

Peer-reviewed Journal

Impact Factor: 7.265

ISSN-2230-9578

Journal of Research and Development

A Multidisciplinary International Level Refereed Journal

June 2021 Volume-11 Issue-36

Impact of Environment on Agriculture, Health,
Water Resources, Social Life & Industrial
Development

Chief Editor

Dr. M. N. Koli

Dr. B. N. Paul, Dr. C. I. Kadant, Prof. T. A. Jalugirdar, Dr. Nareesh Pimankar,
Dr. C. V. Panchal, Dr. Nisar Syed, Mr. Santosh P. Maric

Executive Editors

Dr. M. N. Koli

Principal,
Maharashtra Mahavidyalaya, Nilanga

Executive Editors

Dr. S. S. Pathi

Principal,
Maharashtra College of
Pharmacy, Nilanga

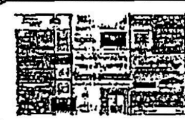
Executive Editors

Dr. E. U. Masumdar

Principal,
Azad Mahavidyalaya, Ausa

Dr. B. N. Paul, Dr. C. I. Kadant, Prof. T. A. Jalugirdar, Dr. Nareesh Pimankar,
Dr. C. V. Panchal, Dr. Nisar Syed, Mr. Santosh P. Maric

Address:
Rajeshwar Kshirsagar, No. 107, P. O. No. 1,
Marol Nagar, Jalgaon, MH-362 101



Journal of Research and Development: A Multidisciplinary International Level Refereed and Peer Reviewed Journal,
Impact Factor-7.265, ISSN- 2230-9578, 30 July-2021, Volume-11, Issue-36
Impact of Environment on Agriculture, Health, Water Resources, Social Life & Industrial Development

30	Nutritional and Nutritional significance of finger millet (Eleusine coracana L.Gaertn): A Review, S. V. Hujure, A. A. Kulkarni, S. A. Kulkarni	90-94
31	Advantages of Strength Training In Competitive Swimming Dr. Gopal Moghe	95-96
32	Financial Technology Dr. Dhulgaude A. B.	97-99
33	Lockdown Impact on Biodiversity and Environmental Pollution Dr. M. S. Pentewar	100-101
34	A Study of Equity Returns of Bajaj Finance to the Shareholders- A Case Study Dr. Shrinivas S. Jagtap	102-104
35	Protection of Environment: Duty and Responsibility in Modern Era Joshi Shubhda Ramesh, Dr. Suryase Pradnya Annarao	105-106
36	Article-The Effect of Natural and Man-Made Disasters in India Waghmare Bhagyashri Bhilma	107-108
37	Impact of GST on Various Sectors of Indian Economy Mr. Vinod Dhondiram Late	109-110
38	Solid Waste Management by Amravati Municipality Corporation before and during Global Pandemic Scenario: A case study to understand Strategy and Policy for Solid waste management during COVID 19 Pandemic Dr. Pratibha Mahalle, Dr. Gajendrasingh Pachore, Dr. Anil J. Gour	111-113
39	Environmental Impact of Technology Salma Firdaus Mohammed Yaseen, Dr. Pradnya Suryase	114-116
40	Impact of Environmental Covid 19 Effect on Indian Industrial Development Rahul Ramesh Godbole, Mahesh Mahadev Kapale, Rajani Philip Shinde	117-118
41	Impact of Covid-19 on Indian Economy Rahul Ramesh Godbole, Mahesh Mahadev Kapale, Rajani Philip Shinde	119-121
42	Impact of COVID-19 on Customers of Health Insurance Sector Bhavani Girish Turachand, Dr. Sambhaji Shivaji Jadhav	122-127
43	Impact of Environment on Health R. M. Mahindrakar, R. V. Suryawanshi	128-129
44	Job Satisfaction of Women In Education Sector Varma Priya Parasuramji, Dr. Sambhaji S. Jadhav	130-132
45	Role in the studies characterization of physico-chemical parameters of water sample in Mukhed Anza, Dist, Nanded Maharashtra. Ambulgekar U. V.	133-135
46	Spatio-Temporal Changes In Cropping Pattern In Beed District Dr. Dushmukh S. N.	136-137
47	Effects of Covid-19 Pandemic and Environment Assessment Dr. Hashmi Irshad Mohiuddin	138-140
48	Impact of Population Growth on Environment in India Dr. Naresh V. Phamkar, Dr. Ajit M. Modjhar	141-143
49	Access to Water Supply and Sanitation - A Human Right Ms. Tanvi Thakkar, Ms. Savina R. Crusto	144-147
50	STUDY ON AGRICULTURE WATER RESOURCE MANAGEMENT IN INDIA Yedatkar R. B., Nalk A. P.	148-151
51	The Variety of Themes and Subjects of Hardy's Poetry Dr. Divjendra Nath Burman	152-154
52	Industry 4.0 and its Impact in India Dr. Prakash Ratanul Rudhya	155-159
53	Impact Of Environment On Health Dr. Vidya N. Jadhav	160-161
54	Thermodynamic properties of aqueous solution of Isoiazid at different temperatures. S. B. Ingole, C. D. Thakur, D. P. Kamble, A. G. Shantkarwar	162-163
55	Road Transportation : "Constructive Economical Means Versus Destructive ecological ends" Miss Pradnya V. Deshpande, Dr. Avinash V. Talmale	164-167
56	COVID-19 Pandemic Crisis and the Way Forward for India Dr. Suraj Kumar S. Prasad	168-169
57	Ayurvedic Remedies of Typhoid Fever Dr. Rajeshwar Kshirsagar, Mr. Vikas Gawande, Mr. Katuram Khillare, Mr. Chetan Pawar	170-172
58	Recovery of Adsorbed Metal ions from the Granular Activated Carbon Dr. Vrushali Ravindra Khillkar	173-175
59	A Study of Irrigation Facilities and Gross Cropped Area in Hingoli District (M.S.) Dr. Vajinath Kantiram Chavan	176-178

