



SINDHI COLLEGE

Sindhi College

(Sponsors : Sindhi Seva Samiti)

#33/2B, Hebbal, Kempapura, Bengaluru – 560024

Permanently affiliated to Bengaluru City University

Re-accredited by NAAC Recognised by UGC under 2(f) & 12(B)

An ISO 9001: 2015 Certified Institution

3.3.3. Number of books and chapters in edited volumes/books published and papers published in National/ International conference proceedings per teacher 2023-24

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	Dr. Jiubi	Role of Higher Education in Advancing Sustainable Development Goals	A study on Mobile Learning Empower Education in the Digital Age	Role of Higher Education in Advancing Sustainable Development Goals	Role of Higher Education in Advancing Sustainable Development Goals	National	2024	ISBN-978-81-956870-2-2	Vidayardhaka First Grade College, Mysore	Vidayardhaka First Grade College, Mysore
2	Dr. Jiubi	Role of Higher Education in Advancing Sustainable Development Goals	Fostering Entrepreneurship and Innovation in Higher Education for Sustainable Development	Role of Higher Education in Advancing Sustainable Development Goals	Role of Higher Education in Advancing Sustainable Development Goals	National	2024	ISBN-978-81-956870-2-2	Vidayardhaka First Grade College, Mysore	Vidayardhaka First Grade College, Mysore
3	Dr. K Uma Maheswari	Internationalisation of Higher Education	A Study On VUCA Environment On Higher Education: Teachers And Students' Perception	Internationalisation of Higher Education	A Study On VUCA Environment On Higher Education: Teachers And Students' Perception	National	2024	ISBN-13 978-81 927564-5-5	M S Ramaiah College Arts, Science, and Commerce	Ramaiah College Arts, Science, and Commerce
4	Dr. K Uma Maheswari	Internationalisation of Higher Education	An Analysis on the Effects of Hybrid Learning of Higher Education	Internationalisation of Higher Education	A Study On VUCA Environment On Higher Education: Teachers And Students' Perception	National	2024	ISBN-13 978-81 927564-5-5	M S Ramaiah College Arts, Science, and Commerce	Ramaiah College Arts, Science, and Commerce
5	Dr. K Uma Maheswari	The Role of AI in E-Commerce Industry	AI's Effects on Customer Relationship Management in the Banking Sector	The Role of AI in E-Commerce Industry	The Role of AI in E-Commerce Industry	National	2024	e-ISSN:2455-3921	VHN, Senthikumara Nadar college	UBER
6	Dr. Jiubi	The Role of AI in E-Commerce Industry	Impact of AI in e- Commerce	The Role of AI in E-Commerce Industry	The Role of AI in E-Commerce Industry	National	2024	e-ISSN:2455-3921	VHN, Senthikumara Nadar college	UBER
7	Dr. Jiubi	The Role of AI in E-Commerce Industry	Impact of Artificial Intelligence on Employee Wellbeing in the workplace	The Role of AI in E-Commerce Industry	The Role of AI in E-Commerce Industry	National	2024	e-ISSN:2455-3921	VHN, Senthikumara Nadar college	UBER

Achen

PRINCIPAL
SINDHI COLLEGE
#33/2B Kempapura, Hebbal,
Bengaluru - 560 024

Vidyavardhaka First Grade College
PG Centre, Department of Studies in Commerce
Sheshadri Iyer Road, Mysuru, Karnataka

**“ROLE OF HIGHER EDUCATION IN
ADVANCING SUSTAINABLE DEVELOPMENT
GOALS”**

Chief Editor:
Dr. S. MariGowda



Editors:
Dr. Poornima S.; Mr. Sunil M. G.

26	POVERTY, PUBLIC POLICY, AND PUBLIC DELIBERATIONS IN KARNATAKA- AN ANALYSIS	Chandrappa S H Ashok Kumar V Paled	33
27	EXPERIENTIAL LEARNING IN INCLUSIVE CLASSROOMS	Manjunatha D S	35
28	IMPLEMENTING SUSTAINABILITY IN HIGHER EDUCATION: CHALLENGES AND STRATEGIES	Ravikumar Aravind V Karabasanagoudra	36
29	EMPOWERING SOCIAL EQUALITY THROUGH SUSTAINABLE BUSINESS MODELS OF THE PROFIT AND NOT-FOR-PROFIT SECTOR	Aditi Kapoor Shailendra Kumar Pokhriyal Vinay Kandpal	38
30	SUSTAINABLE HIGHER EDUCATION PRACTICES TO EMPOWER STUDENTS	Triveni P Niranth Shankar	40
31	ROLE OF HIGHER EDUCATION IN ACHIEVING SUSTAINABLE DEVELOPMENT GOALS - A CONCEPTUAL STUDY	Bhavya K	41
32	SUSTAINABLE DEVELOPMENT GOALS FOR OPTIMIZING FIVE PILLARS - A STUDY IN KARNATAKA STATE	Laxmana P Anilkumar M	43
33	ROLE OF HIGHER EDUCATION INSTITUTIONS IN PROMOTING AWARENESS ON ENVIRONMENTAL PROTECTION	Jasper Benarji	44
34	YOGA INTEGRATION IN ACADEMIA: DRIVING PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOALS	M Sharmila	45
35	ROLE OF HIGHER EDUCATION IN ADVANCING SUSTAINABLE DEVELOPMENT GOALS	C Anu Priya K Ganesha Moorthy	47
36	ADVANCING GOAL 4: QUALITY EDUCATION THROUGH THE ENGAGEMENT OF SELECTED PUBLIC SECTOR BANKS	Harshitha S Srinivas K T	48
37	A STUDY ON MOBILE LEARNING: EMPOWERING EDUCATION IN THE DIGITAL AGE	M Jubi Kavya S	49
38	ROLE OF HIGHER EDUCATION IN ADVANCING SUSTAINABLE DEVELOPMENT GOAL WITH SPECIAL REFERENCE TO CURRENT ENGAGEMENT OF ACADEMIA IN PROCESSING SUSTAINABLE GOALS	Mohammed Sadath P Abdul Haleem Quraishi	51

A Study on Mobile Learning: Empowering Education in The Digital Age

Author: Dr.M.Jubi. Assistant professor, Centre for PG Studies, Sindhi College
jubimothisha@gmail.com

Co-Author: Kavya. S- Final year M.com, Centre for PG Studies, Sindhi College
kavyachethu401@gmail.com

ABSTRACT

Mobile learning has been incredibly popular as an adaptable and convenient teaching tool. The way we work, live, and study has changed dramatically as a result of the increasing use of mobile technology. It should come as no surprise that mobile learning has gained popularity in the education and training sectors given the growing prevalence of smartphones and tablets. A form of technology-enhanced education that happens on a mobile device is called mobile learning, or M-learning. It gives students the freedom to access learning resources and participate in activities whenever and wherever they choose. Due to its many advantages, mobile learning has become more and more popular in the digital age. For instance, it offers a more practical and adaptable method of learning, enabling students to fit learning into their hectic schedules. Furthermore, since mobile learning offers a more customized and interactive learning environment, it can raise motivation and engagement. Convenience and flexibility are two of the primary advantages of mobile learning. With mobile learning, students can participate in instructional activities and access resources from anywhere at any time. This allows learning to fit into any schedule, no matter how full or stressful. Additionally, learners can study at their own pace with mobile learning, taking as much or as little time as necessary to fully comprehend the material. With the ability to access curriculum and lectures at any moment and from virtually anywhere, mobile learning has evolved into a powerful educational tool.

As mobile technology has developed and become more affordable, mobile devices have evolved from being instruments for communication to being tools for socializing, entertainment, work, and education. Students are more likely to interact with m-learning platforms if they are more adept at using smartphones and tablets. One essential need is the ability to access mobile devices and dependable internet connectivity. Students are more likely to use m-learning resources if they have convenient access to these tools. Virtual reality (VR) and augmented reality (AR) can be combined to create immersive learning environments that let students interact with virtual surroundings and objects. AI-driven adaptive learning platforms will keep developing, and customizing tests and instructional materials according to the requirements and performance of each student. The integrated approach of adaptive learning, microlearning, and augmented reality will further leverage the potential impact of technology as it emerges, opening up learning to an extensive spectrum of learners and transforming education for future generations. This study looks into the variables affecting Bangalore City University students' adoption and usage of mobile learning; or m-learning. To shed light on the crucial components influencing students' m-learning engagement, this study attempts to pinpoint and examine these variables.

KEYWORDS: Mobile Learning, Digital Age, Virtual Reality, Augmented Reality, Adaptive Learning.

INTRODUCTION

The quick development of mobile technology in recent years has drastically changed the nature of education. The term "mobile learning," or "M-learning," describes the process of enabling learning at anytime and anywhere by utilizing portable electronic devices like tablets, smartphones, and other mobile devices. The increased accessibility of high-speed internet and the widespread adoption of these gadgets have propelled M-learning to the forefront of modern education. This technological revolution has changed teaching approaches as well as how students learn, making for a more adaptable, customized, and interesting educational experience. Mobile learning makes effective use of the connection and portability of mobile devices to provide instructional content in an easy-to-access manner. With this method, students can study in their favorite places and at their own pace in a flexible learning environment that can be adjusted to meet their unique requirements and schedules. This kind of adaptability is especially helpful in the fast-paced world of today when juggling multiple obligations frequently makes traditional, set-in-stone educational methods unworkable.

Furthermore, the interactive features of mobile learning platforms—which frequently include games, quizzes, and multimedia—help to increase student motivation and engagement. Since it sustains students' interest and promotes active participation, this engagement is essential for effective learning. As technology develops, mobile learning's potential also grows. Technological innovations like virtual reality (VR) and augmented reality (AR) provide immersive learning experiences that can highly interactively imitate real-world surroundings and difficult topics. These technological tools give students practical experiences that improve comprehension and memory of the material. Moreover, the personalization of learning experiences is becoming more and more dependent on artificial intelligence (AI). AI may customize examinations and content to meet each student's specific needs using data analytics, providing individualized guidance and feedback. Comprehending these variables is imperative to maximize the execution of M-learning and guarantee that it serves a wide range of students.

OBJECTIVES

- To study how mobile learning is helpful for education.
- To investigate the latest tools involved in mobile technology, especially for education.
- To research the difficulties faced by the students to authenticate the resources through mobile learning.

REVIEW OF LITERATURE

- **John Traxler's (2018)** work highlights the profound “impact of personal mobile devices on education in the digital age,” predicting their universal and abundant presence worldwide. Although Traxler points out an increasing conflict, mobile learning (M-learning) holds the potential to completely transform formal education. As mobile technology becomes more and more integrated into daily life, it also plays a more complicated and peripheral function within established educational frameworks. This article examines the conflicting paradigms that exist between the changing social views on education and learning and the revolutionary potential of M-learning.
- **Rangel-de Lazaro and Duarte's (2023)** systematic review examines the transformative “impact of mobile learning (M-learning) in higher education,” especially highlighted in the COVID-19 epidemic. The study demonstrates how the development of technology

has transformed M-learning from a complement to an essential teaching tool. The review details how M-learning considerably improves learning outcomes by fostering greater content production, communication, and cooperation between instructors and students.

