Infrastructure is an umbrella concept involving many activities referred to as 'Social Overhead Capital'. It includes:

- **Public Utilities:** Power, telecommunication, piped water supply, sanitation and sewerage, solid waste collection and disposal and piped gas.
- **Public Works:** Roads and major dams and canal works for irrigation and drainage.
- **Other Transport Sectors:** Urban and interurban railways, urban transport, ports and water ways and airports.
- **Social Infrastructure:** Basic education, primary health care and banking service. (World Bank, 1994).

Infrastructure is broadly classified into:

- Social Infrastructure is that infrastructure that assists in stimulating the educational, health related and culture related standards of the people, like we can say schools, colleges, universities, hospitals, museums etc.
- Economic Infrastructure is that infrastructure that contributes in encouraging the economic activities, such as roads, highways, railroads, electricity, telecommunications, water supply etc.

Meaning of infrastructure : Infrastructure means a basic facilities and services which facilitate unlike economic activities and thereby help in economic growth of the country, education, health; transport and communication, banking and finance, irrigation and power and science and machinery etc.

Social infrastructure: Social infrastructure means a basic tricks and services which, in addition to achieving certain social objectives, indirectly help various economic activities. For example, education does not directly affect economic activities like production and circulation but indirectly helps in the economic development of the country by producing scientists, technologists, and engineers. So education, health service, sanitation and water supply etc. These are the examples of social communications.

Definition of Social infrastructure Social infrastructure refers to the core elements of social change (like schools, colleges, hospitals and nursing homes) which serve as a foundation for the process of social development of a country. Social improvement focuses on human resource development, implying the development of skilled personnel as well as healthy and efficient human beings.

Basic components of Social Infrastructure:-

- **Transportation:** Services such as roads, bridges, cycle highways, rail, airports and ports.
- **Energy:** Production and delivery of energy including electric grids. Most nations are moving towards sustainable energy source such as solar panels and wind.
- **Water:** It provides a supply of clean water and executive of water resources.
- **Health & Education:** Institutions that provide for basic quality of life such as hospitals and schools.
- **Public Space:** Public space that attracts economic activity such as tourism and corporate offices
- Including parks, beaches and nature reserves.
- **Environment:** Systems that improve environmental conditions such as rain gardens and green roofs.

Objectives :

- To study the concepts of role of economics of social communications in Indian economic improvement.
- To review the trends in the economic infrastructure and social infrastructure development with special reference to transportation, banking and finance, health, and education.
- To analyze the performance of economic survey in social infrastructure.

Methodology :

The research paper is based on secondary data. The information's are collected from books, journals, newspaper, websites and magazines.

Review of Literature :

- Prakash (1977) - Regional Inequalities and Economic Growth with Special Reference to

Infrastructural Facilities, The study found that there were disparities in the states of India in terms of infrastructure and the regions with stronger infrastructural base the potential to grow more rapidly as compared to others.

- Kapil (2009) - Role of Infrastructure in Economic Development in India: An Inter State Analysis, The study found that inter state disparities have reduced especially after liberalization. The study showed that there was a positive relationship between infrastructure and economic development.
- Chotia and Rao (2015) - Examining the Interlinkages between Regional Infrastructure Disparities, Economic Growth and Poverty: A Case of Indian States. The study found that there existed a negative correlation between Per Capita Net State Domestic Product and poverty data and there existed a positive correlation between Per Capita Net State Domestic Product and Composite Infrastructure Index (CII).

Definition of Economic Infrastructure :- Economic Infrastructure refers to all such elements of economic change (like power, transport and communication) which serve as base for economic growth. Abundant availability of power supply would accelerate the pace of production activity; abundant means of transport would facilitate the movement of goods from the producers to the consumers; it also mention of communication would facilitate advertising and so on forth. In the deficiency of economic infrastructure any efficient system of economic development would only remain a distant possibility.

Transportation infrastructure :- For the sustained economic development of a country, a well connected and efficient transport system is needed. India has good network of rail, road coastal shipping, and air transport. The total length of roads in India being over 30 lakh km, India has one of the biggest road networks in the world. In terms of railroads, India has a network of railroad lines, the biggest in Asia and the fourth largest in the world. The total route length is about 63000 km, and of this 13000km is electrified.

The major Indian ports including Calcutta, Mumbai, Chennai, Vishakhapatnam, and Goa handle about 90% of sea borne trade and are visited by cargo carriers and passenger liners from all parts of the world. A inclusive network of air routes connects the major cities and towns of airlines, while the worldwide airport services are looked by Air India.

Banking and finance infrastructure :- Banking and finance are another important sections of the core communications of India, comprising of 84 scheduled commercial banks, 133 regional rural banks (RRBs), and four local area banks (LABs) apart from more than 13000 non banking economic companies, credit societies, and co operatives. Other than these Indian infrastructure has developed a lot over the years in the other sectors like Indian telecom network with fully automatic worldwide communications, progress has been made by the use of satellite communication and submarine links.

Improving Social Infrastructure (Health and Education for the Poor) :- In LDCs like India, development of social infrastructure is vitally important for achieving faster economic development and alleviating poverty. India's Five Year Plans have failed to eliminate poverty for at least four reasons- malnutrition, poor health, a lack of learning opportunities, and limited choices good education, health and nutrition and low fertility help reduce poverty by growing opportunities to generate the right income. There are also positive associates between health and education. Education empowers people to use information better to make healthy behavioral choices; the healthy are more likely to attend school or go to work and can learn and work effectively.

Educational Outcomes :- In India as in other developing countries, greater coverage and more effective elementary education in grades 1-8 would be the education sector's most significant involvement toward alleviating poverty. No doubt average educational attainment has better in India. Yet India still lags behind other developing countries in average educational achievement to particularly among the poor. No doubt large benefits arrive from achieving a decisive minimum level of education across the population.

Although India has raised literacy rates, it still has a long way to go. Even China and Indonesia have overtaken India in literacy rates. Gross enrolment ratios have also better reaching 90% at the primary stage in which girls' enrolment being 73%. In spite of this, 33 million kids in the age group 6-11 are still out of school. Moreover, 7.8% girls and 6.9% boys in the age group 6-11 are in the workforce, mostly in rural areas. kids of poor families are less likely to be enrolled in schools. This is a major factor behind the low enrolment rates. Moreover, primary-level learning success is low.

Health Outcomes :- Nutrition is a particular problem area. India has a percentage of malnutrition and some segments of the population have among the highest levels of malnutrition in the world. Weaning children and women are particularly affected. There have been only modest declines in the levels of severe and moderate malnutrition in kids in the last 20 years. The proximate reason is the decelerate in poverty reduction.

Economic Survey of Social Infrastructure :- The Economic Survey 2017-18 on Monday pointed that education, skill development and health, sanitation would continue to be the priority areas for the Central government. However, the expenditure on social infrastructure has continued to be around six per cent. The survey said "The expenditure on social services by the Centre and States as a proportion of GDP had remained in the range of six per cent during 2012-13 to 2014-15.

"Being a developing economy, there is not enough fiscal space to increase the expenditure on critical social infrastructure like education and health in India. However, given the limited resources, the Government has consistently prioritized strengthening the educational and health profile of the population," said the Survey tabled in Parliament. It said the government is committed to achieving the Sustainable Development Goal (SDG) for education – 'Ensure inclusive and quality education for all and promote lifelong learning' by 2030. Budget 2018 will be presented in Parliament on February 1 by Finance Minister Arun Jaitley. India's Economic Survey 2017-18 was

presented in Parliament today. This is the first economic survey after the Goods and Services Tax (GST) was implemented last year.

The Performance of Infrastructural Services :- Whether in the public sector or regulated private sector the concert of infrastructural services has been quite poor. In many developing countries, the majority of the population, does not have access to the electricity and until recently in telephone services. After over 50 years of independence, in India the adequate pucca rural roads had not been built and natural highways were in very bad shape and not properly built and maintained lack of good ports and ports in India affected foreign trade of the country. It is only since 2001 that the work of building rural roads, highways, good ports and airports has been started in the 10th, 11th and 12th Five Year Plan

Similarly, until recently before the extensive use of mobile-phone wireless technology, telephone connections were very few and were a luxury consumer service rather than an fundamental productive service required to link markets, producers and consumers. Besides, one has to wait for many years to get telephone connection. However in the last 12 years, regarding telephone service things have improved a lot in India, especially with the widespread use of mobile telephone service. Likewise, in India, the performance of railways port and airport services has been quite inefficient and poor and need drastic reforms to be undertaken to improve their services.

Summary And Conclusion :- Prof. T.N. Srinivasan is right in saying that, the said performance of enterprises providing infrasstructural services has been a factor in the poor performance of many developing countries including India. Thus the case for reforming the infrastructural sectors is very strong, both for improving own performance and for removing the drag of an unreformed and poorly performing infrastructure sector on the realization of potential benefits of reforms in other sectors.

- The poor are often not reaping benefits from public health and education services. In contrast, education and health costs are enormous burdens for the poor.
- Health care also absorbs a major portion of poor families' incomes but often the spending and public health services do not yield much benefit. In such a circumstances, health gaps between the rich and the poor are likely to increase. Special attention is to be paid to the role of basic education in social transformation as well as economic development.
- No doubt health and education services are a public responsibility. But the goal of reducing poverty in India will remain elusive as long as the poor have low utilisation of preventive and curative health services, poor hygienic conditions, low school enrolment and attendance and poor quality schools and health services.
- The rapid expansion of the private sector in health and education is partly a result of the public sector's problem in providing quality services. But private sector behavior in these areas are not effective in providing public goods and are beyond the reach of many of the poor.

- Improvements in education must emerge from the community and at the school level. What is of paramount importance in reducing poverty is faster economic growth. This can be achieved by making more investment on human capital.

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Social Entrepreneurship in India: Challenges and Opportunities

Kaneenika Jain

Assistant Professor, S. S. Jain Subodh Management Institute, Jaipur

Abstract:

The India has become the first to reach to the south pole of moon through its successful mission 'Chandrayan-3'. The nation is still facing problems such as poverty, illiteracy, mortality etc. even after enormous development in the fields such as start-ups, entrepreneurship, big data, artificial intelligence, cloud computing, space research etc. The government is continuously indulged in the spread of innovation and entrepreneurial activities among youth. One of the important and emerging tributary of entrepreneurship is social entrepreneurship that is becoming a buzz in present times. It is more than just philanthropy and has deeper and immense impact on social changes/ upliftment in developing nations. Social entrepreneurship, also known as altruistic entrepreneurship, primarily focuses on creating social capital with little or no emphasis on a positive return on investment (ROI). It focuses on special sort of initiatives, which are both social and economic in nature. In social entrepreneurship products and services are designed to make maximum social impact along with making considerable profits for the firm. The Indian Government has started encouraging social entrepreneurship to great extent so that the social inequalities can be handled and an ideal society can be achieved as well. Social entrepreneurs have the capacity to influence the society by their unique product/service aimed at the social upliftment. Their role begins with identifying the social problem which concerns everybody rather than certain sect of people in society. They play a crucial role in the economic as well as social development of the region. This paper aims at identifying the challenges and opportunities of social entrepreneurs in the nation. The paper also highlights the status of social entrepreneurship in India, the major social entrepreneurs and their successful social innovation, the government support available to social entrepreneurs and the future prospects of social entrepreneurship.

Keywords: economic development, entrepreneurship, India, social entrepreneurship, social innovation.

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Journey of Innovation: Exploring the Dynamics of EdTech Evolution in India- A Comprehensive Review

Arshiya Goyal¹ and Bindu Jain²

¹Research Scholar, University of Rajasthan, Jaipur, India

²Professor, University of Rajasthan, Jaipur, India

Abstract:

This abstract provides a holistic overview of the in-depth analysis undertaken in the comprehensive review paper. By meticulously navigating through the emergence of EdTech enterprises, their contributions, and the overarching influence on the educational landscape, this study aimed at contributing substantively to the ongoing dialogue on the transformative dynamics of education in India. The journey of innovation, as explored in this paper, is not merely retrospective; it is a compass guiding future endeavors of online as well as traditional learning beckoning towards a future where education and technology converge seamlessly for the betterment of learning experiences in India.

Keywords: EdTech, EdTech evolution, Indian education, literature review, digital innovation.

Background:

This review paper highlights the dynamic landscape of Indian education system, addressing the transformative influence of EdTech firms. As digital innovation reshapes traditional learning paradigms, an exploration into the emergence of these entrepreneurial journeys and the EdTech market as a whole becomes crucial for understanding the evolving educational ecosystem.

Purpose:

The purpose of this comprehensive review paper was to explore the pivotal role played by EdTech companies in driving transformative change within the Indian education sector. By understanding their emergence, contributions, and impact on learning methodologies, the paper aimed at shedding light on the subtleties of the EdTech revolution unfolding across the nation.

Methodology:

This paper adopted a thorough literature review approach, synthesizing insights from academic/research articles, industry reports, and case studies. It systematically explored the rise of EdTech organizations in India, delving into their strategies, growth, and contributions. The synthesis of diverse sources aimed at providing a holistic understanding of the factors driving the transformative journey of EdTech businesses in the Indian educational landscape.

Key Areas of Exploration:

- **Inception and Growth:** The review scrutinizes the origins and evolution of EdTech companies in India, tracing their growth trajectories and identifying pivotal milestones in their transformative journey. By revisiting the historical context, the paper unveils the roots of EdTech innovation and the factors propelling their remarkable growth.
- **Contributions to Learning Methodologies:** A focal point of the review is the examination of the impact of EdTech firms on pedagogical methodologies. Through an in-depth analysis, the study explores how these companies have become architects of innovative learning approaches, including personalized learning, adaptive systems, and seamless technological integration into educational practices.
- **Market Dynamics:** Beyond individual ventures, the paper zooms out to analyze the broader EdTech market in India. Understanding market trends, challenges, and opportunities is integral to comprehending the contextual dynamics that shape the EdTech landscape. This exploration provides a panoramic view of the ecosystem in which these innovators operate.
- **Case Studies:** The review incorporates illuminating case studies of prominent EdTech companies, offering a closer look at their strategies, the challenges they have encountered, and the outcomes of their endeavors. These real-world examples serve as beacons, shedding light on the diverse approaches taken by EdTech entrepreneurs and their lasting impacts on education.



New Vistas of Advertising

Kalpana Soni¹ and Kajal Kanwar²

¹*Student, Biyani Girls College, Jaipur*

²*Asst. Prof., Biyani Girls College, Jaipur*

Abstract:

Advertising as we all know is a way through which we can connect to the consumer and understand the needs of them. Nowadays a lot of people are focusing on advertisement because it is really important for the whole economy no matter if it is a developing or developed economy. So to know more about this we can talk about different avenues or vistas of advertising. In India we have around one lakh crore worth of an advertising business. People have different ways of understanding it. Some say it is a dream profession or some say it's just a way to ice the people. Advertisements came to India after the 1990s. That is the globalisation period now if we look at it, major 5 conglomerates control 75-80% of advertising. While the increase in programmatic advertising slowed down in

2022, marketers will spend more on programmatic ads by the end of the year and in 2023. The future of advertising will be AI-powered in 2023. It will employ the effectiveness of AI to promote operations with machine learning. Companies now advertise through online platforms like connected TV, blogs, and apps. The companies learn what customers want and create relevant content based on consumer interest. So it will become standard to integrate solutions for customer journey management, email, mobile, social, web personalization, advertising, content handling, and analytics. Artificial Intelligence is ubiquitous in the advertising space. Now video advertising, personalised advertising, mobile-first advertising, display advertising, print advertising, social advertising, programing advertising are taking the place of traditional advertising.

Conclusion:- New vistas in advertising is that the industry is constantly evolving and embracing innovative approaches. From influencer marketing to immersive experiences, interactive ads, and native advertising, there are so many exciting ways for brands to connect with their audience. It's all about finding creative ways to capture attention and create meaningful engagements. The future of advertising is definitely full of endless possibilities!

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The role of virtual reality in enhancing customer experiences for small businesses

Aditi Pareek

Asst. Prof., Biyani Girls College, Jaipur

Abstract:

This study provides a comprehensive exploration of the profound impact resulting from the integration of virtual reality (VR) on the transformation of customer experiences within the realm of small businesses. As innovation increasingly becomes imperative for small enterprises to stay competitive in the contemporary business landscape, this research endeavors to shed light on how VR, with its promise of immersive and memorable interactions, possesses the potential to fundamentally reshape and elevate the landscape of customer engagement.