Industry 4.0 and its Impact in India



Dr. Prakash Ratanlal Rodiya

Asst. Prof. Dept of Commerce, Rajarshi Shahu Mahavidyalaya, (Autonomous) Chandra Nagar,
 Latur, prakashrodiya123@gmail.com,

Abstract:

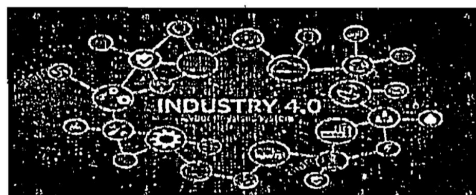
In contemporary scenario, all industries are trying to stretch their fingers all over the globe to end up a robust competitor in commercial world. Industry 4.0 includes a wide set of technologies that provides an accurate platform for innovation and creative answers. In order to put in force such circumstance, it calls for the utilization of advanced prediction gear that involves the conversion of data into records in a systematic method to give an explanation for uncertainties. This era is an opportunity to alternate the financial rules of the industry. As we know India is in its verge of development. Its miles very important to recognize India thrust closer to "Make in India". Thus it's far essential for an India to undertake enterprise 4.0 generation and to get tailored to the identical. This in turn contributes inside the development of Indian economic system. This paper addresses the effect of industry 4.0 generation in India

Key Words: Industry 4.0, Development, evolution, IoT.