- **Rius, Masip, and Clarisó (2012)** examine the integration of student-led projects in developing mobile learning (M-learning) tools at the Open University of Catalonia (UOC). The study demonstrates how a cooperative strategy, similar to open-source development, improves the long-term viability and ongoing development of M-learning resources, guaranteeing their continued applicability and effectiveness in higher education.
- **Crompton and Burke (2015)** explore the impact of mobile technologies on traditional school culture, highlighting a shift towards personalized, on-demand learning. The article suggests a fresh framework for a school culture that places a focus on students' roles as information curators, producers, and keepers.
- **Valk, Rashid, and Elder (2010)** The study investigated the effects of mobile learning (M-learning) enabled by mobile phones on academic performance in developing Asian nations. The report analyses six pilot programs in Bangladesh, India, Thailand, the Philippines, and Mongolia and finds that mobile technology has significantly improved access to education.

STATEMENT OF THE PROBLEM

Students' m-learning experiences in higher education are still uneven. Several crucial elements, including digital literacy, dependable internet connectivity, and access to contemporary mobile devices, provide significant obstacles that prevent M-learning from reaching its full potential. M-learning systems are frequently underutilized as a result of ignorance or inexperience. This disparity makes for a less dynamic and interesting learning environment, which may lower student interest and motivation. Students also have trouble verifying the legitimacy of the educational materials they can access via mobile learning, which raises questions about the reliability and caliber of the information they are exposed to. The purpose of this study is to look into the obstacles and pinpoint the major elements influencing Bangalore City University students' acceptance and use of M-learning. The primary goal of this study is to investigate the variables influencing Bangalore City University students' adoption and utilization of mobile learning. The study intends to offer insights that can improve the efficacy and reach of mobile learning initiatives by looking at these criteria.

RESEARCH METHODOLOGY

Primary Data

Primary data was gathered via interviews and surveys. To collect quantitative data on students connected with Bangalore City University who own mobile devices, internet connectivity, digital literacy, and attitudes towards mobile learning, a systematic questionnaire has been developed. Two hundred of the 230 randomly chosen students from a variety of fields who received the questionnaire were asked to complete it for the study. A subgroup of these students also participated in semi-structured interviews to get qualitative insights into their perceptions, problems, and experiences with mobile learning. This mixed-methods approach offers a thorough comprehension of the variables impacting the adoption of M-learning.

Secondary Data

systems. These systems give teachers the resources they need to create dynamic and captivating learning experiences, including features for content writing, course management, assessment tools, and analytics dashboards. Additionally, mobile learning management systems (LMS) enable instructors and students to communicate and work together, creating a vibrant learning community.

Table 1: Demographical Data of Students

Respondent Categories		F	%	BA	B. Com	BBA	BCA	MCOM	MCOM(FA)	MBA	MCA	BE
Male	Used	90	69	10	35	20	17	18	11	5	8	6
	Not used	40	31									
Female	Used	80	62									
	Not Used	50	38									

Sources: Primary Data

In the data survey, the researcher examined various responder groupings based on this demographic information. Both final-year technical and non-technical students participated in the poll. The use of M-learning does not differ much based-on gender. For academic objectives, 69% of male students and 62% of female students use M-learning and learning technologies, respectively. Students studying engineering and the arts both used M-learning resources. Students studying the arts tend to use mobile learning more than students studying engineering.

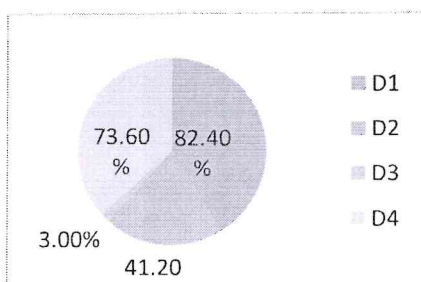
Table 2: Frequency of using Mobile Learning applications by Student

Always		Often		Sometimes		Rarely		Never	
Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
46	35	30	23	35	27	8	6	1	1

Sources: Primary Data

Table – 2 displays the frequency of using mobile learning tools by the students participating in the research. A quarter of the pupils said they constantly utilize mobile learning resources. Of the students, 23% said they had used mobile learning tools frequently, 27% said they had done so occasionally, 6% said they had done so infrequently, and 1% said they had never done so. Most students use mobile learning tools regularly, according to research data.

Graph :1 Device needed for effective use of M learning Platforms



Source: Primary Data

According to the above graph, 40% of students say they use laptops and computers for educational purposes, making them the most often utilized gadgets among students [D1]. [D2] Because of their portability and ease of use, mobile devices are the second most often utilized tool for learning, with 21% of students using them. Just 1% of students use tablets, making them the least popular

Vidyavardhaka First Grade College
PG Centre, Department of Studies in Commerce
Sheshadri Iyer Road, Mysuru, Karnataka

**"ROLE OF HIGHER EDUCATION IN
ADVANCING SUSTAINABLE DEVELOPMENT
GOALS"**

Chief Editor:
Dr. S. MariGowda



Editors:
Dr. Poornima S.; Mr. Sunil M. G.

26	POVERTY, PUBLIC POLICY, AND PUBLIC DELIBERATIONS IN KARNATAKA- AN ANALYSIS	Chandrappa S H Ashok Kumar V Paled	33
27	EXPERIENTIAL LEARNING IN INCLUSIVE CLASSROOMS	Manjunatha D S	35
28	IMPLEMENTING SUSTAINABILITY IN HIGHER EDUCATION: CHALLENGES AND STRATEGIES	Ravikumar Aravind V Karabasanagoudra	36
29	EMPOWERING SOCIAL EQUALITY THROUGH SUSTAINABLE BUSINESS MODELS OF THE PROFIT AND NOT-FOR-PROFIT SECTOR	Aditi Kapoor Shailendra Kumar Pokhriyal Vinay Kandpal	38
30	SUSTAINABLE HIGHER EDUCATION PRACTICES TO EMPOWER STUDENTS	Triveni P Niranth Shankar	40
31	ROLE OF HIGHER EDUCATION IN ACHIEVING SUSTAINABLE DEVELOPMENT GOALS - A CONCEPTUAL STUDY	Bhavya K	41
32	SUSTAINABLE DEVELOPMENT GOALS FOR OPTIMIZING FIVE PILLARS - A STUDY IN KARNATAKA STATE	Laxmana P Anilkumar M	43
33	ROLE OF HIGHER EDUCATION INSTITUTIONS IN PROMOTING AWARENESS ON ENVIRONMENTAL PROTECTION	Jasper Benarji	44
34	YOGA INTEGRATION IN ACADEMIA: DRIVING PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOALS	M Sharmila	45
35	ROLE OF HIGHER EDUCATION IN ADVANCING SUSTAINABLE DEVELOPMENT GOALS	C Anu Priya K Ganesha Moorthy	47
36	ADVANCING GOAL 4: QUALITY EDUCATION THROUGH THE ENGAGEMENT OF SELECTED PUBLIC SECTOR BANKS	Harshitha S Srinivas K T	48
37	A STUDY ON MOBILE LEARNING: EMPOWERING EDUCATION IN THE DIGITAL AGE	M Jubi Kavya S	49
38	ROLE OF HIGHER EDUCATION IN ADVANCING SUSTAINABLE DEVELOPMENT GOAL WITH SPECIAL REFERENCE TO CURRENT ENGAGEMENT OF ACADEMIA IN PROCESSING SUSTAINABLE GOALS	Mohammed Sadath P Abdul Haleem Quraishi	51

39	TRANSFORMATIVE EDUCATION: HARNESSING FUTURE TRENDS IN HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT GOALS	Anil Kumar Chikatimarla	52
40	FOSTERING ENTREPRENEURSHIP AND INNOVATION IN HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT	M Jubi Hema K R	54
41	ADVANCING SUSTAINABLE DEVELOPMENT GOALS THROUGH HIGHER EDUCATION: A CLIL PERSPECTIVE	Preksha	56
42	ENHANCING INCLUSIVITY: EFFECTIVE APPROACHES FOR NURTURING DIVERSITY AND COMMUNITY ENGAGEMENT IN ACADEMIC ENVIRONMENTS	Preety	58
43	THE ROLE OF NITI AAYOG FOR ACHIEVING SDGs- SECTORAL ACHIEVEMENTS IN EDUCATION	S. Poornima	59
44	ROLE OF NATIONAL EDUCATION POLICY 2020 TOWARDS ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT GOALS	Anushha M C	60
45	SUSTAINABLE DEVELOPMENT GOALS: AN ASSESSMENT OF INDIA AND ITS CITIZENS	Sunil M G	61

FOSTERING ENTREPRENEURSHIP AND INNOVATION IN HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT

Author: Dr.M.Jubi. Assistant professor, Centre for PG Studies, Sindhi College
jubimothisha@gmail.com

Co-Author: Hema. K.R- Final year M.com, Centre for PG Studies, Sindhi College
krhema1207@gmail.com

ABSTRACT

Sustainable development is being achieved in the modern higher education environment through encouraging innovation and entrepreneurship. Higher education institutions (HEIs) are essential for equipping students with the skills necessary to succeed in the contemporary economy and advance society. Three crucial elements are examined: integrating entrepreneurship instruction into the curriculum, creating incubators and accelerators, and encouraging interdisciplinary collaboration. Leveraging digital technology also improves learning and encourages innovation. Examples of these technologies include online learning platforms, digital tools, and collaborative platforms. Discussions are held regarding the use of digital technology, experiential learning, and collaborations with government and industry. Through experiential learning opportunities like internships, field excursions, study abroad programs, and community service projects, students can apply their knowledge in real-world circumstances. The report argues that academic institutions can equip students with the knowledge and skills needed to address complex global issues and promote long-term, sustainable economic growth by introducing these elements into higher education.

HEIs must create an environment that supports innovation and entrepreneurship by providing solid institutional support, honoring and rewarding entrepreneurial achievements, funding faculty development, and funding entrepreneurship-focused student organizations and clubs. This study explores the range of strategies and models that higher education institutions (HEIs) might employ to encourage students to have an entrepreneurial mindset and become creative thinkers, thereby aligning academic success with the broader goals of sustainable development. Entrepreneurship education is a vital part of preparing students for the challenges and opportunities of the modern world. It provides students with the necessary skills, knowledge, and mindset to help them become innovative problem solvers, creative thinkers, and leaders. It is important because it helps students develop critical thinking, problem-solving, communication, risk-taking, and teamwork abilities. Alternative career pathways that improve employability, opportunities in life, and skill sets while fostering wider social and economic growth are made available to young people through education. With the aid of education, students from diverse socioeconomic backgrounds might acquire remarkable talents and skills as well as innovative thought. Pupils with an education are better able to think creatively, look for problems to solve, empathize with others, take measured risks, accept failure as an essential component of growth, and comprehend the connection between perseverance and success. Pupils who obtain an education are endowed with the knowledge, skills, and opportunities required to facilitate prosperous entrepreneurship in many settings.