In the dynamic and competitive business landscape, small enterprises are recognizing the pivotal role that innovation plays in maintaining and advancing their competitiveness. This exploration of virtual reality (VR) emerges as a strategic avenue for small businesses, offering not merely a means to meet but surpass customer expectations. VR, with its immersive and memorable experiences, presents an intriguing opportunity for small businesses to redefine and elevate customer engagement, thereby establishing a distinctive position in the market.

Methodology: To comprehensively grasp the impact of VR on customer experiences in small businesses, our research employs a methodical approach involving in-depth case studies. Small businesses actively embracing VR solutions were subject to rigorous scrutiny through meticulous data collection methods. This encompassed the solicitation and analysis of customer feedback, meticulous tracking of sales metrics, and the execution of usability assessments. The overarching goal was to gauge the tangible and transformative impact of VR on the overall customer experience landscape within small enterprises.

Results and Discussion: The empirical findings of our study illuminate a noteworthy and positive shift in customer engagement and satisfaction levels among businesses that integrated VR into their operations. Small enterprises that embraced VR reported a spectrum of tangible benefits, including increased foot traffic, extended customer dwell times, and elevated conversion rates. These outcomes underscore the transformative potential of VR in contributing significantly to the success of small businesses.

The observed increase in foot traffic suggests a heightened interest in establishments utilizing VR, marking a departure from conventional consumer behavior. Prolonged customer dwell times indicate a deeper and more immersive engagement facilitated by VR experiences, emphasizing its power to captivate and hold customer attention. Heightened conversion rates underscore the capacity of VR not only to captivate potential customers but also to convert them into actual patrons, positioning VR as a potent tool for small businesses aiming to enhance their overall success.

Conclusion: At Last the study concludes that the firm, establishes the notion that virtual reality transcends being merely a technological novelty; it is a transformative tool for small businesses. The immersive nature of VR fosters meaningful connections between businesses and customers, transcending conventional engagement boundaries. These deeper connections, as revealed by the study, contribute significantly to the overall performance and success of small enterprises within a competitive market.

Keywords: Virtual Reality, Customer Experiences, Small Businesses, Innovation, Customer Engagement.



Role of Technology in Start-ups and Small business

Anushka Butolia

Student, Biyani Girls College, Jaipur

Abstract:

Technology has become very vital for survival in today's world for startups and small businesses. Innovation is highly dependent on technology in the contemporary business setup especially startups and small firms. The paper considers the different impacts of technology on their business transactions, the precise ways it shapes their operations, strategies, and business at large. The interplay of emerging technologies including artificial intelligence, cloud computing, and data analytics in bringing transformative influence in decision making and scalability is investigated. The results point to the necessity of startups and SMEs to engage with technology and growth levers considering evolving business contexts.

Keywords: Innovation, artificial intelligence, technological advancements, cloud computing, scalability, data analytics.

Introduction: Startups, instead of relying on the traditional tactics are moving towards more powerful interventions. Technology has indeed enabled start-ups to have access to things that were previously impossible for them. As far as a Startup is concerned, such will always be taken to mean that one must step out of their comfort zones. This is where technology shines as the biggest advantage for daily business operations whereupon start up is a young firm with seed capital that was invested by its founding entrepreneurs to develop a unique product or service competing with other sellers of similar goods and services ultimately enabling the clients to gain cheaper products in. Notably, technological advancements such as business call apps could even allow for a more flexible workforce thus saving on the second phone.

Methodology: The research methodology encompasses a systematic selection of literature from established academic databases. To cover all peer-reviewed journal articles about the topic under consideration, database systems like Web of Science will be used. The research in Publish or Perish will use a predetermined set of keywords such as “technology”, “innovation”, “start-ups”, “growth”, “entrepreneurship”, and related phrases.

Result and Discussion: Some businesses have adopted technological approaches as a way of keeping up with sustainable business practices globally and in India. The Startups of today are adopting new technology that involves automation and artificial intelligence. Today no Startup business firm can succeed without new technology. It is a big-ticket in term of money, but it offers a lot and the worth exceeds the high cost.html Additionally, the company utilizes the advanced technology as well, which makes it an upper hand than other competitors in the market. The whole

reputation of a brand as well as the perception of their consumers are very important when it comes to expanding the business and so it should be improved.

Conclusion: Small business startups or companies of different sizes have been able to compete with big corporations through the new Technologies of Technology. Using an array of tech such as servers, mobile devices help small businesses develop competitive advantage in the economic market place. However, small start-up business owners should plan with technology as part of their strategy, for streamlining integration, and to also leave room for future expansion, which enables sustainable growth of business. It is through this mechanism that owners can implement their business and operations using state of the art technology for expansion in future.

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Digital India: A Key to Entrepreneurial Success

Dilpreet Kaur

Asst. Prof., Biyani Girls College, Jaipur

Abstract:

In the contemporary era, the digitization of India's economy, popularly known as Digital India, has emerged as a potent force reshaping the entrepreneurial landscape. This abstract seeks to delve into the transformative impact of Digital India on business ecosystems, shedding light on its role in empowering entrepreneurs across diverse sectors.

Methodology: This study adopts a qualitative approach to comprehensively analyze the multifaceted aspects of Digital India's influence on entrepreneurship. The methodology involves an in-depth review of government policies, industry reports, and pertinent case studies. Through this approach, the aim is to provide a nuanced understanding of how Digital India has become a catalyst for entrepreneurial success.

Results and Discussion: Digital India has played a pivotal role in dismantling geographical barriers that traditionally limited the reach of entrepreneurs. The advent of high-speed internet connectivity and widespread smartphone penetration has provided unprecedented access to markets. Entrepreneurs, regardless of their physical location or financial standing, can now establish a global presence with relative ease. This democratization of market access is leveling the playing field and fostering a more inclusive entrepreneurial environment.

A crucial aspect of Digital India contributing to entrepreneurial success is the emphasis on digital literacy. As the digital ecosystem expands, entrepreneurs equipped with digital skills gain a competitive edge. Government initiatives and private sector collaborations aimed at promoting digital literacy have empowered entrepreneurs to navigate the complexities of the digital landscape

adeptly. This emphasis on continual learning and adaptation is fostering a culture of innovation and resilience among entrepreneurs.

E-commerce platforms, a cornerstone of Digital India, have been instrumental in empowering entrepreneurs to extend their reach beyond traditional boundaries. Entrepreneurs can now tap into a global audience and streamline their operations through secure digital payment gateways. The symbiotic relationship between Digital India and e-commerce has not only expanded market reach but has also catalyzed the growth of niche markets and innovative business models.

Fintech innovation, another byproduct of Digital India, has revolutionized the financial landscape for entrepreneurs. The digitization of financial services has mitigated traditional barriers to capital access. Entrepreneurs can now secure funding through online platforms and crowdfunding, reducing dependency on traditional banking systems. Additionally, the ease of digital transactions has enhanced financial inclusion, providing entrepreneurs with efficient and transparent avenues for conducting business.

The integration of emerging technologies, such as artificial intelligence (AI) and the Internet of Things (IoT), into the entrepreneurial ecosystem is another facet of Digital India's impact. Entrepreneurs are leveraging these technologies to enhance operational efficiency, optimize supply chains, and deliver personalized experiences to consumers. The adoption of these digital technologies has become synonymous with innovation, allowing entrepreneurs to stay ahead of the curve and respond dynamically to market demands.

Conclusion: In conclusion, Digital India stands as a linchpin for entrepreneurial success, offering a level playing field for businesses of all scales. The democratization of information, coupled with the proliferation of e-commerce and fintech solutions, has created an environment conducive to innovation and growth. The integration of AI and IoT technologies further amplifies the transformative potential of Digital India. Entrepreneurs must embrace this digital transformation to not only survive but thrive in the dynamic business landscape shaped by Digital India.

Keywords:- Digital India, Entrepreneurship, Fintech, , AI, IoT.

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Innovating and Thriving in the New Era of Entrepreneurship

Ayushi Agarwal

Student, Biyani Institute of Science and Management, Jaipur

Abstract:

In the ever-evolving landscape of entrepreneurship, adaptation and innovation have become essential pillars for success. The new era of entrepreneurship demands a shift in mindset—one that embraces change, leverages technological advancements, and prioritizes resilience. This abstract explores the key elements required to not just survive but thrive in this dynamic environment.

Innovation stands at the forefront of this new era. It involves not only creating groundbreaking products or services but also reimagining business models, processes, and strategies. Entrepreneurs need to foster a culture of innovation within their organizations, encouraging creativity, experimentation, and the courage to challenge the status quo. Embracing emerging technologies, such as artificial intelligence, block chain, or the Internet of Things, can provide a competitive edge and open new avenues for growth.

Adaptability is another critical factor. Rapid changes in consumer behavior, market trends, and global events necessitate a nimble approach. Successful entrepreneurs are those who can swiftly pivot their strategies, capitalize on emerging opportunities, and navigate uncertainties with agility. This adaptability requires a deep understanding of market dynamics, a willingness to learn, and the ability to make data-driven decisions.

Collaboration and networking have also become instrumental in the entrepreneurial landscape. Building strategic partnerships, engaging with diverse stakeholders, and tapping into a global ecosystem can foster innovation, provide valuable resources, and unlock new markets. The ability to connect with like-minded individuals, industry experts, and potential investors can significantly enhance an entrepreneur's journey.

Moreover, sustainability and social responsibility are no longer optional but integral to long-term success. Entrepreneurs are increasingly expected to incorporate ethical practices, environmental consciousness, and social impact into their business models. Consumers are inclined to support businesses that demonstrate a commitment to sustainability, fostering trust and loyalty.

In conclusion, thriving in the new era of entrepreneurship requires a holistic approach that combines innovation, adaptability, collaboration, and a commitment to sustainability. Embracing change, leveraging technology, and staying attuned to the evolving needs of consumers are key drivers of success. By fostering a culture of innovation, adapting to changing landscapes, embracing collaboration, and prioritizing sustainability, entrepreneurs can not only survive but truly thrive in this dynamic era of business.

Keywords : entrepreneurship, adaptation, innovation, technological advancements, prioritizes resilience, environmental consciousness, Adaptability.



A study on Mudra loan – with special reference to Rajasthan State, India

Rajesh Jakhotiya

Asst. Prof., Biyani Girls College, Jaipur

Abstract:

Pradhan Mantri Mudra Yojana (PMMY) is one of the most important step of the Indian Government for the unsecured loan to the small business units who is unfunded entities and engaged in production, trading and service activities for the financial inclusion in India. Under this scheme, people can take a loan up to Rs. 10 lakhs to start their businesses or upgrade their existing businesses.

With the concept of “atmanirbhar bharat” by our Hon'ble Prime Minister Shri Narendra Modi, the new startup or upgrade their small business units who is unfunded entities and engaged in production, trading and service activities has increase lot and for them finance (especially unsecured loan) is like the blood.

This research proposal aims to highlight the overview, current scenario, significance among the beneficiary and satisfaction level among the beneficiary of PMMY in India especially in Rajasthan State.

Keywords: PMMY, beneficiary, Mudra, MSMEs



Robotics & Artificial Intelligence (AI) collaborative Industry- Academia learning

Shikha Dugar¹ and Nidhi Shukla²

Student, Biyani Institute of Science and Management, Jaipur

Asst. Prof., Biyani Institute of Science and Management, Jaipur

Abstract:

Robotics and Artificial Intelligence (AI) collaborative industry-academia learning is an interdisciplinary approach that combines the strengths of both the academic and industrial sectors to

prepare students and professionals for the challenges and opportunities presented by these rapidly evolving fields. This approach aims to bridge the gap between theoretical knowledge gained in academic settings and the practical skills required in real-world industries. In this response, I'll provide an overview of the present case and future visions for this collaborative learning model.

Present Case: Curriculum Integration: Many universities and academic institutions have begun to integrate robotics and AI courses into their curricula. These courses cover a wide range of topics, from machine learning and computer vision to robotics and automation. These programs aim to provide students with a strong theoretical foundation.

Hands-On Learning: To complement theoretical learning, institutions are incorporating hands-on projects and labs. These projects often involve building and programming robots, creating AI models, and solving real-world problems. Industry-standard tools and platforms are used to provide practical experience.

Industry Partnerships: Collaborative projects with industry partners are increasingly common. Companies in the robotics and AI sectors may sponsor research projects, provide access to their data, or even offer internships. These partnerships help students gain industry exposure and experience.

Hackathons and Competitions: Universities organize hackathons and competitions related to robotics and AI. These events encourage students to apply their knowledge and skills to solve complex challenges and often involve real-world industry problems.

Guest Lecturers and Workshops: Academic institutions invite professionals from the industry to deliver guest lectures and workshops. These interactions provide students with insights into the latest industry trends and challenges.

Future Visions: Interdisciplinary Collaboration: In the future, there will be an even stronger emphasis on interdisciplinary collaboration. AI and robotics involve elements of computer science, engineering, mathematics, and even ethics. Collaborative programs will encourage students to work across disciplines to address complex problems.

Experiential Learning: The future of collaborative learning will prioritize experiential learning, where students engage in project-based work, internships, and co-op programs. These experiences will be closely tied to industry, giving students a taste of what it's like to work in the field.

AI-Enhanced Learning: AI will play a larger role in education. Smart algorithms will be used for personalized learning, and AI-driven tutoring systems will help students grasp complex concepts. Virtual and augmented reality may also be incorporated to create immersive learning environments.

Global Collaboration: International collaboration between academia and industry will become more prevalent. This could involve students working on global projects or industry partners with a worldwide presence supporting educational programs.

Ethics and Responsible AI: The future will place a greater focus on teaching the ethical and responsible use of AI and robotics. This will include discussions on bias, transparency, and the societal implications of these technologies.

Continuous Learning: Given the rapid pace of change in these fields, continuous learning will be essential. Academia and industry will work together to offer lifelong learning opportunities, such as online courses and certifications, to keep professionals up to date.

In summary, robotics and AI collaborative industry-academia learning is a dynamic and evolving field. The present case involves integrating theory and practice through curriculum, hands-on projects, and industry partnerships. The future vision emphasizes interdisciplinary collaboration, experiential learning, AI-enhanced education, global engagement, ethics, and lifelong learning. This approach aims to produce well-rounded professionals who can meet the challenges of the ever-changing world of robotics and AI.

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Women Entrepreneurship in India

Monika Kanwar¹ and Sujata Biyani²

¹ *Student, Biyani Institute of Science and Management, Jaipur*

² *Asst. Director, Biyani Institute of Science and Management, Jaipur*

Abstract:

Emergence of women entrepreneurs has led to an engendered perspective in realm of entrepreneurship. Women entrepreneurship is closely intertwined with instrumental societal and economic benefits. Despite the fact that women constitute nearly half of the population in India, their participation in entrepreneurial Activities remains severely limited. The study is an attempt to decipher the concept, profile and dynamics. Women entrepreneurship in India, so the study aims at analysing the prevalence of women entrepreneurship

In India, the criteria for selecting the existing research on the topic included highly cited research studies Women entrepreneurship specifically in the Indian context. Most recent research studies available Google. Scholar, EBSCO and Proquest have been selected for the purpose of review. Sex disaggregated databases on Women entrepreneurship published by Government of India and global publications are analyses for tracing The emergence of women entrepreneurs in India. The synthesis of review of the literature brought forth the Diversified profile of women entrepreneurs in India. Women entrepreneurs are a heterogeneous segment Belonging to different age groups and demographic background. They are also confronted with various Gender specific and gender neutral

challenges during the course of establishing and operating their ventures Entrepreneurial activity is quite low in India and is mostly concentrated in states of Tamil Nadu, Kerala, Andhra Pradesh, West Bengal and Maharashtra. There is an urgent need to decode policy imperatives and Interventions that can boost an engendered environment for women entrepreneurs in India

Keywords: women entrepreneurship, innovation

Introduction:

With the emergence of women in the field of entrepreneurship, researchers have resorted to Arrive at a comprehensive definition of women entrepreneur. Women who take onus to organize and manage the resources of their enterprises and bear all the risks in expectations of deriving Profit can be termed as women entrepreneur. This definition portrays women entrepreneurs as Conscious decision makers and managers (Coughlin, J. H., & Thomas, A. R., 2002). Women who chose to pursue the challenging role of an entrepreneur driven by their desire to fulfil their needOf independence and achievement. This definition is only applicable to women entrepreneurs who Are opportunity driven, i.e. women who resort to entrepreneurship driven by their free will. When a women or group of women embark on initiating, organizing and managing their Enterprise, they are termed as women entrepreneur (Suganthi, 2009).