Introduction:

Along with the profit, industries also care approximately consumer pleasure, product fine and its customization and additionally cost of manufacturing. Thick digital transformation is at the way, behind the scenes of world's leading industries. They may be intensifying their product portfolio with digital functionalities and also making an investment in records analytics to force innovation and huge enhancements in efficiency as a basement capability. India and china are competing for lion's percentage in international production, from beyond 20 years. Even though India have infrastructural issues, bureaucratic wattle and also inconvenient deliver of sources, India components considerable professional labors and some of huge producers like Havel's, Godrej and Bosch hold their devices in India. India has a big task in its dream of being the global desired manufacturing vacation spot in future. The fourth business revolution is on its way, and there is no stepping lower back. Industry four.0 will be a project and can also have the answers for India's endured gain in the worldwide manufacturing manner. This is the era of advanced manufacturing, composite materials, quantum engineering, three-D printing and robotics.

Definition:



Industry 4.0 defines the gadget of production procedures depends on the autonomously communicating devices with each different and technology along the fee chain: a version of future smart manufacturing facility which makes decentralized decisions based totally on self-employer mechanisms, create a virtual reproduction of the bodily global. In enterprise four.0 laptop-pushed structures screen bodily processes. It additionally referred as fourth business revolution. The concept of enterprise 4.0 is broadly used throughout Europe, in particular in German's production region. At Hanover honest carried out in January 2011, Germany government delivered a new idea as considered one of its "strategic tasks" termed as the enterprise 4.0 this is adopted as part of the high Tech approach 2020 motion plan. Siegfried Dais of Robert Bosch gmbh and Henning Kagermann of acatech, the conversation Promoter group of the industry-science studies Alliance and a team co-chaired via different participants explained and proposed

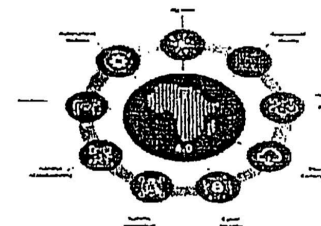
this concept in January 2011. It's far a imaginative and prescient, an idea which changed into first off explained by using enterprise 4.0 running institution.

Objectives of the Study:

1. To study the concept of Industry 4.0.
2. To analyse the opportunity in India for Industry 4.0.
3. To study the advantages of the Industry 4.0.

Literature Review:

With an increase in research on enterprise 4.zero and its implication in Logistics 4.0, is proof that it's far the subject of interest and want for growing enterprise. Industries of many us of a and its authorities have customary the technique which will enhance the attractiveness "industry 4.0" concept. As an instance, Czech government has agreed to "Initiative industry four.0" document and assigned help related to such projects of research. On the different observe, the experimental problems are how to plan the enterprise 4.0 idea. This 4th revolution word is nowadays regularly applied in worldwide meetings and Articles Journals. This literature look at has the predominant objective to display conditions which spotlight the blended effect of industry 4.0 in logistics and its chance evaluation to obtain resilience action primarily based on the formulated questionnaire. Enterprise 4.0 concept turned into published firstly by way of Kagermann in 2011 and that have dependent the enterprise 4.0 pillars statement which became published by using the German country wide Academy of science and Engineering in 2013.



Industry 4.0 concept is designated as the amalgamation across three dimensions: Horizontal Integration together with software matrix, Vertical Integration mixed with connected deliver chain networks and give up-to-quit virtual Integration for product's life cycle engineering along the deliver flow. Industry 4.0 term additionally conceptualized like "a cumulative of standards and technology of the supply community with digital integration in a corporation. From various studies papers, as of now, enterprise 4.0 pillars are described out of which 8 pillars are relevant in the Logistics area, which can be described as follows:

Cyber-bodily device:

Cyber-bodily machine (CPS) concept is defined as the approach in which synthetic and biological structures are collectively incorporated into bodily and cyberspace for processing, facts change, and feedback technique. The amalgamation of tightly consolidated bodily techniques, networking, and processing are called as Cyber-physical device (CPS). Community systems manipulate and screen the physical system with the help of embedded (cyber) subsystems via networked structures. Remarks loops are in useful resource to change the behavior of the physical method whilst required. Different devices like, sensing, computing, and communicate (frequently wireless) capabilities are used to create a physical system. Identity of those physical gadgets may be executed with the assist of physical attributes or data sensing structures, for instance, Radio Frequency identity (RFID) or (infrared sensors), and then it can be blended with a networking gadget, primarily the net, for transmitting the gathered records to the processing subsystem.