This study looks at the frameworks and tactics that schools can use to help their pupils develop an entrepreneurial mentality and creative thinking. This study explores the many frameworks and tactics that higher education institutions (HEIs) might use to help students develop an entrepreneurial mentality and creative thinking skills. The report also emphasizes the value of utilizing digital technology, creating strong alliances with businesses and governments, and placing a strong emphasis on experiential learning.

KEYWORDS: Entrepreneurial Education, Curriculum, Innovation, Digital Technology, HEIs.

INTRODUCTION

In addition to helping students address social, economic, and environmental concerns, encouraging entrepreneurship and innovation in higher education also promotes economic growth, social impact, and environmental sustainability. In the end, universities are vital in providing future leaders with the knowledge and perspective required to promote sustainable development and tackle global concerns. In today's modern higher education setting, encouraging student creativity and entrepreneurship is a growing way to accomplish sustainable development. Institutions of higher learning (HEIs) are essential in providing students with the skills needed to succeed in the modern economy and make valuable contributions to society. This study explores three critical components that are essential to this shift: creating incubators and accelerators, encouraging interdisciplinary collaboration, and incorporating entrepreneurship education into the curriculum. Leveraging digital technology also fosters creativity and improves the educational experience. Examples of this include online learning platforms and collaborative tools.

OBJECTIVES

- To determine the type of assistance that students receive from HEIs' business relationships and incubators.
- To find out about the digital resources or platforms that educational institutions provide to help with entrepreneurship education.
- To explore the main obstacles an educational institution has to overcome to encourage student creativity and entrepreneurship.
- To investigate how the curriculum for higher education incorporates entrepreneurship education

REVIEW OF LITERATURE

Cristina MITITELU from the University of Rome "Tor Vergata" "Fostering Sustainable Development and Entrepreneurship: The New Role of University" explores the effect of a School of Economics CSR training program on students' awareness of sustainability, social entrepreneurship, and creativity. It draws attention to programs such as UniRecycling, which demonstrate active participation and promise for campus sustainability and trash reduction.

A. A. Gibb in his research "In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning" discusses the rise of entrepreneurship education, which places a strong emphasis on new knowledge combinations, creative destruction, and new values as vital components of encouraging students to think like entrepreneurs.

D. F. Kuratko in his study "The Emergence of Entrepreneurship Education: Development, Trends, and Challenges" explores the development, trends, and problems of entrepreneurship education as they have evolved. It offers perceptions into the evolving field of entrepreneurial education and what it means for universities.

A. Fayolle and B. Gailly in their research "From Craft to Science: Teaching Models and Learning Processes in Entrepreneurship Education" delve into the evolution of entrepreneurship education into a science, examining different methods of instruction and learning procedures. It provides insightful viewpoints on the pedagogical strategies for developing an entrepreneurial mentality and set of abilities.

B. Hynes and I. Richardson in their study "Entrepreneurship Education: A Mechanism for Engaging and Exchanging with the Small Business Sector" explore the function that entrepreneurship education plays in connecting people with the small company community. It talks about how universities and small enterprises can work together to promote entrepreneurship and stimulate the economy.

STATEMENT OF PROBLEM

Higher education institutions (HEIs) must quickly adapt to the fast-paced economic, technological, and social developments in the world to keep up with the demands of a complex and dynamic global economy. Because traditional education approaches place little focus on creativity, entrepreneurship, and multidisciplinary collaboration, they frequently fall short in terms of appropriately preparing students for these issues. Moreover, a deficiency exists in the incorporation of digital technology and experiential learning into academic curricula, despite their critical role in cultivating the proficiencies required for sustainable growth. To provide students with the entrepreneurial mindset and creative thinking skills necessary for fostering sustainable economic growth and societal advancement, this study tackles the issue of how HEIs can successfully integrate entrepreneurship education into their curricula, support the establishment of incubators and accelerators, encourage interdisciplinary collaboration, make effective use of digital technology, and forge strong partnerships with industry and government.

RESEARCH METHODOLOGY

Primary Data

Through questionnaires and interviews, primary data was acquired. Through the use of a methodical questionnaire, the researcher gathered quantitative data from a variety of respondents, including students, professors, administrators, industry partners, and important government officials in Bangalore's higher education institutions. 210 respondents from a variety of fields were chosen at random to receive the questionnaire; 180 of them filled it out, and the data is used in the study.

To gain qualitative insights into the attitudes, issues, and experiences with the curriculum, a subgroup of these respondents took part in semi-structured interviews. This mixed-methods approach provides a comprehensive understanding of the factors influencing sustainable development-related entrepreneurship education in higher education institutions. The approach aims to give HEIs a thorough grasp of how they may incorporate entrepreneurial teaching, assist incubators and accelerators, encourage multidisciplinary cooperation, make use of digital technologies, and form alliances with businesses and government.

Secondary Data

Researchers collected secondary data from research, scholarly journals, and previously published works on digital technology in the curriculum and entrepreneurial education in HEIs. The researcher gathered data from institutional reports, internet accessibility statistics, and mobile device usage in the community to support the research findings and conclusions. This allowed the researcher to better understand how higher education institutions (HEIs) can support students' entrepreneurial mindsets and creative thinking.

ENTREPRENEURIAL EDUCATION IN HIGHER EDUCATION INSTITUTIONS (HEIS)

Among the fundamental business skills taught to students are financial, marketing, management, and operational competencies. These are essential to understanding the operations and successes of businesses. Students acquire leadership, teamwork, communication, and problem-solving skills in addition to the foundations of business—all critical for succeeding in the startup setting. Through startup involvement, business simulations, and internships, students apply their theoretical understanding in practical settings. They learn more effectively and are better equipped to handle challenges in the professional world with this kind of hands-on experience.

CURRICULUM DESIGN

Interdisciplinary courses that integrate entrepreneurship with disciplines like engineering, the arts, sciences, and social sciences are examples of effective curriculum design. This demonstrates to pupils how entrepreneurial thinking may be applied in a variety of academic fields. Students can create and test their business ideas through project-based learning. These programs promote original problem-solving by simulating actual company difficulties. employing case studies of profitable and unsuccessful endeavors to impart useful knowledge and techniques. This aids in students' understanding of the intricacies of entrepreneurial endeavours and allows them to learn from actual instances.

INNOVATION IN HEIS

Supporting academic and student research projects to develop new technologies or enhance current ones is known as research and development, or R&D. This promotes an innovative culture that never stops. New ideas can be developed and tested in a supportive setting at innovation hubs and incubators. collaborating on creative solutions to pressing issues in society by forming alliances with businesses, the

government, and nonprofit organizations. These cooperative projects offer real-world expertise and insightful industry knowledge.

ROLE OF DIGITAL TECHNOLOGY

Online learning platforms, which provide courses and resources that are accessible to a wider audience, including remote and foreign students, greatly improve entrepreneurial education and innovation in HEIs. They offer a range of learning resources as well as flexibility. using tools and software for data analysis, design, prototyping, and project management. Modern entrepreneurship requires the use of digital tools to develop projects effectively and efficiently. Students can collaborate with peers and mentors worldwide through virtual collaboration, which enables networking and teamwork. Their viewpoints and creative possibilities are broadened by this.

BENEFITS TO STUDENTS AND SOCIETY

Employers find students more appealing since they acquire highly sought-after abilities. Through personal development, pupils are better equipped to face obstacles in the future by developing their confidence, independence, and proactive attitude. Economic development is aided by entrepreneurial education, which stimulates the formation of new companies and employment prospects. Students create answers to society's challenges, tackling things like health, education, and poverty. promotes the establishment of companies that emphasize ethical and sustainable business practices to enhance the long-term welfare of the world. Fostering a new generation of innovators and leaders requires innovative curricula, entrepreneurial education, and smart use of digital technologies in HEIs. Universities can make a substantial contribution to sustainable development and effectively solve global concerns by harnessing digital tools, offering multidisciplinary and experiential learning opportunities, and establishing supporting ecosystems. This all-encompassing approach promotes economic growth and societal advancement in addition to preparing pupils for the future.

Table -1: Demographical Data of Respondents

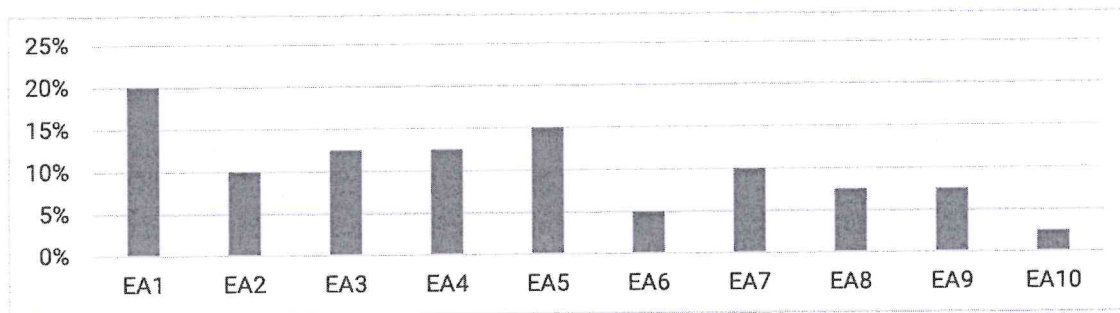
Positions within the institution					
Students	Faculty members	Administrator	Industry partner	Government official	Total No. of respondents
52	20	2	4	2	80

Source: Primary data

The categories of responses from various positions within an institution are displayed in Table 1. With 52 responses, students make up the largest category, followed by faculty members (20). Industry partners have four responders, compared to two for administrators and government representatives. With students and faculty members being the most represented, this distribution shows a wide spectrum of opinions. Therefore, the researcher's recommendations make sense in light of the study's goals.