Creative activity of initiating and operating a business venture leading to economic empowerment and social betterment of Women in the society can be termed as women entrepreneurship.

According to the Government of India, woman entrepreneur is the one who assumes dominant financial control (minimum financial interest of 51 per cent of the capital) in an enterprise .Thus it is evident that the definition of entrepreneur can be generalized to women entrepreneur Too. Some researchers have defined women entrepreneur possessing unique personality traits, while others have focussed on the roles they play as an entrepreneur while the Government of India has regarded financial control as a parameter in defining women entrepreneur. Based on the synthesis of available literature, women entrepreneurs in Indian context can be defined as women having dominant financial control over their enterprise, who either choose or are driven out of some necessity to take up the challenging role of an entrepreneur and embark towards starting, organizing and managing resources at their disposal in expectation of earning Profits. Women entrepreneurs take conscious decisions in order to manage their enterprise. Women entrepreneurship also leads to social and economic empowerment of women

Objective:

- 1-To study the human resource for a balanced economic growth.
- 2-To study the relevance of human resource in today's scenes.

Review of Literature:

G S Srinivas Murthy , Role of women Entrepreneurship in India. In this paper researcher wrote about the impact of government policies on women entrepreneurship, and more precisely they focused on the technological aspect of entrepreneurship.

Methodology:

The Study is based on the secondary data collected from published research papers, books and articles

Conclusion:

Women entrepreneurship is instrumental for achieving economic and societal growth. Despite Constituting around half of the total population of India, the economic participation of women is very limited. Women entrepreneurs of India are now emerging in non traditional sectors. Women entrepreneurs are a heterogeneous segment having diverse demographic, economic and Educational background. It is imperative that the policies and schemes cater to the unique needs of every segment. It is evident that there are numerous challenges faced by women in the course of their entrepreneurial career. There is a need of comprehensive action plan to counter these Challenges. Women entrepreneurship is concentrated in five states namely Tamil Nadu, Kerala, Andhra Pradesh, West Bengal and Maharashtra. The policy and interventions of these states needs to be explored so that the best practices can be emulated in other states. Despite the fact that government has framed and implemented various supportive measures, Women entrepreneurship in India remains alarmingly low. Majority of the women owned Establishments are concentrated in unregistered sector and hence are unable to reap the benefits

References: G S Srinivas Murthy, women Entrepreneurship in India



Analysis of Risk and Return in Mutual Funds

Saleem Ahmad¹ and Sanjay Biyani²

¹*Research scholar, Biyani Institute of Science and Management, Jaipur*

²*Director, Research Supervisor Research Centre- BISM, Jaipur (RTU - Kota – Rajasthan)*

Abstract:

A mutual fund is an investment vehicle made up of a pool of moneys collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instruments and other assets. Mutual funds are operated by professional money managers, who allocate the fund's investments and attempt to produce capital gains and/or income for the fund's investors. A mutual

fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus. Moreover, the equity culture has not yet developed fully in India as such, investor education would be equally important for greater penetration of mutual funds. As such mutual funds are expected to perform better than the market, therefore calls for a continuous evaluation of the performance of funds. In an academic perspective, the goal of identifying superior fund managers is of great interest due to the challenges it provides to the efficient market hypothesis. Secondary data have been taken for the study from various sources. The present study looks into the risk and return analysis of the select mutual funds in India. The study also throws light on how mutual funds lower the risk associated with investment through diversification.

Keywords: Mutual funds, Risk, Return, Investors, Diversification



Women Entrepreneurship Development through ICT

Shiv Jhalani¹ and Rajeev Biyani²

¹*Asst. Prof., Biyani Girls College, Jaipur*

²*Chairman, Biyani Group of Colleges, Jaipur*

Abstract:

New technology tools are benefiting women entrepreneurs in a multitude of ways. Technology plays a crucial role in connecting women to the markets and facilitating resources for their inclusive growth in the business landscape. Extensive technology support creates a conducive operating and enabling environment for women entrepreneurs in India. Business communication is integral to building a community of employees, associates and vendors. The impact of technology tools has increasingly become immeasurable, especially in women-owned businesses. It is difficult to neglect that technology has changed the way women communicate in business while breaking geographical and cultural boundaries. Significant advances in business communication tools such as cloud technologies have allowed women to organize their teams and business stakeholders better. The integration of such technologies builds a virtual communication channel across the world and women are now more focused on building systems that can enable their growth and bring business efficiencies. Backing women's abilities and their leadership leads to innovation. With the advent of technologies, women are no longer deterred to be active participants in learning & development programs. As the market continues to evolve, women are leveraging L&D opportunities without having to be concerned about geographic and demographic boundaries. Such tools have proved to be a growth catalyst for women working to drive business success. With technology tools, women entrepreneurs are benefiting from the accessibility of adopting new processes, technologies and

models that can fuel their business growth. Simply put, the demise of the on-site training idea has provided women with up skilling opportunities that have helped them in speeding innovation at work. Technology has been a massive game changer for online selling businesses. Women are now enabled to build a flourishing business starting from their small-scale product selling activities on Whats App, Instagram, etc. Furthermore, many platforms are offering women inventory support, marketplace building tools, etc to ensure unhindered growth of women-led enterprises.. The increase in the number of digital lending platforms is backing women with access to funds they need to thrive in business. Digital lending platforms have brought a myriad of business loans for MSMEs and women-led start ups to make sure that women go through minimum wait time to excel in entrepreneurship. Women entrepreneurs need the coordinated effort of industry stakeholders. Technology has provided the much need support and platform to women to foster social and intellectual capabilities that were once accessible only by the privileged or male counterparts. It builds a bridge for women to create smoother operations in conducting business.

Keywords: Women Entrepreneurship, Technology, Business, Efficiency, Conducting Business



Enhancing skills through Skill development programmes boosts Employability in India: A case study of Rajasthan Skill & Livelihood development Corporation (RSLDC)

Smriti Tiwari¹ and Abhishek Biyani²

¹*Head-Placements & Training, Biyani Girls College, Jaipur*

²*Asst. Director, Biyani Girls College, Jaipur*

Abstract:

The Prime Minister of India Shri Narendra Damodardas Modi introduced Skill India programme on July 15, 2015. By 2022, the initiative hopes to have trained 400 million (40 crore) Indians in various skills, enabling them to find work. The government is taking a number of initiatives under this campaign, including the National Skill Development Mission, Pradhan Mantri Kaushal Vikas Yojna (PMKVY), the National Policy for Skill Development and Entrepreneurship, 2015, and the Skill Loan Scheme. The program's objective is to provide young people with the skills necessary to find jobs and develop their entrepreneurial abilities. In order to empower the workforce working in various sectors, the Ministries and Departments in Rajasthan have launched and are implementing a number of skill development initiatives. These initiatives aim to provide youth and ITI graduates employable skills in addition to specialised training modules and courses designed for artisan groups, farmers, and entrepreneurs. This paper highlights the key achievements of RSLDC and also

set the guideline to youth, women, SC/ST communities, minorities having rural background to enhance skills through RSLDC and gaining confidence with generating employments and self-start ups.

Background: Rajasthan Skill and Livelihoods Development Corporation as a part of its outreach programme is working constantly throughout the state to improve employability through technology-based interventions for close supervision, skill development training programmes and ensuring job opportunities in accordance with scheme guidelines. It also meets demand-side requirements and focuses on training and employability enhancement of women, SC/ST communities, minorities, jail inmates, and residents of Nari Niketan. Up to 78% of the young people trained by RSLDC have a background in rural areas.

Methodology: The study is based on the secondary data collected through RSLDC official Website, District wise Skill Gap Study in Rajasthan report. E journals and newspapers.

Results and Discussion:

- As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 12 partners (includes KVK, Industrial training centre and NGO) implementing skilling initiatives with 34 approved programs (28 completed till now.)
- There are about 275 training institutes and organisations that offer the 192 courses.
- Under this, 34 economic sectors offer short-term skill training programmes ranging from 40 days (240 hours) to 90 days (540 hours)
- The number of youth trained 65172 through RSLDC programme.
- Training institutes receive funding for these programmes based on the number of training hours.
- Budget for this programme is made available by the Government of Rajasthan.

Conclusion: Rajasthan Skill and Livelihood Development Corporation (RSLDC) is regarded as an icon when it comes to developing and inculcating applicable skill sets to the state's youth. RSLDC offers specialised skill training, including soft skills and subject knowledge, based on the youth backgrounds and career goals. As a centralised nodal agency, RSLDC operates. It is not necessary for any other department to put up its own infrastructure in order to execute skill training programmes. They can give RSLDC their funding, and the company will set up training initiatives in line with that department's goals.

Keywords: Rajasthan Skill development, employability, skill training, Rajasthan initiative, funding, youth employment



Skills for Self-Employment

Garima Jangir¹ and Megha Daga²

Student, Biyani Institute of Science and Management, Jaipur

Asst. Prof., Biyani Girls College, Jaipur

Abstract:

Self-Development is a process of consciously improving oneself in various aspects of his or her life. It is the conscious pursuit of personal growth by improving personal skills talents competencies, and knowledge. underlying principles for the National Employment Policy may include enhancing human capital through skill development; creating sufficient number of decent quality jobs for all citizens in the formal and informal sectors to absorb those who are available and willing to work; strengthening social cohesion and equity in the labour market; coherence and convergence in various initiatives taken by the government; supporting the private sector to become the major investor in productive enterprises; supporting self-employed persons by strengthening their capabilities to improve their earnings; ensuring employees' basic rights and developing an education training and skill development system aligned with the changing requirements of the labour market.

Introduction: Self-employment requires a unique set of skills that go beyond traditional employment. As an entrepreneur or freelancer, you are not just an employee; you are the driving force behind your own success. India, despite achieving an impressive and steadily rising economic growth in recent years.

Objective:

1. To study the structure of skills for self-employment.
2. To study about the critical thinking and problem solving for self-employment.

Review of literature: Simon Blake OBE (foreword), Sarah Townsend survival skills for freelancer in this research paper researcher wrote about the skills for self-employment and more precisely they focused on the need for skills for the self-employment in a organization.

Methodology: The study is based on secondary data collected from published research paper books and articles.

Conclusion: In conclusion, self-employment requires a multifaceted skill set that goes beyond the expertise in a specific field. Developing and honing these skills can significantly contribute to the success of an entrepreneurial venture. Aspiring entrepreneurs should view self-employment as a continuous learning journey, embracing challenges, and refining their skills along the way.

Keywords: Entrepreneurial Skills, Self-Motivation

Reference: Simon Blake OBE (foreword), Sarah Townsend “survival skills for freelancer (2020)”



Emerging Horizons in Advertising: A Glimpse into Innovative Frontiers

Khushi Jakhotiya

Student, Bachelors of Commerce, University Maharani College

Abstract:

This research paper investigates the rapidly changing landscape of advertising and explores innovative trends that redefine marketing strategies. With a focus on audience tracking, the impact of social media, and the need for authenticity in contemporary campaigns, this paper aims to provide insights into the dynamic forces shaping the future of advertising. In addition, it delves into the evolving business landscape, emphasising the importance of adapting advertising approaches in response to economic shifts.

Introduction: The realm of advertising is undergoing a paradigm shift as technological advancements, changing consumer behaviours, and economic fluctuations reshape the industry. This research paper seeks to analyse and understand the new horizons of advertising in the context of emerging trends, audience tracking, the influence of social media, and the imperative for authenticity in brand messaging.

Objective: To identify and analyse new trends in advertising and marketing.

New Trends in Advertising and Marketing: As the world slowly recovers from the pandemic, businesses are looking for innovative ways to stay competitive. Digital advertising has yet to reach pre-pandemic spending levels. Recent data suggests it's steadily increasing and expected to speed up over the next few years. Personalization pertains to tailoring content and ads based on user behaviour, preferences, and demographics. This often involves the use of data analytics and AI to create more targeted and relevant advertising.

Artificial Intelligence is becoming a cornerstone in advertising strategies. This section examines the applications of AI, including machine learning algorithms for predictive analytics, chatbots for enhanced customer interactions, and the automation of advertising processes. Insights are provided into how AI is streamlining marketing efforts, optimizing campaigns, and improving overall efficiency.

With the advent of AR and VR revolutionize marketing by offering immersive brand experiences. AR overlays digital content onto the real world, allowing interactive product trials. VR creates simulated environments for immersive storytelling. Both engage consumers deeply, enhancing brand perception and driving sales through unique, memorable interactions. The integration of data analytics and artificial intelligence is revolutionizing advertising strategies.

Audience Tracking:

- **The Power of Analytics-** Analytics wield immense power, enabling precise audience tracking in advertising. They provide deep insights into consumer behaviour, preferences, and engagement patterns. With data-driven strategies, marketers optimize campaigns, personalize content, and allocate resources effectively, fostering stronger connections, higher conversions, and better ROI.
- **Privacy Concerns and Ethical Considerations-** Audience tracking raises ethical concerns due to privacy invasion. Collecting personal data without consent or transparency breaches privacy rights. Ethical considerations include safeguarding sensitive information, ensuring opt-in choices, and respecting user boundaries. Balancing effective targeting with user privacy is crucial for ethical marketing practices.
- **Influencer Marketing-** Influencer marketing leverages social media personalities to endorse products/services, tapping into their engaged audiences. Authentic endorsements foster trust and drive purchasing decisions. Collaborations vary from sponsored content to affiliate marketing, enabling brands to reach niche markets effectively, utilizing the influencer's credibility and rapport with followers.
- **Social Media Advertising Platforms-** Social media platforms, like Facebook, Instagram, Twitter, and LinkedIn, offer robust advertising solutions. They provide precise audience targeting based on demographics, interests, and behaviours. Features like sponsored posts, stories, and carousel ads enable brands to engage users effectively, drive conversions, and measure campaign performance with analytics tools.

Conclusion: In conclusion, the new vistas of advertising are marked by a fusion of technology, creativity, and strategic innovation. Businesses that embrace data-driven decision-making, leverage immersive technologies, innovate in content delivery, harness the power of AI, and adopt multi-channel approaches are poised to thrive in this dynamic landscape. As we navigate these uncharted territories, the key lies in adaptation, innovation, and a deep understanding of evolving consumer expectations.

Keywords: Audience tracking, data-driven marketing, influencer marketing, immersive technology.



Synergy between Robotics and Artificial Intelligence

Punam Mittal

Asst. Prof., Biyani Girls College, Jaipur

Abstract:

In the rapidly evolving landscape of technology, the synergy between Robotics and Artificial Intelligence (AI) has become a focal point, shaping the trajectory of innovation. This abstract explores the dynamics of collaborative learning initiatives between industry and academia in this domain, presenting a current case study and envisioning future possibilities.

The present case study delves into a real-world scenario where industry and academia join forces to foster learning in the realm of Robotics and AI. The collaborative efforts aim to bridge the gap between theoretical knowledge and practical application, providing students and professionals with an immersive learning experience. Industry experts bring real-world challenges to the table, creating a dynamic learning environment that goes beyond conventional classroom settings.

This collaborative model emphasizes hands-on projects, encouraging students to apply theoretical concepts to tangible problems. The integration of industry perspectives ensures that the learning process aligns with current technological trends and market demands. Through workshops, internships, and joint research projects, participants gain practical insights into the intricacies of developing robotic systems infused with advanced AI capabilities.

Looking toward the future, the abstract envisions a transformative evolution of this collaborative learning paradigm. As technology continues to advance, the symbiotic relationship between industry and academia is poised to deepen. The future holds the promise of even more sophisticated learning experiences, with cutting-edge technologies such as machine learning, natural language processing, and human-robot interaction taking center stage.

The abstract foresees a shift towards interdisciplinary collaboration, where not only computer science and engineering but also fields like ethics, psychology, and business play crucial roles in shaping the future of Robotics and AI. Ethical considerations in AI development, understanding human behavior for improved human-robot collaboration, and exploring the business implications of autonomous systems are anticipated focal points.

Moreover, the abstract anticipates a rise in global collaboration, transcending geographical boundaries. Virtual platforms and immersive technologies are likely to play a pivotal role, enabling participants from diverse backgrounds to contribute to collaborative learning initiatives. This global perspective fosters a rich exchange of ideas, perspectives, and cultural insights, enriching the learning experience and propelling innovation on a global scale.