Huge Statistics Analytics:

The great collation and evaluation of unstructured or dependent facts across numerous wonderful facts generated from distinctive systems and functions like employer consumer management, income management and production device to make it well known for assisting decision making in real time. As in keeping with Forrester's explanation, massive records contains of four dimensions: quantity, range, velocity, value of information. Massive data is processed throughout all these four dimensions for effective choice making. The analysis of records for already saved

4. Easy product waft
5. Green non-stop actual time tracking
6. Green electricity consumption
7. Self sustaining controlling
8. Extra flexibility meeting high degree closing minute modifications
9. Distinctive end to end product transparency in real time
10. At ease and reliable backup gadget for each step in cloud storage challenges in enterprise 4.0
11. Education
12. Sort of procedure and paintings company
13. Loss of research and expert workforce
14. Provider of mechatronic device and machineries
15. Robust community infrastructure
16. Pretty green cyber protection
17. Effective plant format.

Conclusion:

India is a population of 1.2 billion humans and its sources are stretched to say the least, however, India has to transform the manner it has historically dealt with issues; the sector round it's miles converting. As we mentioned in advance, fourth business revolution is on its way to occupy the sector and in all likelihood presents massive opportunities. Via enterprise 4.0 it's miles feasible to create extended atmosphere with certified personnel and to bear on India's aspect in manufacturing and can orchestrate to big scale customization. Even though it is very hard to manipulate the method centrally, if gamers in the device practice right levers there can be strengthened outcomes. For this reason it's far vital to talk the thoughts that players in government and company quarter will profit maximum, if an initiative of enterprise 4.0 goes together. By using adopting industry 4.0, we can have a first-rate aggressive advantage over worldwide competitors in financial system. But first and important we need to have the essence of velocity so as to seize this possibility and to acquire our aim. Nowadays industry 4.0 represents setting control on the brand new way of technological trends and improvements inside the vehicle area alternatively than focusing most effective on growing the performance to expand the business version. Subsequently, vehicle logistics requires complicated new capabilities, each at the character stage and in the business enterprise as an entire, to grow to be smarter. The digital integration and transformation in logistics will create a database, making logistics smarter, extra transparent, and greater efficient at every level, from customer want to shipping. Manufacturing, procurement, buying, and sales & advertising features have become extra carefully aligned as digitization advances.

References:

1. K. Sipsas, K. Alexopoulos, V. Xanthakis, G. Chrysosouris, *Collaborative maintenance in flow-line manufacturing environments: An Industry 4.0 approach*
2. 5th CIRP Global Web Conference Research and Innovation for Future Production, *Procedia CIRP*, 55 (2016), pp. 236-241
3. F. Rennung, C.T. Luminasu, A. Draghici, *Service Provision in the Framework of Industry 4.0*
4. SIM 2015/13th International Symposium in Management, *Procedia - Social and Behavioural Sciences*, 221 (2016), pp. 372-377
5. M. Brettel, N. Friederichsen, M. Ketter, *How Virtualization Decentralization and Network Building Change the Manufacturing Landscape: An Industry 4.0 Perspective*, *International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering*, 8 (1) (2014), pp. 36-37
6. J. Lee, H.A. Kao, S. Yang, *Service innovation and smart analytics for Industry 4.0 and big data environment Product-Service Systems and Value Creation*, *Proceedings of the 6th CIRP Conference on Industrial Product-Service Systems*, *Procedia CIRP*, 16 (2014), pp. 3-8
7. MAK Bahrin, MF Othman, NH Nor, MHT Azli, *Industry 4.0: A Review on Industrial Automation and Robotic Jurnal Teknologi (Sciences & Engineering)*, e-ISSN, 2180-3722 (2016), pp. 137-143