Graph-1

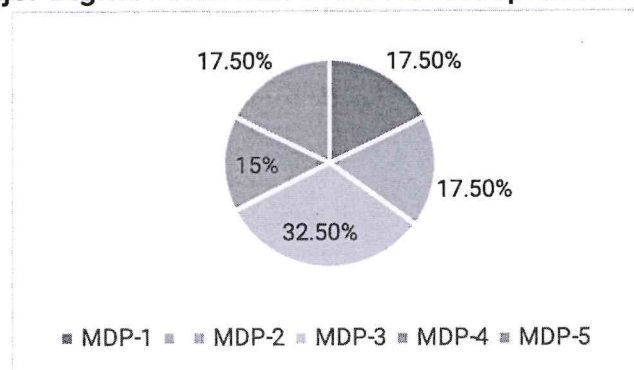
Entrepreneurial Assistance Provided by Incubation Centre/ Industrial Partnership



Source- Primary Data

The entrepreneurial support that the students receive from the Incubation Center is shown in Graph 1. Mentorship and coaching continue to be the most popular forms of support offered by incubation centers and industrial collaborations, with 20% of responses, according to survey data scaled up to 80 respondents. EA5-Workshops and Training come in close second with 15%. Equal amounts of 12.5% are given to EA3-Networking Opportunities and EA4-Office Space and Resources. 10% goes for EA2-Funding & Grants and EA7-Guest Lectures and Workshops. Programs for research and development (EA8) and funding and sponsorship (EA9) both have 7.5% of responses, while the least prevalent are internships and job placements (EA6) and mentoring (EA10), with 5% and 2.5% of responses, respectively. This study emphasizes how important mentorship and hands-on training are when it comes to helping pupils.

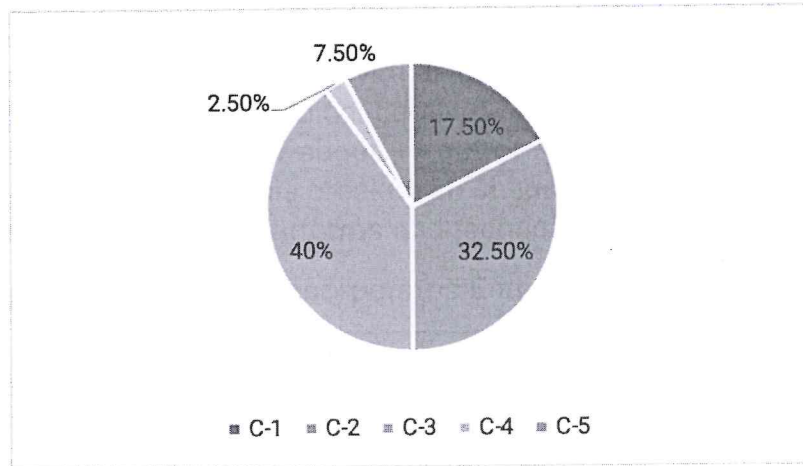
Graph 2: Major Digital Platforms Used for Entrepreneurship Education



Graph 2 depicts the major digital platforms used for entrepreneurial education. Diverse preferences can be shown in the usage of different digital tools and platforms to assist entrepreneurship education in institutions, according to survey data from 80 respondents. MDP-3 (Simulation Software) is the most often used tool; 26 respondents, or 32.5% of the total responses, used it. Online learning platforms (ODPs) like Coursera and edX, MDP-2 (collaborative tools) like Slack and Trello, and other unnamed tools were equally popular, receiving 14 replies apiece, or 17.5% of the total. This emphasizes how crucial collaborative settings and structured online courses are to the teaching of entrepreneurship. Virtual incubators, or MDP-4, are another important component that is utilized by 12 responders (15%). This indicates

a noticeable, albeit marginally reduced, dependence on online incubation programs to develop entrepreneurial abilities and offer assistance to aspiring business owners. The research indicates that entrepreneurship education places a strong focus on experiential learning, with a small preference for simulation software despite the overall balanced integration of different digital tools.

Graph 3: Major Challenges Faced In Promoting Entrepreneurship Among Students



Graph -3 infers the challenges faced by students in promoting entrepreneurship. C-1 (Online learning environments, including Coursera and edX), was selected by 17.5% of respondents, meaning that about 14 out of 80 people selected this choice. C-2 (Collaborative tools, such Slack and Trello, were also well-liked) was chosen by 17.5% of respondents, or about 14 people. The category with the highest preference, C-3 (simulation software), was selected by 32.5% of respondents, or around 26 out of 80. 15% of respondents chose C-4 (virtual incubators), which means that about 12 out of 80 people preferred this choice. Lastly, 17.5% of respondents selected the C-5 (Others) category, meaning that about 14 out of 80 chose various options outside of the designated categories. This breakdown sheds light on the respondents' varied preferences across a range of platforms and technologies.

Table 2: Curriculum Incorporates Entrepreneurial Education

SL.NO	Indicators	CIE-1	CIE-2	CIE-3	CIE-4	CIE-5	CIE-6	CIE-7	Mean	SD
1	Strongly Disagree	34	16	24	20	12	14	14	19.1	7.73
2	Disagree	14	32	14	16	20	12	16	17.7	6.77
3	Neither	10	16	16	18	12	18	14	14.9	3.02
4	Agree	16	10	20	22	18	30	26	20.3	6.57
5	Strongly Agree	6	6	6	4	18	6	10	8.0	4.76
Source Likert scale Computed data										

Table 2 suggests how entrepreneurship education is incorporated into the

curriculum. The Mean and Standard Deviation are used to conduct a scientific analysis of the respondents' psychological characteristics using the Likert scale approach. Since the Mean value for Agree is high, it can be concluded that the curriculum as a whole strongly integrates entrepreneurial education and encourages entrepreneurship among students pursuing higher education. However, because of its shortcomings, the standard deviation strongly disagrees and does not support the curriculum support for current entrepreneurship education, implying that the curriculum has to be modified to meet the demands of the youth today.

CONCLUSION

HEIs can greatly improve students' entrepreneurial mindset and creative thinking abilities by incorporating entrepreneurship education into the curriculum, setting up incubators and accelerators, encouraging interdisciplinary collaboration, utilizing digital technology, and forming strategic partnerships with industry and government. These programs help to progress society and sustainably grow the economy while also preparing students for the opportunities and difficulties of the modern world. The goal of entrepreneurial education in HEIs is to help students become more adept at seeing possibilities, coming up with new ideas, and adding value. Teaching business essentials like finance, marketing, and management is part of this, as is imparting soft skills like problem-solving, leadership, and teamwork. Modern entrepreneurial activities require digital tools for data analysis, design, prototyping, and project management. Students can collaborate online and interact with a worldwide community thanks to virtual collaboration tools that support networking and teamwork. Students are better prepared to take on global concerns and make sustainable progress because of this all-encompassing approach. There are many advantages to integrating innovation and entrepreneurial education in HEIs. HEIs can enable students to develop into creative problem solvers, inventive thinkers, and leaders in their professions by providing them with all-encompassing assistance and cutting-edge instructional techniques.



RAMAIAH
College of Arts, Science
& Commerce - Autonomous

M.S.R JOURNAL OF MANAGEMENT

A Journal of Applied Research

Vol. 4 (2023-24)

ISBN-13 978-81 927564-5-5

National Conference on

"Internationalization of Higher Education"

**(Organized by Department of Commerce and
Management)**

27th and 28th March 2024

Conference Proceedings & Abstracts

**M S Ramaiah College of Arts, Science and Commerce -
Autonomous**

Gate No. 8, MSR Nagar, MSRIT Post
Bengaluru – 560054, Karnataka, INDIA.

Phone: 080-23600966, www.msrmcasc.edu.in

INDEX

<i>Sl. No.</i>	<i>Particulars</i>	<i>Page No.</i>
<i>1</i>	Acknowledgements	
<i>2</i>	About the College	i
<i>3</i>	About the Conference	ii
<i>4</i>	About the Department of Commerce and Management	iii
<i>5</i>	National Conference on Internationalization of Higher Education	iv-ix
<i>6</i>	Schedule of the Conference	x
<i>7</i>	Convener Report on conference	xi-xiii
<i>8</i>	Vote of Thanks by Convener	xiv-xv
<i>9</i>	Editorial Board	xvi
<i>10</i>	Table of Abstracts of the Conference	xvii-xxi
<i>11</i>	Abstracts	1-71
<i>11</i>	Photo Gallery	xxii-xxiv



RAMAIAH GROUP OF INSTITUTIONS

RAMAIAH

Institute of Technology

Medical College

Academy of Management

College of Arts, Science and Commerce

College of Education

Institute of Nursing Education and Research

Polytechnic

Pre-University College

Vidyaniketan

University of Applied Sciences

Faculty of Engineering & Technology

Faculty of Art & Design

Faculty of Management & Commerce

Faculty of Hospitality & Catering Technology

Faculty of Dental Sciences

Faculty of Pharmacy

Faculty of Mathematical and Physical Sciences

Faculty of Life and Allied Health Sciences

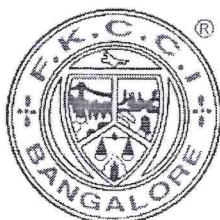
School of Social Sciences

School of Law

Advanced Learning Center

Tissue Bank

Co-Partners:



Estd. 1916



13824-13 978-81 827964-5-5

41.	Effective Strategies through Blended Learning method for students <i>Ms. Padmaja C</i>	31
42.	A Study on Hybrid learning in HEI's in Commerce <i>Mr. Venkatesh Kumar R and Mr. Suresh C</i>	32
43.	Feminist Pedagogy in Virtual Spaces: Strategies for Inclusive Online Learning Environments <i>Ms. Hemalatha Yadav J and Dr. Kapil Arora</i>	33
44.	Exploring transformative paradigms through a comprehensive study of innovations in teaching pedagogy and learning platforms <i>Ms. S Sandhya and Dr. Hemachandra Gudimindla</i>	33
45.	A Study on UVCA Environment on Higher Education: Teachers and Students Perspective <i>Dr. K Uma Maheswari, Ms. Vanthana. S Ms. Anushuya.J and Ms. Yamunashree. B</i>	34
46.	English as a Lingua Franca <i>Ms. Kavyashree MA</i>	35
47.	Student's Choice and Mobility Empowering Learners in a Dynamic academic landscape <i>Ms. Kusuma G</i>	36
48.	The Role of Strategies in Higher Education Institutions: A Special Focus on Legal Education <i>Dr. Ranganathaiah. C.B.</i>	37
49.	Innovative Approaches Enhancing Pedagogy and Learning Management in Education <i>Ms. Ashalatha G M and Ms. Bhoomika .S</i>	37
50.	The FASM Framework: An Integrated Model of Strategies to Overcome Challenges in Higher Education. <i>Ms. Malini Roy, Mr. B. Rasool and Dr. A. R Naik</i>	38
51.	An Analysis on Students Perceptions Towards Internationalisation Efforts in Higher Education <i>Dr. Lakshmi pathi Naidu, Ms. R Deepa, Mr. Balasrinivasan</i>	39
52.	Effective Learning for Teaching 21st Century Skills <i>Ms. Manasa.H.B</i>	40
53.	E-Mindset: Understanding the Psychological Impacts of ICT Learning <i>Ms. Aditi Arun Rao and Dr. Anitha D.S</i>	41
54.	Exploration of Cross-Cultural Complications in Workplace Fraternity <i>Ms. M Harini and Dr. P Parthiban</i>	42
55.	Information Technology Education: Comparing EdTech Solutions to Traditional Classroom Pedagogy <i>Mr. Srivats Ankith Raju and Mr. Shreyas Balaji P</i>	43
56.	Services Revolution- A case study on Higher Education Institutional Strategies with respect to Management Education in India <i>Ms. Sowndarya Rajanikanth, Ms. Vidyashree SV and Dr. Roopa Mr. Temkar V</i>	44
57.	Psychological Factors Influencing Indian Student Choice to Study Abroad: A Review and Future Directions <i>Mr. Shreyas Balaji and Mr. Srivats Ankith Raju</i>	45
58.	Language as a Lingua Franca <i>Ms. Umme Hadiya Kawsar and Ms. Sariya Rehman</i>	46
59.	Enhancement of the Learning Process Using ICT and Hybrid Learning while Teaching Programming Languages <i>Ms. Asharani R and Ms. Nesara K R</i>	46
60.	Investigating the Internationalization of Teaching and Learning: Educators' Perspectives on Inquiry-Based Approaches in Higher Education <i>Ms. Lakshmi S and Ms. Reshma Vijayan</i>	47