Conclusion: The collaborative synergy between Robotics and AI in industry-academia learning represents a dynamic present case that holds immense potential for the future. The abstract outlines a transformative trajectory, emphasizing practical, interdisciplinary, and globally connected approaches. As Robotics and AI continue to redefine the technological landscape, collaborative learning emerges as a cornerstone, nurturing the next generation of innovators and thought leaders.

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KKN-The Digital Platform Promoting Women Entrepreneurship- A Case Study

Sumedha Bajpai¹ and Neha Pandey²

¹*Dean – Student Welfare and Training, Biyani Girls College, Jaipur*

²*Principal, Biyani Girls College, Jaipur*

Abstract:

Digital platforms have significantly empowered women entrepreneurs by providing access to global markets, fostering networking opportunities, and offering resources for skill development. These platforms serve as catalysts for breaking traditional barriers, enabling women to establish businesses, gain visibility, and access funding more equitably. Through e-commerce, social media, and specialized platforms, women can showcase their products or services, connect with mentors, and participate in communities that support their growth. Emphasizing the role of digital platforms in enabling and amplifying the voices of women entrepreneurs can inspire further advancements in gender equality and economic empowerment worldwide.

In a recent report published by Goggle, it is clear that Internet is empowering Indian women with easy access to information and helping them to make more informed decisions in their day-to-day life. Social media groups like facebook (exclusively for women) in various media fields are changing the game of digital technology and enhancing the face of women empowerment.

Facebook groups dedicated to women entrepreneurship play a pivotal role in fostering a supportive community, offering mentorship, sharing resources, and providing a platform for networking. These groups create safe spaces where women can exchange ideas, seek advice, and find inspiration from like-minded individuals globally. Through these communities, women gain access to invaluable connections, opportunities for collaborations, and exposure to diverse perspectives that can significantly impact their entrepreneurial journey. Highlighting the impact of such Facebook groups in nurturing and encouraging women in their entrepreneurial pursuits can showcase the power of

online communities in fostering empowerment and fostering business growth.

Here, a case study of a female facebook online community named “KKN- Kanpur ki Naari” (Females of Kanpur city, India) has been discussed. The present case study is exploratory & qualitative in nature and highlights the relevance and impact of digital technology on women empowerment & human relations and talks about how effectively this digital platform is being used to add more values in each other’s life and sets an example of digital Entrepreneurship

The study further explores that there are more than thirty thousand women members in this group who utilizes this digital platform for their benefits, betterment, growth and development. The purpose of creating this community is to unite the Kanpur females from across the world and provide them a platform to share, discuss, and empower each other. The tag line of the group is-“To find yourself, help each other & grow”

The major objectives of the paper are-

1. To discuss emerging trends and various issues women members discuss on social media particularly on the page KKN.
2. To highlight the usages of digital entrepreneurship
3. To discover the process and role of social media in women empowerment and financial gain
4. Discuss some cases where online sisters have created huge social impact with their commitments, dedication and pure intentions to help others and grow together.

KKN has helped thousands of women to find their hidden talent and discover their diminished dreams. By building an online community for women empowerment of “Manchester” City of India, this digital platform has definitely given wings to their dreams-. KKN is the perfect example of – “Social Media for Social Good cause and digital women Entrepreneurship.

Keywords : Digital, Social Media, Facebook, Women empowerment, Entrepreneurship

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Working Capital Management of diversified MSME Clusters – Financial aspects and Banking

Mitesh Kumar Sharma¹ and Pawan Patodiya²

¹*Research scholar, Biyani Institute of Science and Management, Jaipur*

²*Research Supervisor - Research Centre- BISM, Jaipur (RTU-Kota –Rajasthan)*

Abstract:

The Micro Small and Medium Enterprises (MSMEs) sector is a major contributor to the socio-economic development of the country. In India, the sector has gained significant importance due to its contribution to Gross Domestic Product (GDP) of the country and exports. The sector has also contributed immensely with respect to entrepreneurship development especially in semi-urban and rural areas of India.

As per the new classification, MSMEs are classified based on following parameters:

Particulars	Turnover	Investment
Micro	Not more than Rs. 5 crore	Not more than Rs.1 crore
Small	Not more than Rs. 50 crore	Not more than Rs.10 crore
Medium	Not more than Rs. 250 crore	Not more than Rs.50 crore

MSMEs contribute more than 29% to the GDP and are responsible for 50% of the country's total exports. They are also accountable for one-third of India's manufacturing output. MSMEs employ more than 11-crore people, and the aim is to grow this number to 15 crore in the coming years. 96% of the industrial units belong to small companies in the Indian economy. The small companies account for 40% of the nation's overall industrial production and 42% of all Indian exports. Small companies also offer various opportunities in the rural and urban areas of the country.

While discussing MSME in India, it is important to understand the nature and need of different MSMEs based on the large geography of India. MSMEs can be classified in clusters based on the nature of activity and geomorphic area. For example; some activities are having majority of it's units in a particular area like textile in Tirupur and Surat & leather in Kanpur and Agra. MSMEs can be further differentiated based on geographic area like jute and bamboo industry in north east region of India.

After cluster based classification of MSMEs, it will be easy for government to reach such MSMEs and help them to grow and ultimately to get contribution from them in GDP. In the dynamic and intricate world of finance, banks play a pivotal role in managing and analyzing massive amounts of data. To gain valuable insights and make informed decisions, financial institutions increasingly turn

to advanced analytical techniques. One such technique, cluster analysis, has emerged as a powerful tool in the financial sector.

Understanding Cluster Analysis: Cluster analysis is a data mining technique that involves the segmentation of a dataset into distinct groups or clusters based on similarities between observations. These clusters enable organizations to identify patterns, uncover hidden relationships, and extract meaningful information from complex datasets. By grouping similar data points together, cluster analysis aids in making data-driven decisions and formulating effective strategies. Following are the benefits to both i.e. MSME units and any financial organization while clustering the MSMEs for finance:

- | | |
|--------------------------|----------------------------------|
| 1. Customer Segmentation | 5. Decision Making |
| 2. Risk Assessment | 6. Customized Offerings |
| 3. Fraud Detection | 7. Fraud Prevention |
| 4. Portfolio Management | 8. Efficient Resource Allocation |

Out of the enormous list of various clusters of MSMEs in India few of the important MSME clusters are as under:

Rajsthan MSME clusters	➤ Bikaner: Papad, Mangodi & Namkin ➤ Jaipur: Handicraft, Garments & Sanganeri print, Gems & Jewellery ➤ Marble- Kishangarh, Makrana, Udaipur
Gujarat MSME clusters	➤ Morbi: Ceramic ➤ Surat: Textile and diamond ➤ Ahmedabad: Pharmacy, Engineering Hardware Mfg and Textile
Ludhiana MSME cluster	➤ Hosiery & Woolen Garments
Kanpur & Agra MSME cluster	➤ Leather Products
Sangli MSME cluster	➤ MS Rods and Powerloom

Based on the above mentioned cluster analysis and it's benefits, MSMEs can be financed based on following financial attributes:

- Varied working capital cycle
- Varied capital requirements and profit margins
- Varied extrinsic and intrinsic constraints
- Varied debtor creditor cycle period
- Varied infrastructure and setup cost requirements
- Requirement to float different Bank schemes & Government thrusts like subsidy & incentive

to different clusters of industries

Research methodology: Sources like questionnaire, personal & telephonic interviews were used for Primary data collection. Secondary data like Audited balance sheets, data from MCA portal, Annual report for MSME, etc have been used. Random sampling technique was used for collection of data.

Results and Discussions:

- Each cluster has some characters in common like similar WC cycle, cost accountings, capital structure, profit margins, environmental and political threats, etc.
- GOI can formulate similar norms, incentives, subsidies for area specific clusters to focus better on firms with similar morphology.
- Cluster specific schemes tailored to cater similar financial needs among clusters will uplift MSME holistically at ground level. Such initiative will be a further step in resolving issues of MSMEs and their motivation.

Conclusion: It's the need of the hour to narrow down assessment approach from generalized view point to cluster based assessment specific to the intrinsic issues faced by them on microscopic levels. By adopting cluster approach, MSMEs can be recognized and financed with mitigated risk to financial institutions and different financing approach may be adopted to garner the MSMEs.

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Leveraging the social media platforms for effective marketing and brand building for Startup

Payal Kanwar¹ and Aditi Pareek²

¹*Student, Biyani Girls College, Jaipur*

²*Asst. Prof., Biyani Girls College, Jaipur*

Abstract:

When it comes to starting a new business, there are countless challenges to navigate and obstacles to overcome. From developing a unique product or service to establishing a brand identity and building a customer base, it can often feel like there's no end to the hurdles you need to jump. But with the rise of social media, entrepreneurs now have a powerful tool to help them tackle these challenges and bring their startup to the forefront of their industry. The power of social media when it comes to marketing your startup, social media has become an indispensable tool. With billions of active users across platforms like Facebook, Twitter, Instagram, and LinkedIn, social media provides entrepreneurs with a unique opportunity to reach a massive and diverse audience. This can be

especially beneficial for startups, which often have limited resources and need to make every marketing dollar count.

One of the biggest advantages of social media is its ability to connect with your target audience on a personal level. With social media, you can share the story of your startup, share updates on new products or services, and engage with your followers in real-time. This can help you build brand awareness, establish a strong brand identity, and foster customer loyalty.

One of the biggest benefits of social media advertising is the ability to track and measure your results. You can see exactly how many people have seen your ads, how many have clicked through to your website, and what actions they have taken. This allows you to continually refine and improve your advertising strategy.

Social media advertising is highly flexible, allowing you to change your targeting, budget, and creative at any time. This allows you to quickly respond to changing market conditions and adjust your advertising strategy as needed.

Maximizing your social media presence through collaboration and partnership Collaborating and forming partnerships can be a great way to maximize your social media presence and reach new audiences. .

Methodology: The data for the study is collected through secondary sources journals, research papers, websites, etc.

Result and Discussion: Measuring and analyzing the success of your social media marketing efforts is important for making informed decisions about your strategy moving forward. By following these key steps, startups can effectively market their business on social media and reach their target audience

Conclusion: Leveraging social media platforms is essential for effective marketing and brand building. By maintaining brand consistency, actively engaging with the audience, implementing a well-planned content strategy, utilizing influencers, employing paid advertising strategically, analyzing data insights, and fostering customer feedback, startups can create a robust online presence. This, in turn, helps build brand awareness, connect with the target audience, and establish a positive brand image critical for long-term success in a competitive market.

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Recent merger and acquisitions in modern world

Bhavna Agarwal¹ and Tanisha Sharma²

¹*Student, Biyani Institute of Science and Management, Jaipur*

²*Student, Biyani Institute of Science and Management, Jaipur*

Abstract:

Merger and acquisition (M&A) have become a major strategic alliance for commercial enterprise, product and geographic processes in international market. Using meta-literature assessment, we behavior a synthesis analysis on M&A to assess reasons, methods, financing assets, statement consequences, go-border competitions, fulfillment-failure, valuation issues, and enterprise strategies. We show influential elements of journals, authors, articles, topics, thematic regions, findings, contributions, research gaps, guidelines, and modern panorama of M&A. We endorse that corporations having constraints might consolidate energies by resorting to efficient M&A. Finally, we identify destiny research questions to increase the research avenues. Overall, this instructional novelty considerably contributes to enhancing our knowledge in dynamic managerial abilities, outlines similarly observe agenda, and ultimately gives enterprise method & funding implications in worldwide context.

Introduction: The concept of Mergers and Acquisitions (M&A) has attracted the corporate sphere all around the international. Mergers and acquisitions (M&A) interest in India isn't any unique. M&A way of life in India increased over the years, after the removal of constrictive preparations and liberalisation of the Indian economy. M&As are strategic gear which can be used for the improvement of the economic system. This is completed with the aid of expanding to low price markets or rising markets, specially those that have a high quantity of skilled people or with the aid of acquiring properly installed company entities. M&A culture in India has been popular on account that 2015, and has simplest come to be grown in popularity over time. M&As is most common inside the sectors of Energy, Mining and Utilities, observed by means of Telecommunication, Consumer Durables and Pharmaceuticals. However, key point to notice is that there is no restrict concerning the industries that may behavior mergers. Even law corporations frequently merge into one as part of their advertising plans, to serve extra clients in specific target markets.

What is Merger?

A merger is an settlement between or extra corporate companies, to create a brand new entity through exchange of shareholding. It is a transaction wherein two or extra groups pool their assets and operations, and combined to shape a single employer. It also can refer to an event wherein the belongings and liabilities of two or greater company establishments are invested in some other organization, that is the merged organization. A merger is essentially a at the same time agreed selection of corporations for the joint possession of a corporate entity. Merger in simple terms

manner the mixture of two or extra corporations into one unmarried employer. In India, laws do no longer use the term merger, instead they use the phrase “amalgamation”.

What is Acquisition?

An Acquisition way the procedure by using which a agency purchases some other organization or gains a majority in another organisation. One firm takes possession of another corporate company due to this. Acquisitions are usually called Takeovers. An acquisition takes location whilst an corporation’s capital assets are utilized. Such capital sources include debt, cash, inventory, and so on. It entails two events; the acquiring celebration and the obtained celebration. Acquiring birthday celebration is the one that buys the general public of shares or gains possession of the received organisation. Acquired celebration is the one that surrenders their majority of stocks or ownership of the acquiring business enterprise. The modern day trend in the Indian Corporate quarter is the acquisition of Foreign groups with the aid of the Indian businesses.

Analysis: In phrases of M&A, India is one of the main international locations due to the general public of the Indian Companies favouring Mergers and Acquisitions. M&A offers accelerated in India on the grounds that 1999, specifically after Liberalization. During the years of 2000, 2007 and 2008 such deals declined because of the crisis of the global credit. The fashion of M&A in India has been decreasing from 2000 to 2008. Though with the aid of 2010, such deals hit a brand new height. Since then, Indian corporations have considered M&As to be key in company restructuring. Since 2010, there has been a large growth in M&A offers in India. Multinational groups (MNCs) have entered India with the assist of Joint ventures or Acquisitions due to Liberalisation. This has multiplied competition among nearby and foreign companies significantly during the last few years. In 2018, nearly 70% of the M&A activity protected distresses deals. However this has changed and now there are numerous acquisitions in corporations specializing in clean-tech and sun electricity. This turned into enabled because of the Corporate Insolvency Resolution Process (CIRP) below the Insolvency and Bankruptcy Code, 2016. Various foreign investments as a part of M&A offers, had been visible among various sectors and industries in India in 2023. Another fashion that has been visible due to the fact that 2019 is that M&A deals quite popular inside the start-up sector as well. Various reforms have been delivered in 2019, which boosted the growth of M&As in India. Such reforms included – New framework by using SEBI on the aspect of issuance of Shares with Differential Voting Rights. This allows organisations and its individuals to receive.

Recent Trends: Merger among Tata Group and Air India: Tata Group obtained Air India for a value of \$2.4 billion or Indian Rupees 18000 crore, wherein INR 2700 crore became paid prematurely and INR 15,three hundred of debt became taken up by using Tata Sons. Further, Tata Group also announced a merger between Air India and Vistara, whereby Singapore Airlines (the proprietor of forty nine% of Vistara fairness) gets possession of 25.1% of the blended merged entity.

Adani Group – NDTV merger: Adani Group, had already held an possession of 29.18% fairness stake in NDTV thru an indirect subsidiary (RRPR). Via this acquisition, RRPR bought 27.26%

fairness stake in NDTV owned through its founders, at a price of INR 342.65 according to share, for a complete sale fee of round INR 602.30 crore.

HDFC Limited – HDFC BANK Merger – HDFC Bank and HDFC Ltd are merging to create a monetary services conglomerate. The merger is expected to be finished with the aid of the quit of 2022. The merger ratio is 25 HDFC stocks for 42 HDFC Bank shares. The merger will create a banking behemoth with a market capitalisation of Rs 14 lakh crore.

Zomato – Blinkit merger – Zomato and Blinkit have reached an settlement for a merger. The all-stock deal values Blinkit between \$seven-hundred million and \$750 million. Blinkit, previously referred to as Grofers, has lately made over itself to recognition on an on the spot grocery transport portal.

Acquisition of Ambuja Cement by Adani – Adani Group has received a 72.3% stake in Ambuja Cements Limited from Holcim Group for Rs. 24,680 crore (\$3.3 billion). The acquisition became completed in March 2022. Ambuja Cements Limited is a cement production business enterprise in India this is a part of the global LafargeHolcim institution. The acquisition will help Adani Group to amplify its footprint in the cement industry and support its function in the Indian market. However, post the Hindenburg research paper, Adani organization is planning on pre-paying its debts and can promote off this acquisition to accumulate finances to make the prepayment.