fuelled innovation in teaching pedagogy. These immersive technologies empower educators to create dynamic and interactive learning environments that go beyond the limitations of traditional lectures. Using AR and VR, educators can engage students in simulations, virtual field trips, and real-world problem-solving scenarios, providing a hands-on learning experience that broadens beyond the confines of traditional classrooms. Further, it explores the evolution of learning platforms, that has extended the traditional classroom setup beyond physical boundaries. These platforms provide a flexible and accessible approach to education, allowing students to interact with content at their leisure. Massive Open Online Courses (MOOCs) have grown in popularity, providing a diverse range of courses from prestigious institutions and democratizing global access to education. Furthermore, this paper investigates the concept of gamification in learning platforms. Adding game elements to educational content can help educators improve student motivation, engagement, and retention. Gamified learning platforms use competition, rewards, and interactive challenges to make learning more engaging and effective. Finally, discusses the challenges and future implications of these innovations. While the advantages of incorporating technology into education are obvious, concerns have been raised about equitable access and digital literacy. Bridging the digital divide and ensuring that all students have access to these cutting-edge tools remain critical components of educational innovation.

Keywords:

Innovation, Teaching Pedagogy, Learning Platforms, Massive Open Online Courses (MOOCs), Gamification in Education.

A Study on UVCA Environment on Higher Education: Teachers and Students Perspective

Dr. K Uma Maheswari⁹⁴, Ms. Vanthana. S⁹⁵ Ms. Anushuya.J⁹⁶ and Ms. Yamunashree. B⁹⁷

The higher education sector is facing several challenges in today's volatile, uncertain, complex, and ambiguous (VUCA) environment. To align with global competencies, it must enhance the quality of education. However, higher education institutions encounter

⁹⁴ Professor, Centre for PG Studies, Sindhi College, Bangalore, Karnataka.

⁹⁵ Student, MBA, Bannari Ammanni Institute of Technology, Tamilnadu.

⁹⁶ Student, MBA, Bannari Ammanni Institute of Technology, Tamilnadu.

⁹⁷ Student, MBA, Centre for PG Studies, Sindhi College, Bangalore.

difficulties in adapting to diverse student learning capacities while striving to emulate global organizational, pedagogical, curricular, industry interface, and academic research models. This study aims to analyze the needs of students when they enter higher education their learning process stages during their tenure and teachers' competencies. The paper will focus on an empirical survey of students and teachers who propose a hierarchy of six needs: certainty, diversity, significance, networking, contribution, and growth. These needs will be linked with various stages of student learning and teachers' competency levels and provide suggestions. Keywords: VUCA environment, pedagogical, student needs, Teacher competencies.

Keywords:

UVCA Environment, Higher Education, Teachers and Students Perspective.

English as a Lingua Franca

Ms. Kavyashree MA⁹⁸

English as a Lingua Franca is wide spread language in today's world. This paper digs in to the dynamic realm of English as a common language usage all over the world and its pivotal role in global communication.

As the world becomes associate, English excels its extremities in its heritage and it is way over across varied communicative and aesthetic landscapes. This paper explains the subject matter as how does it hand out to the world, or the community? How does it sense to the working members in a firm? Unwind the complicated nature, and the evolving nuances of English language use in a world characterized by communicative diverseness.

Through insightful examination and case histories, we look into how English as a Lingua Franca make the path for effective cross-cultural communication while being decisive nuanced understanding of linguistic heterogeneity.

Keywords:

English as a Lingua Franca, Communicative, Aesthetic Landscapes.

⁹⁸ Assistant Professor, Department of English, Jyothy Institute of Commerce and Management, Bangalore.

As a part of internationalization, the role of teaching pedagogy and learning platforms are very important. The teachers are focused on presenting the syllabus to the students in such a way that it is relevant to their needs. It is an educator's understanding of how the student learns. Learning platforms also play a vital role in the formation of a student. Learning platforms are coming to different variability due to the coming of internationalization.

This paper begins with an introduction to internationalization in education. And the study focuses on the role of internationalization in teaching pedagogy and learning platforms. It explains the types of teaching pedagogy and different learning platforms. It also discusses the impact of internationalization in teaching and learning.

Keywords:

Internationalization, Teaching Pedagogy, Learning Platforms.

An Analysis on the Effects of Hybrid Learning of Higher Education

Dr K. Uma Maheshwari¹³⁵ and Ms. Manjula K R¹³⁶

In today's era, most segments of society have adapted to the Internet of things, but the education sector is still new to this trend. Only with the onset of the pandemic has the education sector begun to embrace digitalization. In the current post-pandemic scenario, the education sector has been forced to adopt hybrid learning. Virtual meeting rooms have effectively replaced physical classroom interaction. Hybrid Learning or Blended Learning is a combination of an online learning environment for flexibility in distance or outside of classroom learning, and face-to-face (F2F) classroom instruction. This has both positive and negative impacts on students, faculties, and management, affecting a spectrum of social, economic, physiological, and cultural aspects. This paper aims to quantitatively analyze the collected data on such impacts, synthesizing and evaluating the results. This paper is a normative study with plausible positive solutions for a more equipped education system and analyzes the effect of hybrid learning on teaching in higher education.

Keywords:

Hybrid Learning, Higher Education, Out Side Classroom Learning.

¹³⁵ Associate Professor, Centre for PG Studies, Sindhi College, Bangalore.

¹³⁶ Student, Centre for PG Studies, Sindhi College, Bangalore.



International Journal of Business and Economics Research

www.drbgrpublications.in

Proceedings of

One day National Level Conference



The Role of AI in E-Commerce Industry

Organized by
Department of Commerce

Convener
Mr.V.M Kannan

Released by
**Virudhunagar Hindu Nadars'
Senthikumara Nadar College**

(An Autonomous Institution, Affiliated to Madurai Kamaraj University)

(Accredited with 'A' Grade by NAAC)

76th Rank at College Category in NIRF Ranking 2023

Virudhunagar, Tamil Nadu, India

Published by

**Dr. BGR
Publications**

International Journal of Business and Economics Research (IJBER)

e-ISSN:2455-3921

VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE

An Autonomous Institution, Affiliated to Madurai Kamaraj University

Re - accredited with 'A' Grade by NAAC
76th Rank in College Category by NIRF 2023

DEPARTMENT OF COMMERCE

Invitation

One Day National Level Conference on
THE ROLE OF AI IN E-COMMERCE INDUSTRY

RESOURCE PERSONS



R. Rajesh Kannan

Principal Enterprise Architect/AI Solutions
LTIMindtree, Chennai

DR. V. Subburaj

M.E., Ph.D, Professor,
Vemu Institute of Technology, Andhrapradesh



Venue : COE Hall
Date : 13-03-2024

WELCOME ADDRESS

Mr.V.M. Kannan, M.Sc., M.Phil., Convener

INAUGURAL ADDRESS

Thiru M.D.Sarpparajan, B.B.A., Secretary

FELICITATIONS

Thiru V.Palanichamy, B.A., President

Thiru V.P.P.K.V.N.Rajamohan, B.B.A., Vice President

Tmtty G.Ramya, B.A., Vice President

Thiru S.S.S.A.S.Sakthi Babu, B.B.A., Treasurer

Dr.A.Sarathi, M.Sc., M.Phil., Ph.D., Principal

Dr.A.Kalidass, M.A., M.Ed., M.Phil., Ph.D.,
Coordinator-SF Programmes

Dr.B.Ravichandran, M.Com., M.Phil., M.A., B.Ed., M.B.A., Ph.D.,
Head of Department

VOTE OF THANKS

Mr.N.Kanagavel, M.Com., M.Phil., Coordinator

You are cordially invited

Head, Staff and Students
Department of Commerce

Index

S.No	Paper Id	Name of the Authors	Title of the Paper
1	AI-2024-01	T. Dayana Mercybai & Dr. J. Kamala Juliet Isaac	Driving Economic Growth: A Study of the Challenges and Opportunities Faced by the Indian Startup Ecosystem
2	AI-2024-03	D. Sangeetha	Applications of Internet of Things
3	AI-2024-04	K. S. Suresh & C. Venil ilavarasan	E-commerce, AI, and the Evolution of B2B/B2C Dynamics in Shaping the Future of Film
4	AI-2024-05	S. Manikandan & Dr. V. Manohar	AI's Place in India's Insurance Sector
5	AI-2024-07	R. Preethi	The study on customer Perception towards artificial intelligence based customer service with reference to people in Virudhunagar
6	AI-2024-09	G. Abinaya & Dr. V. Manohar	The Role of Artificial Intelligence in Email Marketing Strategies
7	AI-2024-10	A. Rajakamatchi & Dr. S. Vijayalakshmi	Role of Artificial Intelligence in Stock Trading and Investment Decisions
8	AI-2024-11	Tresena Machado C & Dr. S. Daniel David Annaraj	Role of Artificial Intelligence (AI) in Marketing
9	AI-2024-12	K.T. Nirmala Devi & Dr. S. Vijayalakshmi	Artificial Intelligence in Conversational Payments on UPI
10	AI-2024-13	H. Aravinth & K. Chitra	Influence of IoT (Internet of Things) on Business and Commerce
11	AI-2024-15	J. Nagasudha	The Role of AI in Healthcare
12	AI-2024-17	Dr. S. Chitra Devi & Dr. D. Jeya Priya	Applications of AI in E-Commerce Industry
13	AI-2024-18	Dr. M. Jubi	Impact of Artificial Intelligence on Employee Wellbeing in the workplace
14	AI-2024-19	B. Jeyalakshmi	A Study on Challenges and Limitations of Artificial Intelligence in E-Commerce
15	AI-2024-20	P. Varshaa & E. Sweetline Priya	A Study on Artificial Intelligence in Inventory Management
16	AI-2024-21	Dr. K. Sounthara Priya & Dr. A. Josephine Stella	Problem and Prospects of AI Technology in E-Commerce Industry
17	AI-2024-22	Anaswara Mohan & E. Sweetline Priya	A Study on Chatbots and Virtual Assistants – AI Powered Customer Service
18	AI-2024-23	Dr. T. Jebasheela & Dr. C. Anupriya	Reshaping e-Commerce: The Influence of Artificial Intelligence
19	AI-2024-24	R. John Samuel Abishegh & E. Sweetline Priya	Study on 'The Role of Artificial Intelligence in Fraud Detection and Prevention in e-Commerce'
20	AI-2024-25	Dr. M. Jubi & Hema. K.R	Impact of AI in e-Commerce
21	AI-2024-26	M. Ponuselvi	A Study of Customer Perception towards Artificial Intelligence in Banking Customer Services-With Reference to Nationalized Banks in Virudhunagar



22	AI-2024-27	V. Shunmathy & K.B. Hariny	A Study on Role of AI in e-Commerce Industry
23	AI-2024-30	Dr. P. Sumalatha & Nazeer Shaik	Innovative Applications of AI in E-commerce: Trends and Insights
24	AI-2024-31	M. Kallaganadi & Dr. P. Ramalakshmi	A Study on Consumer Satisfaction Level of Granites
25	AI-2024-32	Biji Jose & Dr. S. Muthulakshmi	The influence of chatbots using GPT on academic writing among college students
26	AI-2024-35	R. Maheswari	Smart Farming Agriculture using IOT
27	AI-2024-36	Dr. K. Uma Maheswari, R. Deepa & N. Bhagyashree	AI's Effects on Customer Relationship Management in the Banking Sector
28	AI-2024-37	Sathyanarayana. R	AI and Fintech Companies
29	AI-2024-41	Dr. S. Rukkumani	The Strategic Integration of AI for Elevating E-commerce
30	AI-2024-42	Dr. S. Kartheeswari	Artificial Intelligence as a Boon in Food and Beverage Industry
31	AI-2024-43	Dr. N. Vijayalakshmi	Challenges and Opportunities for AI in E-Commerce
32	AI-2024-44	A. Nagavaratharajan, J. Porkodi & M. Sivasankar	Revolutionizing E-Commerce: The Impact of AI-Enabled Technologies
33	AI-2024-47	Dr. K. Latha	Role of Artificial Intelligence in E-commerce: Present and Future
34	AI-2024-48	Dr. R. Shanthi & Dr. B. Nandhini	Role of Artificial Intelligence in Business Transformation (A study with special reference to Virudhunagar)
35	AI-2024-49	M. Sivasankar, V.M. Kannan & A. Nagavaratharajan	Digital Marketing Trends Analysis in AI
36	AI-2024-50	A. Ummul Barhana & R. Mercy	The Role of AI in E-Commerce Industry
37	AI-2024-51	M. Govindammal & A. Sathya	The transformative Influence of Artificial Intelligence in E-Commerce: A Comprehensive study
38	AI-2024-52	Dr. R. Jeyanthi & Dr. N. Padmavathy	A Study on the Impact of Artificial Intelligence in E-Commerce Industry
39	AI-2024-57	M. Kallaganadi & M. Esakkiammal	Job satisfaction of Arts and Science College faculty members in Tirunelveli District
40	AI-2024-60	Dr. S. Maheshwari & Dr. P. Geetha	A Study on the Awareness of AI Applications among College Students in Online Shopping
41	AI-2024-63	Dr. P.V. Muthu Perumal & Dr. K. Mangayarkarasi	Artificial Intelligence In Business Decision Making
42	AI-2024-65	B. Roja & Dr. S. Muthulakshmi	Role of Artificial Intelligence in Solar Energy
43	AI-2024-67	Dr. P. Uma Shanthi & Dr. J. Kamatchi Eswaran	Role of Artificial Intelligence In E-Commerce Industry
44	AI-2024-68	V.M. Kannan & M. Saraswathi	Applications of AI in E-Commerce Industry

AI's Effects on Customer Relationship Management in the Banking Sector

K. Uma Maheswari^{1*}, R. Deepa² and N. Bhagyashree³

^{1*}Professor, Centre for PG Studies, Sindhi College, Bangalore, India

²Assistant Professor, Ramaiah College of Arts, Science and Commerce, Bangalore, India

³PG. Student, Sindhi College, Bangalore, India

*Corresponding Author e-mail ID: umameenaxi@gmail.com

Abstract

Every business needs to focus on effective Customer Relationship Management (CRM) to understand their customers better. Successful companies use CRM to automate their business processes, develop personalized communications, and provide customers with helpful answers to their questions. By combining generative AI with CRM, businesses can access customer information more easily and track, analyze and collaborate on customer data throughout their lifecycle. Banks also use AI tools for CRM to manage customers and strengthen their relationships. This study aims to determine the effectiveness of AI-combined CRM in the banking industry, which helps to improve customer satisfaction.

Keywords: Artificial Intelligence (AI), Customer Relationship Management (CRM) and banking sector

Introduction

Artificial intelligence technology is becoming increasingly common in financial institutions. It is capable of replacing human-to-human interactions in decision-making and action-taking processes. AI is helping banks expand and is expected to capture over a trillion dollars of the financial sector by 2030¹. The use of AI is crucial for financial institutions to stay updated with the latest technological advancements. Commercial banks have started using AI to address long-standing financial issues, such as fraud detection, enhancing customer experience, tracking customer behavior for recommending more personalized services, analyzing customer credit histories to predict risks associated with allotting loans, and many more. Application of AI-CRM tools with different perspectives drive in different areas includes sales, marketing, service, and operations activities, its inters functionality has made the AI-CRM research even more fragmented in the banking sector.

banking sector. So, it is important to study. AI's Effects on Customer Relationship Management in the Banking Sector

Objectives of the Study

- To find the AI's effectiveness on CRM in the banking sector to measure customer satisfaction.
- To suggest the ways and means used to improve the effectiveness of customer relationship management.

Hypothesis

H₀: There is no significant difference of opinion about AI's effect on CRM among different gender, age, education and occupation

Research Methodology

This study is a combination of quantitative and qualitative research design. Both primary and secondary data were used to collect the data. To acquire primary data, a survey is being done using a questionnaire. For obtaining the secondary data different data accessible via websites, journals, books, etc. has been employed in this research. The Target Population and Sampling for this research are based in Bengaluru, the respondents are from Public and Private sector banks in Bengaluru concerning its customers. The questionnaire was distributed to 200 respondents out of which 107 responded. The Sampling Technique of sampling used in this research Convenience sampling techniques. Analysis of variance determines the statistically significant difference in means occurring between two or more groups. The Tools used for data analysis and interpretation in this research are SPSS and MS Excel have been used for both data coding as well as data transcription.

Data Analysis

This study has analysed the AI's effects on customer relationship management in the Banking Sector, the following are the statements that represent the effects of AI on customer relationship management;

P values. The analysis of data shows the valid result of reliability and validity of data at significant p values. The results in the table suggest that the respondents in this study discriminated and provided evidence of discriminant validity.

AI-based CRM plays a vital role in all the fields, which is necessary for the development of the Industries, this study investigates the AI's Customer Relationship Management will be effective in the banking Industry. For that this study framed 10 statements to check the effects of AI's CRM in the banking industry through five point Likert Scale (1- strongly disagree, 2- disagree, 3- neither agree nor disagree, 4- agree, 5- strongly agree). These statements are considered as the dependent variables, analyzed with the help of factor analysis and named as different factors.

TABLE 3 ROTATED COMPONENT MATRIX
AI'S EFFECT ON CRM IN BANKING

Statement (AI's Effect on CRM in Banking)	Factors	Component
		1 &2
personalization	AI Elevates Customer experiences across the system 51.831	.779
customer needs		.725
Virtual Solution		.590
Real-time update		.662
never sharing		.623
bonding		.621
Flexible	AI on Customer-Centric Banking 16.512	.835
customer value		.853
Updated Security		.658
Customer-friendly		.556

AI's Effect on CRM in Banking statements such as personalization, customer needs, virtual solution, real-time update, never sharing, and bonding come under one factor called AI Elevates customer experience across the system with total components of 52.831, and the flexibility,

Conclusion

Retaining customers in the fast-paced world of technology is a challenging task for banks. The competition has become even tougher for the banking sector due to the rise of LPG. As a result, banks need to improve themselves by providing various AI tools to ensure the safety and comfort of their customers. The banking industry has been enhancing its relationship management by offering a variety of useful instruments that guarantee security, comfort, and stability. Upgrading technology can help raise the level of service and security and enhance the bank's reputation. Nowadays, internet and phone banking are more appealing to clients due to their efficiency and user-friendliness. To compete with non-banking sectors, banks must adopt the latest and most popular technologies of the modern age to boost their relationship marketing tactics. The banking sector has benefited greatly from automation. Artificial intelligence techniques can be employed in the banking sector to improve the speed and creativity of client banking transactions. Fortunately, AI has been offering a wide range of applications to help banks operate as efficiently as possible, opening the door for a new level of financial services.

References

1. Bhatt, D. P. (2021). *Role of AI in improving CRM, Sales and Customer Experience*. Pandit Deendayal Petroleum University, Gandhinagar.
2. Cristina Ledro, A. N. (December 2022). Artificial intelligence in customer relationship management: literature review and future research directions. *Journal of Business & Industrial Marketing* , 48-63.
3. Chatterjee, S., Ghosh, S.K., Chaudhuri, R. and Chaudhuri, S. (2020b), "Adoption of AI-integrated CRM system by Indian industry: from security and privacy perspective", *Information & Computer Security*, Vol. 29 No. 1, pp. 1-24, doi: 10.1108/ICS-02-2019-0029, Emerald Group Publishing Ltd., Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur, India.
4. Waltman, L., Van Eck, N.J. and Noyons, E.C.M. (2010), "A unified approach to mapping and clustering of bibliometric networks", *Journal of Informetrics*, Vol. 4 No. 4, pp. 629-635.
5. Catalan-Matamoros, D. (2012), "An overview to customer relationship management", in Catalan-Matamoros, D. (Eds), *Advances in Customer Relationship Management*, IntechOpen, London.
6. Lokuge, S., Sedera, D., Kumar, S., Ariyachandra, T. and Ravi, V. (2020), "The next wave of CRM innovation: implications for research, teaching, and practice", *Communications of the Association for Information Systems*, Vol. 46, pp. 560-583.