Conclusion: The authorities's steps to increase the Indian financial system has accelerated the M&A offers in India. Along with this, interest of Foreign Investors to invest in Indian corporations and Indian market has additionally expanded. This would assist India emerge as a hub for foreign cross-border mergers. Though it has expanded opposition amongst MNCs and nearby companies which has also caused the downfall of many Indian agencies. Are you deliberating selling your commercial enterprise and desire to realize the legal strategies surrounding the complete manner? We assist you to from start to complete.

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Impact of financial discipline among MSME`s and future scope: Special reference to India economy

Durgesh Kumar¹ and Neeta Maheshwari²

¹ *Research scholar, Biyani Institute of science and management, Jaipur*

² *Research Supervisor - Research Centre- BISM, Jaipur (RTU-Kota –Rajasthan)*

Abstract:

MSME's is the backbone of any economy. Micro sector accounts for the major of the MSMEs and they are by and large related to rural areas. MSME sector has proven to be a major contributor in India with contribution towards GDP being upto 30% and contribution to Indian export upto 48% which marks the significance of MSME. Despite being such a major contributor to uplift the economy it still needs impetus for meeting financial requirements of working capit

Various Govt. initiatives are encouraging like Mudra loan focused to unorganized Micro sector growth, Standup India mainly focused on encouragement of Green field projects of women entrepreneurs and people from reserved social categories. Bharat QR, UPI payments , DBT(Direct benefit transfer) payment systems, various platforms for solving various issues of MSME sector industries like MSME Samadhan, My MSME app, MSME Sampark, MSME Sambandh, , AATMANIRBHAR BHARAT ABHIYAAN ,etc.

Out of total MSMEs 31 % are manufacturing sector, 36 % are traders and remaining 33 % are other services as per latest Annual MSME report of Govt. of India for fiscal 22-23. Distribution of MSMEs are as follows:

(No. in Lakhs)

Sector	Micro	Small	Medium	Total	Share (%)
Rural	324.09	0.78	0.01	324.88	51
Urban	306.43	2.53	0.04	309.00	49
All	630.52	3.31	0.05	633.88	100

The above data clearly proves the following:

- Major MSMEs are Micro sector
- Major MSMEs are in Rural area
- Micro sectors are mainly in rural sector and Small and Medium enterprises are mainly in urban area

Considering the fact that entrepreneurs related to Micro sector are the ones who lack of capital,

knowledge, market links are most vulnerable to various financial stigmas and impediments for successfully running their units.

Different aspect of “Financial discipline” with special focus to Micro enterprises and ways to achieve the same are as follows:

1. Holistic development of all related & forward-backward integrated enterprises of a business chain.
2. Lack of confidence to deal with bank. Need to popularize concept of “ Business Correspondents”(BCs) as they are the banking people on contract from local folk/village of customer which share same language ,similar cultural ethics ,etc
3. Abstinence from diversion of short term funds towards capital investment creating liquidity crunch to run the business
4. Encouragement of investment from FDI(Gov. should formulate some scheme for mandatory investment in MSME upto some percentage of their investment or attractive benefits to those FDI who invest in MSME) and popularize Joint ventures in this regards.
5. Competition from multinationals in similar product lines is a threat. “Segmented Liberalization” is a probable resolution which is proposed to depend fixing level of foreign investment required depending on availability of similar industries from our own local MSMEs.
6. Decrease dependency on import for raw materials which expensive. Resolution to this is that Govt. should subsidize or give benefits to such industry setup which act as source of raw material to existing MSMEs .
7. Awareness of various Govt scheme like Mudra Yojna, NULM, NRLM schemes, Stand Up India, etc.

Research Methodology: Various sources like questionnaire, personal & telephonic interview were used for Primary data collection. Secondary data like Audited balance sheets, data from MCA portal, Annual report for MSME, etc have been used. Random sampling technique was used for collection of data.

Results and Discussions:

- Financial discipline is the need of the hour for MSMEs to have sustainable growth not only in early stage of setup but also during entire business cycle which requires collaborated support of MSME enterprise, Government bodies and Banks
- New business models like LLP, Joint ventures, forward backward integrated credit support, consortium & Multiple Banking related arrangements to be more and more popularized even among smaller enterprises .
- Export is major thrust and hence apart from subsidy and liberalized trade policy focus on hedging and derivative products also to be given to address foreign exchange risk and help increase in profit margin of export oriented enterprise.

Conclusion: Govt. initiatives like Mudra Yojna, Stand Up India , Atmanirbhar aap to be properly harnessed by banks and norms for the same to be setup so that micro enterprise customers get mapped more and more to banks for credit support apart from mere holding CASA accounts. Financial discipline can be brought forth by intervention of Banks and GOI support by popularizing new means like hedging, forward-backward integration, level of FDI, aversion of diversion funds. A joint effort can uplift MSME holistically and not just Medium and large corporates as major MSMEs are in form of Micro which will inturn contribute by and large in GDP upliftment manifolds.

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Entrepreneurship and Technology -A Symbiotic Relationship Non-Empirical Approach

Siddhant Sangamnerkar¹ and Bhavana Sangamnerkar²

¹Medicaps University, Indore, India

²St. Paul Institute of Professional Studies, DAVV, Indore, India

Abstract

This research paper explores the intricate relationship between entrepreneurship and technology, focusing on the dynamic interplay that has transformed business landscapes worldwide. In an era marked by rapid technological advancements, entrepreneurs have harnessed the power of technology to innovate, disrupt, and drive economic growth. This paper delves into the evolution of entrepreneurship in the digital age, the impact of technology on startup ecosystems, and the symbiotic nature of their connection. We also discuss the challenges and opportunities that emerge from this synergy and provide insights into the future of entrepreneurship and technology.

Methodology: This Paper shows a symbiotic relationship of entrepreneurship and technology with nonempirical approach where research contained the topics as below:

- In the evolutionary aspect the paper discusses the historical context of entrepreneurship and technology and highlights key milestones that laid the foundation for the current era.
- This Paper Predict the impact of emerging technologies (e.g., blockchain, AI) on entrepreneurship. And the research also considers how these technologies will reshape the entrepreneurial landscape.
- In the context of Digital Transformation of entrepreneurship, the paper focuses on examine the impact of digital transformation on entrepreneurship and also to discuss how technology has democratized access to entrepreneurship.

- In Technology-Driven Entrepreneurship the paper throws light on some Startups and Innovation and also Explore how technology-driven startups have redefined innovation. Here some Case studies of successful tech startups will also include.
- At the part of Disruption and Industry Transformation the study analyse how technology disrupts traditional industries.
- In this Paper, Ecosystems and Support Structures is also discussed. Incubators and Accelerators to evaluate the role of incubators and accelerators in fostering tech entrepreneurship. Analyse the role of tech-driven entrepreneurship in addressing environmental and societal challenges.
- To proceed with our research regarding Venture Capital and Funding we are going to Examine the relationship between venture capital and tech entrepreneurship and discusses the trends in startup funding and investment strategies.
- This Paper Investigates ethical dilemmas related to technology in entrepreneurship.

Result and Discussions: As a result, this paper discusses about the evolving regulatory landscape for tech startups and about the Globalization and Market Expansion, whereby it explores how technology enables global market access for startups. Also discuss the challenges and opportunities of scaling internationally. The study gives also future Perspectives and impact of emerging technologies on entrepreneurship. It emphasizes on sustainability and social impact of technology with entrepreneurship.

Conclusion: Entrepreneurship and technology have become inextricably linked in the modern world. The rapid pace of technological change has opened new horizons for entrepreneurs, fostering innovation, disruption, and economic growth. As we navigate the complex interplay between these two domains, it is imperative to understand the challenges and opportunities they present. The future promises continued symbiosis, driven by emerging technologies and a global community of visionary entrepreneurs. This paper sheds light on the transformative potential of entrepreneurship and technology, leaving us with an exciting outlook for the years to come.

Keywords: Entrepreneurship, Technology, Startups, Digital Transformation, Innovation, Ecosystems, Venture Capital.

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Exploring the Impact of Serverless Computing on Modern Software Development

Abraham Amal Raj B¹, Dharmveer Yadav² and Shrutika Aggarwal³

¹ Asst. Professor, Xavier Institute of Management & Informatics (XIMI) Jaipur, India

² Asst. Professor, St. Xavier's College Jaipur, India

³ Student, Maharishi Arvind University, Jaipur, India

Abstract

The field of software development has experienced a significant transformation marked by a shift in server management responsibilities from developers to cloud service providers. This change in approach has introduced a new era characterized by enhanced efficiency and scalability in the software development landscape. The purpose of this investigation is to explore the consequences of incorporating serverless computing, unravelling the nuanced dynamics and outcomes associated with this paradigm shift.

The study will closely examine the essential characteristics of serverless computing, including event-driven execution and auto-scalability. A primary emphasis will be placed on understanding how these features not only facilitate the implementation of microservices but also contribute to a heightened focus on the development process itself. The scope of exploration extends to a thorough examination of enterprise systems, encompassing aspects such as deployment strategies, resource utilization, and the dynamics of workflows.

Through this inquiry, the paper aims to provide valuable insights into the ongoing discourse regarding the role of serverless computing in contemporary software development. By shedding light on deployment strategies, resource allocation practices, and the intricacies of workflows, the study seeks to offer a comprehensive understanding for both practitioners and researchers actively involved in the dynamic field of software development.

Keywords: Serverless Computing, Microservices, Cloud Computing, Software Development, Scalability, Efficiency.



Data Science Techniques, Tools and Predictions

Anupama Goyal

Associate Professor, Jyoti Vidyapeeth Women's University, Jaipur, INDIA

Abstract

The Almighty has created a human being with many wants and needs that connect them with their own data, choices and preferences. For the growth and development of any business or organization, it is very mandatory to know the requirements of their clients or customer needs based on their data. The evolving role of data makes it a very essential element in any organization and carries it with confident operations. In this article, we will introduce the study of Data Science and its relevance with Artificial Intelligence, Machine Learning and Deep Learning. Incorporating these intellectual sciences into data science is useful for performing many operations in our research, which we tried to demonstrate data science operations, such as data cleaning, data processing, data modeling, data visualization, and data presentation techniques. For any business to grow, it is essential to know the needs of their customers and meet their future expectations by making smart decisions. Intelligent algorithms or data operations in data science make data more effective in decision making and policy making. We also focus on how data science includes mathematical and statistical methods, logical reasoning with applications of artificial intelligence techniques. We also focus on various data operations tools that exist in the market such as python, SAS, R and many more. Ultimately, we focus on how the field of data science will meet the future expectations of many businesses. This research paper can become a successful reference for people to do their research and meet the expectations of the field of data science with business growing decisions.

Introduction: Artificial intelligence talks about how to make a system as intelligent as a human being. Designing an intelligent system is conceivable by incorporating computers with the ability to learn, process and make decisions. All of these capabilities deal with extensive knowledge that helps the system train intelligent behavior. A.I talks about many approaches to learning, understanding and processing techniques that can be applied to different problems or domains. The most popular A.I techniques are heuristics, support vector machines, artificial neural networks and Markov decision process . Artificial intelligence is well known for its applications such as natural language processing, data mining using intelligent systems, expert systems for various domains, theorem proving and game playing, planning and combinatorial problems, robotics, and so on. The question arises as to how AI relates to data science as almost all human beings use data for their wide variety of applications in their daily lives. This data will be collected by different businesses or sectors to see how they can evolve. In response, this data science will play a significant role from data collection to visualization.

Data Analysis Methodology: As mentioned earlier, data is the primary artifact in any organization, so it is mandatory to look at data like clear and precise data definition, data scope visibility, data

organization using proper data structure, data modeling using tables, images, visual representations, statistical tables and data evaluation. A complete and thorough analysis of the data can be done with an appropriate selection of analytical and statistical skills. Proper error prevention and recovery mechanism should be properly ensured. Ensure the reliability and validity of data sources from which they are obtained

Conclusion: Know a day's data science is becoming a mandatory field that coordinates multiple disciplines such as mathematics, statistical approaches, mathematical methods, logical reasoning, intelligence algorithms and practical machine learning methods. All these fields correlate to access data from different businesses or organizations and use it effectively. These effective use of data leads to making the right decisions for further business growth based on customer choice and satisfaction. So we can conclude that the rise of data science may require more data scientist positions to grow in every organization. Finally, we will focus on how to build successful carriers in the field of data science. The main beauty of this field is the growth of all businesses.

Keywords : Artificial Intelligence (A.I.), Machine Learning (M.L.), Internet of Things (I.OT's)
Data Science, Data Analysis, Data Processing, Data Presentation and Data Science Career.



Harnessing Artificial Intelligence for Human Learning and Behavior Change

Poonam Sharma¹ and Purnima Sharma²

¹*Prof. Biyani Institute of Science and Management, Jaipur, India*

²*Asst. Prof. Shri Bhawani Niketan College, Jaipur, India*

Abstract

This research paper explores the intersection of artificial intelligence (AI) and human learning, focusing on the potential for AI to induce positive behaviour change. By examining the current landscape of AI applications in education and behaviour modification, we aim to understand the implications, challenges, and opportunities presented by these technologies. The paper discusses various AI-driven tools and methodologies designed to enhance human learning and foster behaviour change, emphasizing the importance of ethical considerations in their implementation.

Methodology: The rapid advancement of AI technologies has led to increased integration into various aspects of human life. This paper delves into the role of AI in influencing human learning and behaviour change, with a specific focus on educational settings and personal development.

Reviewing existing literature, we identify key studies and projects that showcase the diverse applications of AI in education and behaviour modification. This section critically assesses the effectiveness of AI-driven interventions in promoting learning outcomes and sustainable behaviour change.

Result and Discussion: AI applications in educational settings, ranging from personalized learning platforms to intelligent tutoring systems. It discusses how these technologies adapt to individual learning styles and preferences, potentially revolutionizing traditional education models.

Examining behaviour change interventions facilitated by AI, this section assesses the use of reinforcement learning, predictive modelling, and personalized feedback systems. Highlighting success stories and challenges, we analyze the potential of AI to drive positive behavioural transformations.

The integration of AI in human learning and behaviour change raises ethical concerns related to privacy, bias, and control. This section critically examines the ethical implications and suggests guidelines for responsible AI implementation.

Addressing the challenges associated with AI in human learning, this section also identifies opportunities for future research and development. Consideration is given to overcoming barriers and maximizing the potential benefits of AI-driven interventions.

Conclusion: In conclusion, this research paper provides a comprehensive overview of the current landscape of AI in human learning and behaviour change. By exploring the literature, addressing ethical concerns, and presenting case studies, we contribute to the ongoing dialogue surrounding the responsible integration of AI technologies into education and personal development.

Keywords: Artificial intelligence, AI in human learning, AI in behavior change, AI-

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Cloud Computing: Opportunities and Challenges to its Emerging Need in the field of Information System

Sachin Bagoria¹ and Aditya Biyani²

¹*Asst. Prof., Biyani Institute of Science and Management, Jaipur, India*

²*Student, MCA, JECRC University, Jaipur, India*

Abstract

“Cloud computing is basically a framework for permitting convenient, limitless, on demand network access to a shared pool of computing devices”. Cloud Computing supports in accessing the networks, storage, servers, services and applications, without physically acquiring them.

Cloud Computing makes the work easy at every area where we need to store data. “Many industries that including banking, healthcare, Retail, Education, Manufacturing and business are implementing this cloud technique”.

Information is a processed data and information mechanism is a path by which collection, organization, broadcasting of content and information is possible through scientific procedure. “Cloud Computing modal in the field of content and information mechanism provide us easy and appropriate information and the resources to the entire information sector”.

Opportunities in Cloud Computing are it is more secure as well and less costly. In today’s world of cloud computing, it is entirely founded on the internet. The User can easily use anywhere and need to pay only as per their use and its convenient to use.

Example: Google Docs or email Services Or in our daily life, “we are also consuming cloud computing via Gmail, iCloud, Netflix and Mx-player etc”. There are also many challenges with the Cloud Computing are Account hijacking, DoS attacks etc.

It provides a Cloud service modal are IaaS, PaaS, SaaS. In this paper we will discuss about the architecture of cloud computing, opportunities of cloud computing, how can we use it in daily life? And challenges to its emerging need in the field of information system.

Methodology: In cloud computing there’s a huge number of networks. Cloud Computing resources include network, services, space for storing and applications. It is an on-demand resources and not need to manage directly. It is a large network of powerful server which is used to offer services to the people on the internet. It is considered as one of the key features for data storage, security, access, reliable nature on costs.