Impact of AI In E-Commerce

Author: Dr.M.Jubi. Assistant professor, Centre for PG Studies, Sindhi College
jubimothisha@gmail.com

Co-Author: Hema. K.R- Final year M.com, Centre for PG Studies, Sindhi College
krhema1207@gmail.com

ABSTRACT

E-commerce and artificial intelligence (AI) are two separate domains that come together to transform corporate operations, especially in online retail settings. Artificial intelligence (AI) describes how technology, particularly computer systems, mimics human intelligence processes. It entails the development of algorithms capable of learning, reasoning, solving problems, perceiving, and comprehending language—tasks that normally call for human intelligence. Artificial Intelligence (AI) comprises several subfields, such as robotics, computer vision, machine learning, and natural language processing. The term "electronic commerce," or "e-commerce," refers to the buying and selling of products and services through the Internet. (Khrais, 2020) Online retail establishments, online marketplaces, digital payment systems, supply chain management, and other activities are all included in this broad category. The way that e-commerce and artificial intelligence are combined has resulted in major improvements and changes to the way that online businesses function and engage with their clientele. Businesses in a variety of industries employ several AI tools to improve production, efficiency, decision-making, and consumer experiences. Chatbots and virtual assistants, CRM systems, natural language processing (NLP) tools, marketing automation platforms, business intelligence (BI), and analytics tools are some of the most widely used artificial intelligence (AI) tools among businessmen. All of these tools are essential to the revolution of e-commerce because they improve productivity, efficiency, decision-making, and customer experiences. They meet certain requirements and difficulties that organizations have in the digital era, empowering them to innovate, adapt, and prosper in a market that is changing quickly. Through cutting-edge machine-learning applications in marketing, AI is utilized to make smart decisions and gain a competitive advantage. The study aims to investigate how AI tools help firms operate more effectively online.

KEYWORDS: Artificial Intelligence, E-commerce, Marketing Automation.

INTRODUCTION

The combination of artificial intelligence (AI) and e-commerce has become a revolutionary force in the modern business world, changing the face of online retail settings. The term artificial intelligence (AI) refers to a wide range of technologies, including robotics, computer vision, machine learning, and natural language processing. Artificial intellect is defined as the machine imitation of human intellectual processes. Due to these technological advancements, computers are now capable of learning, thinking, solving problems, perceiving, and comprehending language—tasks that have historically required human intelligence. However, the term "e-commerce," or electronic commerce, refers to the exchange of products and services via the Internet. It includes a broad range of tasks, such as supply chain management, digital payment systems, and online retail stores and marketplaces. According to certain researchers, definitions are the science and engineering of creating intelligent computers and machines is known as artificial intelligence. (Shyna Kakkar, 2017) AI differs from psychology in that it places more of a focus on computation, whereas computer science emphasizes

OBJECTIVES OF THE STUDY

- To research how AI techniques are being used to improve online business operations.
- To research how AI technologies help entrepreneurs overcome the difficulties they encounter in enhancing consumer happiness.
- To evaluate how much an entrepreneur has improved company productivity in e-trade by using AI tools.

RESEARCH METHODOLOGY

One of the most crucial parts of the research design is data collecting since it provides how the research question can be answered. Finding, choosing, processing, and analyzing data on a subject are all done using a particular process or set of procedures called research methodology. The reader can critically assess a study's overall validity and dependability in a research paper by looking at the methodology chosen. Surveys, focus groups, interviews, and observation are all included in the research.

PRIMARY DATA

The data was acquired from corporate staff and customers in Bangalore North Zone. The researcher wanted to know how the company used e-commerce to market its items, how AI tools were used to handle consumer complaints, how to improve e-trade and its benefits, and how the company overcame real-world e-trade challenges by utilizing AI tools in the business. Customers and E-commerce traders provided information using the company's standardized surveys. 170 clients in all received questionnaires. 150 of the completed forms were then chosen by the researcher because they had information that was relevant to the study. The researcher also acquired important data from E-traders and corporate staff department chiefs.

SECONDARY DATA

The researchers used the industry website that adopts AI tools in E-Commerce, books, journals, organizational records, financial reports, and the publication of corporate books as sources of information.

MODERN AND CONTEMPORARY AI TOOLS FOR THE E-COMMERCE SECTOR

➤ Chatbots and Virtual Assistants

Chatbots and virtual assistants communicate with clients in real time by utilizing machine learning and natural language processing (NLP). (Kaur, 2020) These tools respond to consumer questions, suggest products, help with transactions, and give tailored support. E-commerce companies frequently utilize chatbots, such as Drift, Intercom, and Zendesk Chat, to increase consumer engagement and conversion rates.

➤ Predictive Analytics Platforms

Machine learning algorithms are used by predictive analytics platforms to analyze historical data and forecast future results. These e-commerce solutions assist companies in predicting sales trends, recognizing patterns in customer behaviour, and streamlining inventory control. (Fedorko et al., 2022) Google Analytics, IBM Watson Analytics, and Microsoft Azure Machine Learning are a few examples.

➤ Customer Relationship Management (CRM) System

➤ **Dynamic Pricing Software**

Product prices are instantly changed by dynamic pricing software in response to competition pricing, market demand, and other variables. E-commerce companies may maximize income and maintain competitiveness by using these technologies to optimize pricing tactics. Prisync, Omnia Retail, and Revionics are a few examples of pricing optimization solutions that help e-commerce businesses set competitive, dynamic rates.(Prabha, 2021)

➤ **Recommendation Engines**

- i. Recommendation engines utilize machine learning algorithms to provide customers with suitable product recommendations based on their browsing history and behavior. These algorithms look at browsing behavior, historical purchases, and user interactions to deliver personalized product recommendations. A few e-commerce recommendation engines that can be used to increase the likelihood of cross-selling and upselling are Recombee, Clerk.io, and Amazon Personalize.
- ii. These systems were created in response to the need to filter massive amounts of data and offer customers a customized recommendation (based on their interests) while they were looking for a good or service within a sizable dataset. (Prabha, 2021)
- iii. Recommendation engines examine a user's historical data and concentrate on their decisions and actions. Additionally, they can examine clicks, prior transactions, shopping carts, and search requests. These algorithms give consumers a well-rounded recommendation by concentrating on several variables. Stability, precision, disparity, and originality are some of these qualities. With the use of this data, artificial intelligence (AI) software can forecast customer behavior and offer suggestions or recommendations for products that will help them successfully during the shopping or choosing process. E-businesses can therefore boost revenue and client happiness.

ANALYSIS AND FINDINGS

Table No:1
AI tools application in consumer goods as of 2023

SI.NO.	Usage of AI in Business	Frequency	Percentage
1	Personalization of product services	35	70
2	Forecast of product demand	26	52
3	Pricing	23	45
4	Marketing Strategies	22	43
5	Customer service	20	40
6	Speedy Delivery	20	40
7	Quality control	45	90
8	Fraud Detection	24	48

Source: Computed Data

Usage of AI Tools in E-commerce

AI Tools/Benefits	QC	PPS	FPD	ROW TOTAL
CVA	1	1	3	5
CRM	2	3	1	6
MAP	3	2	1	6
COLUMN TOTAL	6	6	5	17

XSQUARE	3.664444
DOF	4
P-VALUE	0.453318

Source: Computed Data

The null hypothesis is rejected since the P-value is less significant than the 0.05 level. Thus, the report concludes that "AI tools have a significant impact on e-commerce." Here, artificial intelligence (AI) tools like chatbots and virtual assistants (CVAs), CRMs, and marketing automation platforms (MAP) are taken into consideration for hypothetical testing based on the most popular applications of AI tools. Quality control (QC), product personalization (PPS), and forecasting product demand (FPD) are the main advantages taken into consideration for Chi-square testing. From now on AI-powered systems can go through enormous volumes of data to find patterns in consumer behaviour. Today's decision-makers are better equipped to understand the needs and wants of the market. AI is constantly flexible and can be tailored to the needs of the business.

Conclusion

To sum up, the word artificial intelligence is broad has multiple meanings, and refers to the ability to add intelligence to software or apps. Innovative tools like inventory management, delivery path mapping, and sales forecasting have become more commonplace in business decision-making processes due to increased digitalization and interest in e-commerce. Companies can also learn about their clientele's consumption habits thanks to AI technology like recommendation engines and chatbots. Consequently, they can enhance customer service by offering tailored product recommendations and targeted advertising based on users' online activity, such as clicks, shopping cart contents, and past transactions.

Businesses must rethink their manual processes to convert them to automated ones if they hope to fully utilize AI technologies. This involves training staff members on these technologies as well as establishing a human-machine relationship in which humans not only give AI the data it needs to make decisions but also serve as moderators, stepping in to correct or modify AI's solutions under all moral and legal obligations as well as the requirements of the company. As a result, businesses can address the moral issues raised by this technology, such as the fact that AI is presently unable to identify data that contains unjustified prejudices. As a result, the user may spot any errors and either fix them or comprehend the reasoning behind any surprising choices that were made.

References

Impact of Artificial Intelligence on Employee Wellbeing in the Workplace

Submitted by

Author: Dr.M.Jubi

DCP.M.COM.MBA. M. PHIL.P. HD

Mail ID: jubimothisha @gmail.com

Assistant Professor

Centre for PG Studies

Sindhi College, Bangalore

ABSTRACT

The impact of Artificial Intelligence (AI) on worker well-being is a crucial issue in contemporary workplaces. The impact of AI technologies on employees' mental, emotional, and even physical health has come to light as these technologies are incorporated into more and more commercial operations. Workplace safety is being revolutionized by artificial intelligence. Using AI software and sensors, predictive analytics enables businesses to examine their workspaces for any threats to employee safety and workplace health. The ability to tailor AI solutions to support any professional is their greatest feature. AI-powered robots to replace human workers in dangerous jobs altogether.(Chaudhary et al., 2023) Employing AI software and sensors, predictive analytics enables businesses to examine their workspaces for any threats to employee safety and workplace health. The ability to personalize AI solutions to support any professional is their greatest feature. AI-powered robots will completely replace human labour in hazardous jobs. For most firms, this is not a new phenomenon; most dangerous equipment-related manufacturing tasks are being replaced by robots, and human workers are still in charge of overseeing the production lines. Tools such as micro power apps are widely utilized for task automation. For job safety, having a strong cybersecurity system is crucial. Workflow surveillance using AI may safeguard your employees' health in several ways, including occupational safety and preventing accidents at work. The goal of this research is to investigate the complex relationship between AI and worker well-being, taking into account both the advantages and disadvantages. This study attempts to give a nuanced knowledge of how businesses should prioritize the mental and emotional well-being of their workforce while utilizing AI's promise through a thorough investigation.

KEYWORDS: Artificial Intelligence, Employee welfare, Enhanced productivity

INTRODUCTION

Employee benefit plans have traditionally been designed to increase productivity and efficiency while lowering absenteeism. But today, the social welfare program is more comprehensive and addresses almost all aspects of the advancement and protection of workers in the industrial sector. (Manzini and Grandeur, 2011). It makes sense for welfare initiatives to aim to develop an organization's workforce to be productive, secure, content, and competitive. The aim of offering these amenities is to elevate the quality of life at work and raise living standards. (Priti, 2009). Labor welfare is an all-encompassing term that refers to the distinct advantages, facilities, and initiatives that an organization offers to its workers to promote their

professional and social lifestyles as well as their aspirations to enhance productivity and output. (Mishra and Manju, 2007).