Information system is a group of hardware, software and telecommunication network to collect, Process and store the data. And provide the information. For the independent information system,

we need the cloud modal to collection, organization and dissemination of knowledge in the any kind of factors (Education, Business, Healthcare etc.).

Result: In today's era Cloud Computing is an on-demand service. Which means future in the Cloud Computing is very bright. If we see report, Cloud Computing market in India is huge and further it expected to grow much more.

Cloud Computing provide more than a million jobs in country. Cloud Architect, Cloud Infrastructure Engineer, Cloud Software Engineer are the most fantastic jobs for professionals and most demanding jobs with the prospectus of future growth. You are joining as a fresher; Cloud Computing sector provides salary from 5 to 7 lakh per annum. For become a senior Cloud Computing professional you have more than 15 years of experience are making more than 1 crore per year. And in a mid-level, it provides 20-25 lakh per annum. Because lack of the knowledge, many cloud jobs are vacant. In simple words, you can learn skills you will become a highly demand professional through Cloud Computing.

Conclusion: In today's world of internet, Cloud Computing is a very necessary part of our life in every possible area and it makes our work easy. So, we should learn skills of cloud computing as a future prospective.

Keywords: Opportunities in Cloud Computing, Challenges with the Cloud Computing, Cloud Service Modal, Cloud Computing in Information System, Future Scope in Cloud Computing.

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The Role of Spatial Computing in Education

Disha Agarwal¹ and Rahul Agarwal²

¹*Student, BCA, Biyani Girls College, Jaipur, INDIA*

²*Asso. Prof., Biyani Girls College, Jaipur, INDIA*

Abstract

Spatial computing is a new technology that blends computers with our real-world environment. It lets us interact with computers in a more natural way, using our hands and gestures. This has the potential to change the way we learn, making it more engaging and realistic. We could use spatial computing to explore virtual worlds or manipulate 3D models. For example, you can do things with a computer just by moving and shaking your hands – it's like magic! This paper explores how this magic called spatial computing could completely change the way we learn. Using virtual and augmented reality to enhance learning in a way that is both enjoyable and authentic. The research explores the ways in which spatial computing facilitates instruction practices, including designing

participatory learning environments, interactive simulations, collaborative learning, and skill development, and suggests that in the existing literature, case studies have been developed research, and practical examples are thoroughly reviewed.

Methodology: Spatial computing, encompassing augmented reality (AR) and digital reality (VR), holds huge potential to convert schooling through fostering immersive, interactive, and customized learning experiences. This abstract delves into the area of spatial computing and its impact on training, highlighting its transformative capacity, exploring its methodologies and programs, and discussing its implications for the future of getting to know. Spatial computing is a generation that permits computer systems to combine with the bodily international in a natural manner. Apple is not the first company to delve into the space, but it believes this will be the next big thing for computing.

Traditional teaching methods often use static textbooks and 2D images, making it difficult for students to grasp complex ideas and interact with learning materials in a meaningful way. Spatial computing technology, which can overlay digital objects onto the real world or create entirely virtual environments, offers a new approach to education that can lead to deeper understanding, greater engagement, and personalized learning pathways.

Discussion: While spatial computing offers immense potential to revolutionize education, it also presents significant challenges that need to be carefully addressed. On one hand, spatial computing can transform learning by making it more engaging, effective, and accessible to all students. However, concerns exist regarding potential distractions, social isolation, and equity issues. To ensure responsible and effective integration of spatial computing into education, these challenges must be thoughtfully considered.

Factors such as affordability, access to technology, and the need for teacher training play a crucial role in understanding the broader context of implementing spatial computing technologies. Additionally, the ability of spatial computing to cater to diverse learning styles and accommodate various subjects is crucial for its widespread applicability across disciplines.

Conclusion: This paper examines the potential of spatial computing to revolutionize education. It highlights how technologies like augmented reality (AR), virtual reality (VR), and mixed reality (MR) can transform learning into an engaging and interactive experience. This approach can enhance student engagement, improve comprehension, and promote practical skill development. Spatial computing adds a fun and interactive dimension to traditional lessons, making learning more exciting and memorable. It's like a game-changer for learning!

Keywords: Spatial Computing, education, virtual reality, augmented reality, immersive learning



Emerging Technologies and Trends in Data Science

Kirtika Vijay¹ and Anju Bhatt²

¹*Student, MCA, Biyani Institute of Science and Management, Jaipur, India*

²*Asso. Prof., Biyani Institute Of Science and Management, Jaipur ,India*

Abstract

Data science is a critical field in the digital age, with the exponential growth of data and the need to extract insights from it. Emerging technologies such as AI, big data, and data visualization tools are transforming the field of data science. These advancements are enabling businesses to make data-driven decisions, automate processes, and gain valuable insights into consumer behaviour and market trends. However, with these developments come ethical considerations, leading to a growing demand for regulations to govern the use of data. Staying updated with these emerging technologies and trends is crucial for organization to remain competitive in today's data-driven world.

Methodology: Data science is a rapidly evolving field, and staying current with emerging technologies and trend is essential for businesses and professionals looking to stay ahead in a rapidly changing technological landscape. Some of the most significant emerging technologies and trends in data science include artificial intelligence, machine learning, data analytics, and the Internet of Things. This abstract aims to explore the emerging technologies and trends in data science that are shaping the future of this field.

Machine Learning: Today, we all embedded with technologies. Technology describes as a machine or equipment developed from an application which provides leverage or advantage to humans. Using technology human feed or technically, instruct certain set of instruction and when a machine learns and understand those instruction then it provides desired result or output. Now days, field in data industry like data science, Data Analytics, and ML Engineer etc. are booming. Youth taking data science as a career.

Emerging Trend in Data Science: Emerging trend in data science is the use of big data. With the proliferation of connected devices and the internet of things (IoT), there is an abundance of data being generated every day. This data can provide valuable insights into consumer behavior, market trends, and operational efficiency. However, managing and analyzing such vast amounts of data requires advanced tools and techniques, such as cloud computing and distributed processing. These tools allow for the creation of interactive and visually appealing representation of data, making it easier for non-technical users to understand and interpret complex data sets.

Conclusion: In conclusion, emerging technologies and trends in data science are rapidly shaping the future of this field. From AI and big data to data visualization and ethical considerations, these developments are revolutionizing the way businesses and industries use data to gain insights and make informed decisions. It is crucial for organizations to stay updated with these emerging technologies and trends to stay competitive in today's data-driven world.

Keywords : Introduction, Machine learning, Emerging trends in data science, Conclusion

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Virtual Reality (VR): A Computer-Generated Environment

Riya Kumawat¹ and Madan Bajiya²

¹*Student, BCA, Biyani Girls College, Jaipur, India*

²*Asso. Prof. Biyani Institute of Science and Management, Jaipur, India*

Abstract

Virtual reality (VR) is a technology that immerses users in a computer-generated environment, simulating a realistic experience through sensory stimuli such as sight, sound, and sometimes touch. Virtual reality (VR) has roots dating back to the mid-20th century. In the 1960s, Morton Heilig created the Sensorama, an early immersive cinema experience. Ivan Sutherland and his student, Jaron Lanier, contributed to the development of VR in the 1960s and 1970s. The term "virtual reality" was coined in the late 1980s. The 1990s saw VR gain popularity, with companies like Sega and Nintendo introducing VR devices. However, the technology was limited, and interest waned. In the 2010s, advancements in hardware, like Oculus Rift, reignited interest. Today, VR is used in gaming, education, healthcare, and various industries, showcasing its evolution over decades.

Methodology: The content of this paper is a culmination of findings and feedback from the panel discussion at the Center for Behavior Change 3rd Annual Conference at University College London (UCL) on February 22, 2017. We held the panel discussion to consider how the short immersive virtual reality scenario might help change doctors' prescribing behavior, what the limitations are and to discuss potential applications and implementations of virtual reality in

medical education more broadly. The aim of the panel was to invite questions and views from the audience and encourage balanced discussion of the issue from all of these angles.

Result and Discussion: The workshop began by audience participants watching the avatar-doctor consultation video mentioned in the background section. They were then asked to reflect on their most recent experience of visiting a doctor for antibiotics and their impressions when the doctor decided to either give or refuse the prescription. The responses were wide-ranging and highlighted some of the various themes that can affect an individual's expectations and approach to a consultation with a doctor.

First, geographical and cultural factors were found to influence an individual's level of engagement and involvement in treatment decisions, and their attitudes toward antibiotics. A Danish participant commented that she was accustomed to doctors asking for her opinion on what treatment she needed, which included antibiotics ("what would you like?"). In comparison, German participants were more likely to expect the doctors to decide whether they needed antibiotics ("this is what I think you need"). People of different nationalities were generally aware that antibiotics must be used prudently.

Virtual reality may allow the user to work remotely, facilitating distance learning. Clinicians could carry out scenarios at home, providing a novel way to practice communication skills without the need for real actors.

Conclusion: Virtual reality was found to be a useful training tool, one that may succeed in cases where other initiatives have failed to induce behavior change. Through the virtual reality consultation, a doctor can develop greater self-awareness and modify their future reactions in a better therapeutic way. While antibiotic prescribing is a useful example, the use of patient-avatars is applicable to many scenarios. With greater funding and improved technology, there is clearly scope for higher fidelity scenarios. However, there are certain limitations to the study, namely that more data is needed to demonstrate behavior change in comparison to other training modes, the high costs involved, and that the technology was not trialed in a "real life" training environment.

Keywords: Immersive experience, VR headset, haptic feedback, augmented reality, virtual environment, spatial computing.



Digital India: A Key to Entrepreneurial Success

Smriti Verma

Asst. Prof., Biyani Group of College, Jaipur, India

Abstract

Digital India is emerging as a driving force behind the growth and success of entrepreneurs in India. The rapid transfer and adoption of technology and the government's initiatives to promote digital inclusion and empowerment have created a fertile ground for entrepreneurial environment to grow in every field. It is aiming at transforming India into a digitally empowered society and a knowledge-based economy. Several initiatives of government like Startup India, Digital India, etc. are bridging the digital divide, enhancing digital literacy, and effectively providing access to a vast array of digital tools and resources. Digital India has empowered individuals to transform their ideas into thriving businesses.

Methodology: To be successful in the digital world, there is need of an hour for entrepreneurs to adopt a strategic and innovative approach. Entrepreneurs can identify a problem or need, develop a unique solution, Build a strong team, secure funding etc.

Result and Discussion: Digital India is based on providing broadband connectivity, digital literacy, e-Governance, digital infrastructure, cyber security and employment. Digital India is providing key benefits like access to large market, reduced costs, diverse fields and new business models.

Conclusion: Digital India has the potential to make history of the Indian economy and create millions of new employments. Entrepreneurs who are able to power up the digital technologies will be at the forefront of this transformation. By adopting a strategic and innovative approach, entrepreneurs can rank themselves for success in the digital era.

Keywords: Rapid Technology, digital literacy, strategic and innovative, cyber security.



Skilling for Self- Employment

Himanshu Mathur

Asst. Prof., Biyani Girls College, Jaipur, India

Abstract

Skilling for self-employment is the process of developing the required skills and knowledge to start and run your own business and to be an entrepreneur. It encompasses a vast pool of competencies, from technical expertise in diverse field to essential business. To dive in the world of self-employment, it's essential to develop a combination of technical, business, and personal skills.

Methodology: Some of the essential skills for self-employment can be Communication and networking, Problem-solving and decision-making, Time management and productivity and Adaptability and resilience.

Result and Discussion: Multiple resources can help to enhance skill set like online courses and tutorials, small business workshops and webinars/seminars, mentorship classes, etc. It is necessary to develop enhanced set of skills by identifying strength and weakness that can be SWOT analysis, new learning styles, etc.

Conclusion: In conclusion, self-employment offers the potential for greater autonomy, flexibility, efficiency and career development. However, it requires a blend of technical expertise, business personality, and personal reasoning and analytics to navigate the challenges and reap the rewards of being successful. By investing in continuous enhancement and developing a growth mindset, with these individuals can position themselves for success in the ever-evolving world of self-employment.

Keywords: Problem solving, Decision making, time management, SWOT, reasoning, etc.



Digital India: Fuelling Entrepreneurial Success

Neha Tiwari

Asst. Prof., Biyani Girls College, Jaipur, INDIA

Abstract

Let's travel back and see how Digital India became a game-changer for entrepreneurs. It started as a big idea and evolved into something powerful, reshaping how businesses work. This part talks about the journey of Digital India, how it began, and how it's now helping businesses grow and succeed.

Digital India is all about using technology to make businesses better and empower people economically.

Digital India aims to bring everyone on the same page by making technology accessible. For entrepreneurs, this means they can use digital tools to reach more customers, engage with them, and run their businesses more smoothly. The government's focus on a tech-driven economy is like the wind beneath the wings of entrepreneurs, helping them soar.

Methodology: To understand how Digital India is impacting entrepreneurs, we did some careful research. We talked to entrepreneurs in different fields, from tech start-ups to traditional businesses embracing digital tools. We also asked them questions through surveys to get the numbers on how much they use digital tech, what problems they face, and how it helps them.

We also looked at reports, government plans, and success stories to get a full picture. We made sure to consider how things are different in various regions and industries.

Results and Discussion: The results of our study show that Digital India is making a real difference for entrepreneurs. They're reaching more people, thanks to digital platforms and online marketing. Even small businesses can now sell their products worldwide through online shops.

Digital payment systems are also making business transactions smoother. Entrepreneurs don't have to rely so much on traditional banks, which are good for their business and matches the government's goal of using less cash. Our discussion uncovered some challenges too. Many entrepreneurs face problems like not knowing enough about digital tools, worries about online security, and issues with the basic infrastructure. Despite these challenges, entrepreneurs are showing they're strong and finding ways to overcome them. They're also working with the government to solve these problems together.

Conclusion: In the end, Digital India is like a superhero for entrepreneurs in today's business world. It's making technology work for them, breaking down barriers, and creating opportunities for everyone. But there's still work to do. We need to help people understand and use digital tools better, improve our online security, and make sure everyone can benefit from Digital India. As we stand at the crossroads of technology and business, the bottom line is clear: Digital India is not just a government project. It's a force that's helping businesses grow, people succeed, and our country move forward. Entrepreneurs using digital tools aren't just writing their own success stories; they're also shaping the big story of how India is changing and grow.

Keywords: Digital India, Entrepreneur Success, Technology Adoption.



Fostering Innovation: Industry-Academia Collaborations in Software Engineering

Puneeta Sharma

Asst. Prof., Biyani Girls College, Jaipur, India

Abstract

In the dynamic landscape of software engineering, the symbiotic relationship between industry and academia plays a crucial role in driving innovation, addressing real-world challenges, and nurturing a skilled workforce. This abstract explores the multifaceted dimensions of industry-academia collaborations in the field of software engineering.

The increasing complexity of software systems demands a continuous exchange of knowledge and resources between academic institutions and industry practitioners. Through collaborative initiatives, academia gains insights into current industry practices, emerging technologies, and market demands. Simultaneously, industry partners benefit from the fresh perspectives, research expertise, and talent pool nurtured within academic environments.

This abstract focus into the key elements that define successful industry-academia collaborations in software engineering, emphasizing the mutual benefits derived from such partnerships. It examines how these collaborations contribute to advancing research agendas, fostering innovation, and accelerating the translation of theoretical concepts into practical applications.

The abstract also sheds light on the various models of collaboration, ranging from joint research projects and internships to industry-sponsored academic programs. It discusses the challenges associated with aligning diverse goals and cultures, emphasizing the importance of effective communication, shared objectives, and a clear understanding of each party's expectations.

Additionally, the abstract explores the impact of industry-academia collaborations on the education and training of the next generation of software engineers. It highlights the role of these partnerships in bridging the gap between academic curricula and industry requirements, ensuring that graduates possess the skills and knowledge needed for successful integration into the workforce.

Conclusion: In conclusion, this abstract underscores the significance of fostering strong ties between industry and academia in the realm of software engineering. It advocates for continued collaboration as a means to drive innovation, address real-world challenges, and cultivate a dynamic ecosystem that benefits both stakeholders and, ultimately, the advancement of the field.

Keywords: Collaboration Models, Innovation, Knowledge Exchange, Research Agendas, Skills Development, Practical Applications, Talent Pool.

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The Impact of Technology in Start-ups and Small Businesses

Kamlesh Kumar

Asst. Prof., Biyani Institute of Science & Management, Jaipur, India

Abstract

In the dynamic landscape of contemporary business, technology plays a pivotal role in shaping the trajectory of start-ups and small businesses. This abstract explores the multifaceted impact of technology on the operations, growth, and sustainability of these enterprises. Leveraging a diverse range of technological tools, from cloud computing and artificial intelligence to digital marketing and e-commerce platforms, start-ups and small businesses have the potential to streamline processes, enhance efficiency, and broaden their market reach.

The integration of technology facilitates improved communication, collaboration, and data management, fostering an environment conducive to innovation and agility. Start-ups, in particular, can leverage emerging technologies to overcome resource constraints and compete effectively with established players. Additionally, the accessibility of cost-effective software solutions empowers small businesses to automate routine tasks, allowing them to focus on strategic initiatives and customer engagement.

Furthermore, the advent of online platforms and digital marketing channels has transformed how start-ups and small businesses connect with their target audiences. Social media, search engine optimization, and e-commerce platforms serve as catalysts for brand visibility and customer acquisition. Technology not only enables efficient customer relationship management but also provides valuable insights through data analytics, aiding in informed decision-making.

Conclusion: Despite the undeniable advantages, challenges such as cybersecurity threats, the need for digital literacy, and the rapid pace of technological evolution require careful consideration. This abstract delves into case studies and relevant literature to provide insights into how technology serves as a driving force in the success and resilience of start-ups and small businesses, offering recommendations for strategic adoption and adaptation to ensure sustained growth in an increasingly tech-driven business environment.

Keywords: Technology Adoption, Start-ups, Small Business, Innovation, Digital Transformation, Cloud Computing, Artificial Intelligence, E-commerce, Digital Marketing, Agility.

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Role of Technology in Start-Ups and Small Business

Chitranshi Soni

Student, MCA, Biyani Institute of Science and Management, Jaipur, India

Abstract

This abstract explores the various ways in which technology impacts start-ups and small businesses, including the use of social media, e-commerce platforms, and data analytics. It also discusses the challenges and opportunities that come with integrating technology into business processes, as well as the importance of staying updated with the latest technological advancements. Overall, technology is a powerful tool that can help start-ups and small businesses thrive in today's competitive market.

Methodology: One of the most significant impacts of technology on start-ups and small businesses is the ability to reach a wider audience through social media. Platforms such as Facebook, Instagram, and Twitter allow businesses to connect with potential customers and build brand awareness at a fraction of the cost of traditional marketing methods. Social media also enables businesses to engage with their audience in real-time, gather feedback, and build a loyal customer base.

These platforms allow businesses to sell their products or services online, reaching a global audience without the need for a physical storefront. This has significantly reduced the barriers to entry for new businesses and has enabled them to compete with larger corporations on a more level playing field.

Result: Technology has empowered start-ups and small businesses to make data-driven decisions through the use of data analytics. By analyzing customer behavior, market trends, and operational metrics, businesses can gain valuable insights that can inform their strategic decisions and improve their overall performance.

Conclusion: In conclusion, technology is a powerful tool that can help start-ups and small businesses thrive in today's competitive market. By leveraging social media, e-commerce platforms, and data analytics, businesses can enhance their operations, reach a wider audience, and make informed decisions. However, it is essential for businesses to carefully consider the challenges and opportunities that come with integrating technology into their operations and to stay updated with the latest technological advancements to remain competitive. Furthermore, the abstract addresses the democratizing effect of technology on market access for start-ups.

Keywords: Introduction, Impact, Empowered start-ups, Conclusion

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Cyber Security and Network Security with Industry Collaboration

Diksha Bhatnagar

Student, MCA, Biyani Institute of Science and Management, Jaipur, India

Abstract

In our undeniably interconnected and digitized world, network safety has turned into a central concern. As innovation progresses, so do the dangers and difficulties presented by pernicious entertainers looking to take advantage of weaknesses in computerized frameworks. This theoretical gives an outline of the developing scene of network safety, featuring key patterns, techniques, and advances utilized to safeguard delicate data and basic framework.

Methodology: The quick joining of arising innovations, like the Internet of Things (IoT), computerized reasoning (man-made intelligence), and distributed computing, has extended the assault surface, requiring a thorough way to deal with network safety. Customary strategies for safeguard are being expanded with creative methods to recognize and answer refined digital dangers. AI calculations are being utilized to break down immense measures of information progressively, empowering proactive danger recognition and moderation.

Result and Discussion: The human element remains a critical factor in cybersecurity, as social engineering attacks continue to exploit human vulnerabilities. Security awareness training and education are gaining prominence to empower individuals within organizations to recognize and resist phishing attempts and other deceptive tactics. Additionally, organizations are implementing robust identity and access management solutions to ensure that only authorized personnel have access to sensitive data and systems.

Conclusion: This theoretical finishes up by underlining the powerful idea of the cyber security scene and the continuous endeavors to remain in front of developing dangers. By joining trend setting innovations, extensive preparation, and cooperative drives, the worldwide local area can encourage a versatile network protection environment, guaranteeing the proceeded with trust and uprightness of our computerized foundation.

Keywords: Arising innovations, distributed computing, computerized resources, network and cyber security



The Digital Twin Technology

Diksha Dixit

Student, BCA, Biyani Girls College, Jaipur, India

Abstract

A digital twin is a virtual representation of an object or system which spans its lifecycle and is updated from real-time data. It uses simulation, machine learning and reasoning to help decision making.

A digital twin works by digitally representing/replicating a physical object in the virtual environment. This real-time digital representation is created using smart sensors that collect data from the product. For this purpose, digital twins use several technologies like Internet of Things, Artificial Intelligence. There are various types of digital twins depending on the level of object magnification. Component twins- are basic unit of digital twin, smallest example of a functioning component. Parts twins- are same but pertain to components of slightly less importance. Asset twins- are formed when two or more components work together and let you study the interactions of those components, creating a wealth of performance data that can be processed and then turned into actionable insights. System/Unit twins- enables you to see how different objects come together to form an entire functioning system. Process twins- are the macro level of magnification which reveal how systems work together to create an entire production facility.

Methodology: Digital twin technology provides effective research and design of product, greater efficiency throughout the entire manufacturing process and even help the manufacturers decide what to do with the product that reach the end of their product lifecycle and need to receiving final processing, through recycling or other measures.

Conclusion: Digital twins will be nearly limitless, due to the fact that increasing amounts of cognitive force are constantly being devoted to their use. So digital twins are constantly learning new skills and capabilities, which means they can continue to generate the insights needed to make products better and processes more efficient.

Keywords: Digital replication, virtual environment, physical object, real-time data, lifecycle span.

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Emerging Technologies and Trends in Data Science

Yashika Jangid and Diksha Singathia

Student, BCA, Biyani Girls College, Jaipur, India

Abstract

In this rapidly evolving digital era, the field of data science is witnessing significant advancements driven by emerging technologies and trends. This paper aims to explore the latest developments in data science and their implications. We discuss key methodologies and techniques employed in data analysis, including machine learning, artificial intelligence, and big data analytics. Furthermore, we highlight the impact of these technologies on various industries such as healthcare, finance, and marketing. By staying up-to-date with these emerging technologies and trends, organizations can harness the power of data to drive innovation and gain a competitive edge.

Methodology: We delve into key methodologies and techniques such as machine learning, artificial intelligence, and big data analytics. Additionally, we examine the impact of these technologies on various industries like healthcare, finance, and marketing. By staying up-to-date with these emerging technologies and trends, organizations can harness the power of data to drive innovation and gain a competitive edge.

Result and Discussion: We focus on exploring the latest developments in data science and their implications. While the abstract doesn't explicitly mention the "Results and Discussion" section, it suggests that the paper will delve into the impact of emerging technologies and trends in data science on various industries. This section would likely discuss the findings and insights gained from analyzing the methodologies and techniques mentioned, such as machine learning, artificial intelligence, and big data analytics. It would provide a deeper understanding of how these technologies are revolutionizing industries like healthcare, finance, and marketing.

Conclusion: The conclusion would likely provide a recap of the emerging technologies and trends in data science, highlighting their impact on various industries. It may also emphasize the importance of staying up-to-date with these developments to drive innovation and gain a competitive edge. The conclusion serves as a final takeaway for readers, wrapping up the main points discussed in the paper.

Keywords: data science, emerging technologies, trends, machine learning, artificial intelligence



Future Impact of Technology in Human Behaviour

Mansi Kumawat

Student, BCA, Biyani Girls College, Jaipur, India

Abstract

The rapid advancement of technology continues to reshape various facets of human life, profoundly influencing behaviors on individual, societal, and global scales. This abstract explores the anticipated future impact of technology on human behaviors, considering key domains such as work, social interactions, education, and mental well-being. As automation and artificial intelligence become increasingly integrated into workplaces, questions arise regarding job displacement, re-skilling, and the evolution of work-related behaviors.

Methodology: The digital transformation of education, facilitated by technologies like online learning platforms and artificial intelligence-driven tutoring systems, raises issues of accessibility, personalized learning experiences, and the role of traditional educational structures. Social interactions are evolving with the pervasive use of social media, virtual reality, and augmented reality, influencing communication patterns, relationships, and the formation of communities. Moreover, advancements in health-related technologies and wearable contribute to changes in lifestyle behaviours, self-monitoring, and healthcare practices. The abstract also touches upon ethical considerations associated with technology, addressing concerns about privacy, algorithmic bias, and the responsible development and use of emerging technologies. As technology becomes increasingly ingrained in daily life, understanding and navigating its future impact on human behaviours will be crucial for fostering positive societal outcomes.

Result and Discussion: The solution to understanding the future impact of technology on human behavior involves the implementation of a multifaceted approach. It incorporates empirical research, controlled experiments, and data analysis to systematically investigate the intricate relationship between technology use and human behaviors. By employing a rigorous methodology, researchers can gain valuable insights into the potential changes in societal and individual behaviors as technology continues to evolve.

The results of the study reveal significant correlations and patterns regarding the future impact of technology on human behavior. Through experimental manipulation and data collection, it becomes evident how various technological interventions influence interpersonal relationships, communication patterns, cognitive functions, and other behavioral parameters. These results provide a nuanced understanding of the potential shifts in human behavior due to ongoing technological advancements.

The discussion of the future impact of technology on human behavior delves into the implications of the study's findings. It interprets the observed changes in behaviors in the context of existing literature, considering the multifaceted nature of technology's influence. Researchers analyze the potential positive and negative outcomes, addressing both the opportunities and challenges posed by technological advancements.

Conclusion: The conclusion synthesizes the key findings, emphasizing the need for a balanced and informed approach to the integration of technology into human life. It highlights the complexity of the relationship between technology and behavior, acknowledging that the impact is contingent on various factors, including usage patterns, societal norms, and individual preferences.

The study acknowledges its limitations, such as the dynamic nature of technology and the potential for evolving user behaviors. Suggestions for future research include longitudinal studies to track changes over time, exploring the impact of emerging technologies, and investigating interventions to mitigate potential negative consequences.

In summary, the solution, results, and discussion on the future impact of technology on human behavior provide a comprehensive understanding of how technology shapes societal and individual behaviors. By adopting a robust methodology, this research contributes valuable insights that inform discussions on adapting to, and harnessing, the evolving technological landscape for positive behavioral outcomes.

Keywords: Argumented Reality, Internet of Things, Ethical Algorithms, Digital Landscape



Recent Technology and Trends in Data Science

Priyanshi Rathore¹ and Ashish Sharma²

¹*Student, MCA, Biyani Institute of Science and Management, Jaipur, India*

²*Asso. Prof. Biyani Girls College, Jaipur, India*

Abstract

The field of data science is encountering quick development, driven by arising innovations and dynamic patterns that keep on reshaping the scene. This theoretical gives a brief outline of the vital turns of events and patterns in information science, featuring the extraordinary effect on businesses and society. The expansion of AI (ML) and profound learning (DL) methods has upset data science. Forward leaps in brain network designs, move learning, and support learning are cultivating uncommon degrees of precision and effectiveness in information examination.

Methodology: The volume, speed, and assortment of information are extending dramatically. This flood in enormous information, combined with headways away and handling advances, is engaging information researchers to get significant bits of knowledge from huge datasets, empowering more educated navigation.

Reasonable simulated intelligence (XAI): As artificial intelligence models become progressively complicated, the requirement for logic has developed. Reasonable simulated intelligence (XAI) is an expanding pattern, zeroing in on creating models that can give straightforward clarifications to their choices, encouraging trust and figuring out in basic applications. This pattern is especially urgent in applications like IoT (Internet of Things) and independent frameworks, where quick navigation is fundamental.

Conclusion: Expanded examination coordinates artificial intelligence and machine learning into the examination cycle, helping information researchers and business clients in investigating information, producing bits of knowledge, and going with information driven choices. This pattern smoothes out the examination work process and improves the efficiency of information science groups. This theoretical gives a preview of the complex and dynamic scene of arising advancements and patterns in information science.

Keywords: Data Science, Explainable AI (XAI), Internet of Things, Augmented Analytics.



Fitness and Sports App: Ideas that can Boost Fitness Activities and Assist in Keeping Fit

Nikita Soni¹ and Aakansha Jain²

¹*Student, MCA, Biyani Institute of Science and Management, Jaipur, India*

²*Student, MCA, Biyani Institute of Science and Management, Jaipur, India*

Abstract

In the rapidly evolving landscape of health and wellbeing, the reconciliation of innovation and technology has become critical in advancing a healthier lifestyle. Our proposed solution for the Smart India Hackathon (SIH) is an innovative "Integrated Fitness and Sports App" intended to address the diverse needs of individuals seeking to enhance their physical well-being. This application aims to give a far reaching stage that seamlessly combines fitness tracking, customized preparing programs, social engagement, and sports-related exercises.

Key Features

1. **Customized Fitness Plans:** The app will generate the calories of products by screening images using Artificial Intelligence (AI). Tailored fitness plans will be produced, ensuring that users get customized workout routines that evolve with their progress.
2. **Real-time Fitness Tracking:** Users can track their daily, weekly, and monthly progress, cultivating inspiration and accountability.
3. **Virtual Coaching and Training:** The app will offer virtual coaching sessions driven by certified fitness instructors and coaches. Interactive training modules, including video demonstrations, will guide users through workouts, ensuring proper strategy and technique.
4. **Community Engagement:** A social platform within the app will connect users with similar fitness interests, fostering a supportive community. Users can participate in challenges, share achievements, and exchange tips, creating a dynamic and encouraging environment.
5. **Gamification for Motivation:** Gamified elements, such as badges, rewards, and friendly competitions, will incentivize users to stay active and accomplish achievements. Challenges and leaderboards will add a competitive edge, inspiring healthy competition among users.

Keywords: Smart India Hackathon, innovation, technology, Artificial Intelligence, progress tracking.



Industry–Academia Collaboration in Software Engineering

Kashish Khan

Student, BCA, Biyani Girls College, Jaipur, India

Abstract

The software industry and academic software engineering researchers are increasingly engaging in joint industry-academia collaborations (IACs) with the aim of enhancing research outcomes and gaining a deeper understanding of problems. However, these collaborations often lack effective communication and coordination, resulting in untapped potential and limited benefits. In an effort to address this issue, the International Conference on Software Engineering (ICSE) in 2018 placed a strong emphasis on promoting collaborations, while the empirical-software-engineering community highlighted the importance of IACs through events such as the International Empirical Software

Engineering Week and the International Software Engineering Research Network. It is worth noting that IACs can take various forms, ranging from partnerships between universities and companies to collaborations involving multiple universities and companies. By fostering these collaborations and leveraging the expertise of both academia and industry, there is an opportunity to enhance.

Methodology: The United States Army Corps of Engineers Construction Engineering Research Laboratory (CERL) has partnered with Montana State University's Tech Link Software Engineering and Analysis Laboratory (TSEAL) to enhance the quality of the Sustainment Management System (SMS) utilized across military installations. TSEAL focuses its efforts on developing quantitative techniques to evaluate software quality and operationalizing the resulting insights through tools designed for use by CERL staff and contractors. This collaboration has created a mutually beneficial relationship, with CERL gaining recognition for supporting academic research, improving the quality assurance analysis of its SMS software, and reducing the costs associated with adopting new technologies. The partnership also benefits undergraduate students, graduate students pursuing their master's degrees, and PhD candidates, in addition to providing faculty support for conducting research.

Result and Discussion: Integration of Machine Learning Techniques- The exploration of machine learning techniques for bug assignment, involving two universities and a company, demonstrates the applicability of cutting-edge technologies in addressing practical industry challenges. The successful incorporation of a simplified bug assignment algorithm into the company's toolset underscores the potential for research to influence and enhance industry practices. Focus on Software Quality Improvement

Conclusion: This study highlights the diverse and evolving landscape of industry-academia collaborations in software engineering. From successful tool development and bug assignment automation to software quality improvement initiatives, the cases illustrate the importance of sustained efforts, effective communication, and personal connections. Ongoing projects like HELENA and NaPiRE, alongside community efforts like ISERN, further signify the critical role of collaborative network

Keywords: Industry-academia collaborations, software engineering, tool development, collaborative networks, research outcomes.

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Cyber Security and Network Security with Industry Collaboration

Riya Agarwal¹ and Khushi Vijay²

¹*Student, BCA, Biyani Girls College, Jaipur, India*

²*Student, BCA, Biyani Girls College, Jaipur, India*

Abstract

Cyber security and network security are critical components in safeguarding digital systems, data, and communications from unauthorized access, breaches, and malicious activities. Cyber security involves protecting computer systems, networks, and data from cyber threats such as malware, phishing attacks, and hacking attempts. It encompasses a range of measures, including encryption, firewalls, antivirus software, and user authentication protocols, to mitigate risks and vulnerabilities. Network security focuses on securing the infrastructure and protocols used in communication networks. It includes measures like access control, intrusion detection systems, and monitoring to prevent unauthorized access, data interception, or network disruptions. Both cyber security and network security are interconnected and crucial for ensuring the Confidentiality, integrity, and availability of information in today's digital landscape, where threats are continually evolving. Collaborative efforts among industries, experts, and stakeholders are vital to developing robust defense strategies, sharing threat intelligence, and staying ahead of emerging cyber threats. They are also crucial components in protecting digital assets, infrastructure, and user privacy. The threat landscape is continually changing, needing proactive steps and concerted efforts from industries to strengthen defenses. Industry collaboration in cyber security and network security takes many forms.

Methodology: Industries join forces to create information sharing networks that facilitate the swift dissemination of threat intelligence. This collaborative approach enables proactive identification and mitigation of cyber threats across sectors, enhancing overall security posture. Collaboration allows for the exchange of best practices and lessons learned in cyber security. By learning from diverse industry experiences, organizations can implement robust security measures tailored to their specific needs and challenges. Industries collaborate to establish unified security standards and protocols. This shared framework ensures consistency and interoperability, reducing vulnerabilities that arise from fragmented security measures. Joint initiatives enable the development of collective defense mechanisms against cyber threats. This includes collaborative research into emerging threats, shared toolkits for incident response, and coordinated efforts to thwart large-scale cyber attacks.

Result and discussion: A comprehensive result and discussion section on cyber security, network security, and their collaboration within industries involves analyzing the impact, effectiveness, challenges, and benefits of such collaboration. Improved Incident Response and Recovery:

Collaborative efforts have streamlined incident response procedures. Industries working together have shown faster recovery times and minimized the impact of cyber incidents through coordinated response plans.

Effective Risk Mitigation: Collaboration between industries has proven effective in mitigating cyber security risks. The combined efforts result in a more holistic approach to identifying and addressing vulnerabilities across sectors.

Conclusion: In summary, industry collaboration in cyber security and network security has shown promising results in enhancing threat intelligence, incident response, and technological advancements. However, ongoing challenges in interoperability, regulatory adaptation, and skills development require continued attention and collaborative efforts for sustained progress in safeguarding digital ecosystems. It is also a comprehensive approach that promotes shared knowledge, collaborative innovation, regulatory adherence, talent development, and coordinated response mechanisms. Industries build their defenses against cyber-attacks by exploiting collective capabilities, resulting in a more resilient and secure digital ecosystem for all stakeholders. It also serves as a force multiplier, leveraging collective expertise, resources, and knowledge to build a more resilient defense against cyber threats. This collaborative approach not only strengthens individual entities but also contributes to a safer and more secure digital landscape for businesses and users alike.

Keywords: Cyber security, Network Security and Industry Collaboration.



Unleashing the Power of Quantum Computing: A Revolution in Information Processing

Shefali Pandey

Student, MCA, Biyani Institute of Science and Management, Jaipur, India

Abstract

This paper explores how quantum computing transforms information processing. Unlike regular computers, quantum ones use "qubits," basic units that can exist in many states simultaneously—thanks to "superposition." This unique ability allows quantum computers to tackle numerous solutions at once, making them super powerful. They also have a cool trick called "entanglement," where qubits link up, no matter the distance. Quantum gates, their special building blocks, run powerful algorithms with applications in code-breaking, medicine, and machine learning.

Result and Discussion: Quantum computing, with its use of "qubits" and principles like "superposition" and "entanglement," presents a game-changing approach to information processing. This allows quantum computers to handle multiple solutions simultaneously, making them powerful in applications like code-breaking and medicine. Despite challenges with fragile qubits, major companies like IBM and Google, along with startups, are working to make quantum computers practical for everyday use. This promises a future with super-fast and smart computers solving previously insurmountable problem.

Conclusion: Quantum computing's revolutionary features, including qubits, superposition, and entanglement, promise a transformative impact on information processing. Despite challenges, ongoing efforts by industry leaders and startups aim to make quantum computers practical for everyday use. This holds the potential for a future where super-fast, 'intelligent computers redefine problem-solving in unprecedented ways.

Keywords: Quantum Computing, Qubits, Superposition, Quantum Gates, Error Correction

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Emerging Trends in Data Science

Vanshika Sharma

Student, MCA, Biyani Institute of Science and Management, Jaipur India

Abstract

Thanks to new trends and technology, the discipline of data science is developing quickly. Emerging technologies and trends are driving the fast evolution of the area of data science. New methods and instruments are being created to gain insights and make defensible decisions in response to the data's exponential increase. Machine learning, big data analytics, security and privacy, integrating with other domains, and ethical considerations are a few of the major developments.

Methodology: As data grows exponentially, new methods and tools are being created to help people get insights and make wise decisions.

Result and Discussion: Data science is being revolutionized by algorithms for artificial intelligence (AI) and machine learning. Without explicit programming, they are able to recognize patterns, evaluate enormous volumes of data, and make predictions. To enhance suggestions and identify fraud, this technology is being used in a number of industries, including finance and e-commerce.

Conclusion: Another development in data science is big data analytics. Because social media, the internet, and Internet of Things devices provide a wealth of data, enterprises can now use cutting-edge methods.

Keywords: data science, emerging technologies, machine learning, artificial intelligence, privacy, security, ethic.

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Robotics and Artificial Intelligence Collaborative Industry Academia Learning: A Present case and Future Visions.

Alshifa Hussain

Student, BCA, Biyani Group of Colleges, Jaipur, Rajasthan, India.

Abstract

Artificial Intelligence (AI) is a broad branch of computer wisdom that's concentrated on a machine's capability to produce rational gets from external inputs. The thing of AI is to produce systems that can perform tasks that would else bear mortal intelligence. Artificial Intelligence (AI) has recently disintegrated everything from operations in day- to- day conditioning to operations in astronomy and amount drugs. Moment, nearly every sector uses AI in one form or another. Appertained to as the fourth artificial revolution, AI has the implicit to change the world. This study analysis the main challenges, trends, technological approaches, and artificial intelligence styles developed by new experimenters and professionals in the field of machine literacy, deep literacy, big data.

Methodology: Robots are the physical machines that can move & interact with the world, AI is like the brain that helps them think and make decisions. In this collaboration, AI gives robots the smartness or brain to understand their surroundings, and make sense of information, and learn from experiences. It's like teaching robots how to be clever. On the other hand, robots use their bodies to carry out tasks. So, when robotics and AI join forces; you get smart robots that can handle different situations, learn from mistakes, and work with efficiency, making our lives easier and more productive. They become a dynamic duo, combining intelligence and physical capabilities to tackle a variety of tasks.

Result: The collaborative integration of robotics and artificial intelligence (AI) has yielded significant advancements across industry, academia, and learning domains. In industry, the implementation of intelligent robotic systems powered by AI has led to notable improvements in efficiency, productivity, and resource utilization. The seamless collaboration between human

workers and these technologies has resulted in streamlined processes and enhanced overall performance.

Conclusion: AI has proven to be superior to mortal decision-making in certain areas. AI is better than humans at finding and making the stylish programs in certain areas concerning wisdom, engineering, and complex societal and macroeconomic issues.

Artificial Intelligence will bring a huge revolution in the history of humanity. mortal civilization will flourish by amplifying mortal intelligence with artificial intelligence, as long as we manage to keep the technology salutary.

Keyword: Robotics & artificial intelligence collaboration, industry integration, academic integration, chatbot , NLP.

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Software Development's Transition to a Human-Centric Approach

Swati Kanwar

Student, BCA, Biyani Girls College, Jaipur, Rajasthan, India.

Abstract

In the dynamic realm of contemporary software development, this review summarizes the transformative integration of human-centric design principles, exploring its profound impact on user experience (UX). This study meticulously examines the departure from conventional development approaches, providing an in-depth analysis of strategies such as iterative prototyping, usability testing, user research, and persona creation. Leveraging the latest technological advancements, this paper showcases how emerging tools and methodologies enhance the implementation of human-centric design in the software development lifecycle.

The importance of empathy and inclusivity in design is expounded, going beyond mere aesthetics. The application of machine learning and artificial intelligence in user research is highlighted, showcasing how these technologies contribute to a deeper understanding of user preferences and behaviors.

Methodology: Real-world applications demonstrate the holistic nature of human-centric design, emphasizing its relevance in contemporary software development. Iterative prototyping ensures continuous refinement, while advanced usability testing methods, including eye-tracking and

biometric analysis, validate and optimize user satisfaction. The incorporation of virtual and augmented reality in persona creation is explored, providing a more immersive understanding of user personas and enhancing the software's alignment with diverse user expectations. Challenges in implementing human-centric design are addressed, acknowledging the latest issues such as ethical considerations in AI and the need for sustainable development. Tactical solutions and best practices are outlined, leveraging the latest agile methodologies and DevOps practices to ensure a harmonious balance between user-centricity and the practicalities of software development in the rapidly evolving technological landscape.

Conclusion: In conclusion, this review offers a comprehensive and detailed exploration of the transformative impact of human-centric design on software development, underlining the importance of staying abreast of the latest technological trends. The shift towards prioritizing user needs, preferences, and experiences is positioned as a crucial strategy, enabling developers to create software that not only meets functional requirements but also establishes meaningful and adaptive connections with users.

Keywords: Human-Centric Design, Software Development and User Experience.



Analyse How IoT Technologies can be Leveraged to Create Smarter and More Sustainable Urban Environments

Amrata Saran and Garima Singnath

St. Paul Institute of Professional Studies, DAVV, Indore, India

Abstract :

The rapid urbanization witnessed globally has intensified the challenges faced by cities in managing resources, infrastructure, and environmental impact. In response to these challenges, this research paper investigates the potential of Internet of Things (IoT) technologies to transform urban environments into smarter and more sustainable ecosystems. Through an extensive literature review and examination of real-world case studies, the paper explores the multifaceted applications of IoT in urban settings. The focus areas include the development of smart infrastructure, environmental monitoring, waste management, and energy efficiency.

Methodology:

- The study identifies and addresses challenges related to security, privacy, interoperability, and ethical considerations associated with the deployment of IoT in urban contexts

- Through in-depth analysis of successful IoT implementations in various cities, the research provides insights into the strategies, outcomes, and lessons learned from these initiatives.
- Furthermore, the paper discusses the implications of IoT technologies on urban sustainability, emphasizing the potential for enhanced resource management, reduced environmental impact, and improved quality of life for urban residents.
- As cities continue to grapple with the complexities of urbanization, this research contributes to the ongoing discourse on leveraging IoT as a transformative tool for creating smarter and more sustainable urban environments.
- The paper concludes by outlining future directions and offering recommendations for policymakers, city planners, and researchers to maximize the benefits of IoT in the pursuit of urban sustainability.

Result and Discussions:

- IoT devices for environmental monitoring have provided valuable real-time data on air and water quality.
- The data collected has identified pollution sources and enabled timely interventions to maintain healthier urban environments.
- The findings highlight the crucial role of IoT in creating cities that respond proactively to environmental challenges.
- Such monitoring not only enhances the quality of life for residents but also aids in long-term sustainability planning.

Conclusion:

The implementation of IoT in smart infrastructure has proven instrumental in optimizing transportation systems, energy grids, and water networks. Real-time data collection and analysis have facilitated improved traffic flow, reduced energy consumption, and enhanced water distribution efficiency. This not only contributes to the functionality of urban systems but also aligns with environmental conservation goals, fostering a more sustainable and resilient urban landscape.

Keywords: IoT technologies, Smart Cities, Sustainable urban development, Urban infrastructure, Environmental monitoring, Waste management, Energy efficiency, Data analytics, Urban planning, Security and privacy



Impact of Environmental Accounting in Indian Automobile Industry

Rupali Bohara

Research Scholar, Maharaja Vinayak Global University, Jaipur

Abstract:

This study focuses on assessing the impact of environmental accounting practices within the Indian automobile industry. The objective of environmental accounting is to bring environmental costs to the managers; therefore, motivating them to identify ways to reduce and avoid economic costs related to the environment and at the same time reduce the company's environmental impact.

Methodology:

The research employs a mixed-methods approach, combining quantitative analysis of financial data with qualitative insights from interviews with key industry stakeholders. Financial indicators such as carbon accounting, emissions reporting, and environmental cost accounting will be analysed to evaluate the extent to which Indian automobile companies are incorporating environmental factors into their accounting frameworks.

Result & discussion:

Furthermore, the research investigates the relationship between environmental accounting disclosures and stakeholders' perceptions, examining how transparency in environmental reporting influences consumer trust, investor confidence, and regulatory compliance. The study aims to provide valuable insights for policymakers, industry practitioners, and academics on the effectiveness of environmental accounting in fostering sustainability within the Indian automobile sector.

Conclusion:

On the basis of our research, it is concluded that there is an impact on selected automobile industries of environmental accounting. This study contributes to the growing body of knowledge on sustainable business practices, encouraging a more comprehensive and environmentally responsible approach to financial management within the Indian automotive sector and beyond.

Keywords : Environmental Impact, Stakeholders, Carbon Accounting, Emissions Reporting, and Environmental Cost Accounting

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Factors Influencing Worker Participation in India's Dairy Industry: A Case Study of Rajasthan

Bharti Sirohiya

Research Scholar, Maharaja Vinayak Global University, Jaipur

Abstract:

During the Vedic era, milk and its products like ghee and curd were considered sacred and were used in religious ceremonies. The period also witnessed the domestication of cows and buffaloes, which laid the foundation for the dairy sector in India. In Rajasthan, Dairy development was initiated by the state government in the early seventies under the auspices of Rajasthan State Dairy Development Corporation(RSDDC) registered in 1975. The research aims to identify key determinants that either encourage or hinder workers' involvement in decision-making, considering the unique characteristics of the dairy industry in the Indian context.

Methodology:

The study employs a mixed-methods research design, combining surveys and interviews to gather both quantitative and qualitative data. Surveys will be administered to a diverse sample of workers across various levels in the dairy industry, interviews will be conducted with industry experts, labour representatives, and management personnel.

Result & discussion:

Through statistical analysis and thematic coding of qualitative data, the study seeks to highlight patterns and correlations between these factors and the extent of workers' participation in decision-making processes. The research explores the role of regulatory frameworks and government policies in shaping the landscape of workers' involvement in the dairy industry. The programme was aimed at increasing milk production, developing the cooperative movement, and enhancing the quality of milk.”

Conclusion:

By understanding the factors influencing participation, organisations can develop strategies to enhance workplace democracy, improve job satisfaction, and ultimately contribute to the overall efficiency and sustainability of the dairy industry in India. This research has broader implications for industries facing similar labour dynamics, providing a foundation for informed decision-making to promote inclusive and participatory practices in the workplace.

Keyword: Employee Engagement, Organisational Culture, Thematic Analysis, Workforce, Employer Employee Relationship.

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R-4, Sector No. 3, Vidhyadhar Nagar, Jaipur - 302039, Rajasthan, India

Phone : +91-141-2338591-95 ▪ e-mail : acad@biyanicolleges.org ▪ bicon@biyanicolleges.org

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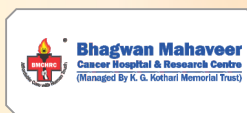
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