The amenities, services, and advantages that companies offer to their staff members for their convenience are all included in the employee's welfare. The measures that promote employee productivity are those that pertain to their security, safety, and well-being. The various welfare services that a business offers its workers directly impact their level of alertness, productivity, and general physical, mental, and health well-being. Accommodations and canteen facilities that fall within the categories of living comfort and working atmosphere are offered by all health services. Employee welfare can be defined as the endeavour to make one's life worthwhile. Human worth will decrease with age due to a cycle of illness, accelerated by stress, and other factors. Improved healthcare will also empower employees, increase productivity, and assist provide adequate and efficient results. When we have good welfare, it's usually an expensive decision, but when we consider the long term, it benefits the company in the long run. It is the procedure used by law enforcement to ensure that an employer stays out of trouble with the law. Social welfare programs should be emphasized as a prudent investment that, when implemented more effectively, will always produce superior results. Offering welfare benefits to staff members always aids in the development of wholesome, productive, devoted, and contented workers for any organization.

REVIEW OF LITERATURE

- ☆ **Dr. K. Vijaya Rani (2015)** "Employees Welfare Measures Towards Productivity of Neyveli Lignite Corporation Limited" The research indicates that the health facilities and worker safety measures provided by the company have a more significant effect on employees working in thermal power plants and mines.
- ☆ **Dr. K. Lalitha (2014)** "A Study on Employee Welfare Measures Concerning IT Industry" The study aims to determine the employee welfare policies implemented in the IT sector. Anything done for an employee's comfort and well-being beyond their salary—which is not required by the industry—is referred to as employee welfare. Enriching and maintaining the happiness of employees is the fundamental goal of employee welfare.
- ☆ **Shelar (2013)**-identified the effective & welfare provisions for manufacturing industrial units & service industrial units in Karad taluka, District Satara, Maharashtra. She discovered that the management of Karad Taluka's service industry does not effectively reduce employee absenteeism through employee welfare and social security initiatives. To boost employee morale, both industry units should provide their employees with decent working conditions, cooperative societies, canteens, and libraries.
- ☆ **Ms. Anitha. k, Dr. V. Shanthi, and Dr. Annie Sam (2021)** "Impact of Artificial Intelligence Techniques on Employee Retention for Employee Retention" The analysis found that, in the global sector, retaining people is the biggest risk. Businesses are always attempting to come up with new tactics and approaches to keep their personnel. In this cutthroat market, keeping personnel in the company is a struggle for every HR professional. Across the globe, the majority of firms adopt excellent employee well-being practices as one of their strategies.
- ☆ **Prabakar S (2013)**"Employee satisfaction and welfare metrics and to know the awareness of the notion of employee's wellbeing" is the stated goal of the study. According to the studies, Although the majority of workers are satisfied with the current assistance programs, others are not. Management is therefore able to assess the problem impartially by taking the big picture into account.

STATEMENT OF THE PROBLEM

Industrial advancement is contingent upon a contented labor force. Effective management was severely hampered by the management's disregard for human resources. An overestimation or underestimation of a machine's capability will never cause it to react, but an employee will undoubtedly do so. The goal of the study is to determine how Artificial Intelligence is applied as a trustworthy gauge for safety procedures implemented for worker wellbeing. Determining the problem and describing it offers the inquiry a feeling of direction. AI's impact on worker welfare and safety has received adequate consideration.

OBJECTIVES OF THE STUDY

- To study the deployment of AI strategies to enhance workplace wellbeing and safety
- To study how employee entitlements boost loyalty and morale while improving employees' paternalistic and altruistic viewpoints.
- To evaluate the effects of AI tools on the implementation of workplace safety protocols for employees.

RESEARCH METHODOLOGY

Data collection is one of the important aspects of the research design purely because it is the way that how we can get answers to the research question. The particular process or strategies used to locate, pick, organize, and evaluate data on a subject are known as research methodology. A research paper's methodology choice enables the reader to assess a study's overall validity and dependability critically. The researcher includes surveys interviews focus groups and observation.

PRIMARY DATA

The information was gathered from Bangalore South Zone corporate personnel. The researcher inquired about the company's welfare facilities, safety precautions, and benefits. The company's standardized questionnaires were used to gather data from both employers and employees. A total of 180 employees were given questionnaires, of which 172 completed them. The researcher then selected 160 of the completed forms because they contained pertinent data for the investigation. Key information was also obtained by the researcher from the company's leaders and department heads. The researcher has done empirical analysis by using statistical tools like Ranking and chi-square test for hypothetical testing.

SECONDARY DATA

The company's website, as well as books, journals, organizational records, financial reports, and the publishing of corporate books, were used by the researchers to gather information.

ANALYSIS AND FINDINGS

The Best AI Techniques to Augment Workplace Safety

By automating repetitive tasks, monitoring potentially hazardous equipment, and employing cyber threat and predictive analytics to keep ahead of potential dangers, artificial intelligence (AI) solutions can increase worker safety. AI solutions may safeguard digital and physical operations for businesses in both the healthcare and financial sectors, resulting in a work environment with less data loss and fewer on-site injuries. Additionally, it can assist in

controlling workplace harassment. This is a thorough examination of some of the ways that artificial intelligence is transforming workplace safety.

PREDICTIVE ANALYTICS

- ❖ Using AI software and sensors, predictive analytics enables businesses to examine their workspaces for any threats to employee safety and workplace health. Workers are alerted to the existence of risks and advised to take appropriate action before things get worse once they have been evaluated. Predictive analytics solutions are therefore ideal for employees in mines and industries where it's imperative to react rapidly to situations.
- ❖ The AI software/sensor can utilize the data to determine the appropriate course of action once the machine learning system has narrowed down on a problem. Depending on the risk, this could entail an evacuation siren or a straightforward alert sent via an IoT device. Predictive analysis is more appropriate for professional settings since it can handle multiple inputs at once, even though it shares similarities with human activities in terms of analysis and warning systems.(Oravec, 2022)
- ❖ The ability to tailor AI solutions to support any professional is their greatest feature. This also applies to predictive analytics, which is useful for cybersecurity specialists and data scientists.

TASK AUTOMATION

- ❖ AI-driven robots can also completely replace human labor in hazardous jobs. This is not a novel phenomenon for most firms, as the majority of hazardous equipment-related manufacturing operations are being replaced by robots; human supervisors continue to oversee the production lines and job automation technologies such as micropower apps are widely utilized.
- ❖ The benefits of AI task automation extend beyond the production line and personal safety equipment. Drones are a great contender as well. Drones are an effective tool for physical delivery and analysis. (Viegas et al., 2023)They are compact and frequently have cameras, which makes them perfect for examining hazardous areas. They can be adjusted to reach areas that are inaccessible to humans and that make them a great instrument for efficiency and security.

CYBER THREAT ANALYSIS

- ❖ A strong cybersecurity system is necessary for workplace safety since it protects employee communications and any personal or business information that might be misused to harm the business or its workers. This is where artificial intelligence (AI) may help a company's cyber threat analysis.
- ❖ Using state-of-the-art natural language processing and predictive intelligence systems, cybersecurity specialists can leverage artificial intelligence (AI) to investigate vulnerabilities in systems, threats, and defenses in real-time. To help them make better judgments, these cutting-edge AI technologies can scrape and search the internet for any cybersecurity-related information.(Veiga & Pires, 2018) Depending on the kind of threat, putting the appropriate remedy into practice is also much simpler.

COMMUNICATION SURVEILLANCE

Natural language processing, or NLP, has greatly simplified the process of keeping an eye on massive data sets and conversations(H, 2018). Examining both written and oral communication speeds up the learning process for AI systems and enables them to generate extensive reports and transcribe meetings.

WORKFORCE SURVEILLANCE

- ❖ Workforce monitoring has been fundamentally transformed by Internet of Things (IoT) sensors that are powered by AI and machine learning (ML) solutions. Artificial Intelligence significantly contributes to worker safety by shielding workers from health hazards in addition to increasing productivity through production line optimization.
- ❖ AI-enabled workflow surveillance may protect your workers' health in several ways, including workplace safety and averting mishaps.(van Dick, 2023) An employee's location can be tracked, their occupational health can be monitored, and they may be alerted to any potential environmental hazards or workplace accidents by using IoT sensors.

EQUIPMENT SURVEILLANCE

- ❖ Drones and manufacturing robots are just two examples of robotic devices that have improved safety and productivity in workspaces. Despite all of these technologies' benefits, it is important to remember that they still require supervision. AI technologies combined with human workers provide the finest supervision for this equipment.
- ❖ Breakdowns in machinery and malfunctioning equipment can lead to potentially fatal industrial injuries. These threats are a harsh reality for modern firms as machines are taking over different operations across several industries. IoT devices in conjunction with AI solutions, however, are lowering these figures. (Parry & Battista, 2019) They prevent equipment malfunctions during production by anticipating issues and providing fixes before things get out of control. The devices' round-the-clock passive monitoring aids in identifying and notifying employees in the event of malfunctions or thefts.

TABLE NO:1

STRATEGIES OF ARTIFICIAL INTELLIGENCE TOOLS IN SAFETY PRACTICES

Item No	Code	Item depiction	Rank
1	AIS-1	Predictive Analysis	2
2	AIS-2	Task Automation	1
3	AIS-3	Cyber Threat Analysis	3
4	AIS-4	Communication Surveillance	5
5	AIS-5	Workforce Surveillance	4
6	AIS-6	Equipment Surveillance	6

Source: Primary Data

Researchers deduce the influence of AI tools on employee well-being from the preceding Table. On a scale of 1 to 6, Six are assigned for outstanding five for excellent, four for very good,

three for good, two for fair, and one for subpar work. By analyzing oral and written communication, communication surveillance enables AI systems to learn more quickly, transcribe meetings, and produce comprehensive reports. Big data sets and extensive communication monitoring are now much easier to handle thanks to natural language processing. AI-powered workforce surveillance can safeguard workers' health through occupational safety and shield them from accidents at work.

TABLE NO: 2

BENEFITS OF AI IN THE SAFETY PRACTICES

SL NO	Code	IMPACT	Rank
1	MHS	Mental health support	4
2	SD	Skill Development	3
3	SS	Smart scheduling	1
4	CP	Career pathing	2

Source: Primary Data

Table 2 demonstrates how entrepreneurs use AI solutions that help workers, such as career pathing, skill development, mental health support, and smart scheduling. The business places a strong emphasis on the mental health support that AI-powered chatbots can offer staff members, giving them instant access to information that can help them manage stress and anxiety. Second, focus on skill development. This will help employees stay engaged and upskill. While smart scheduling is less responsive, artificial intelligence (AI) can optimize schedules to reduce overtime and distribute tasks among team members. Career pathing tools can also help employees explore possible career paths within the company.

HYPOTHESIS

H₀: There is no significant impact of AI tools in the application of safety measures in the employee's workplace.

H₁: There is a significant impact of AI tools in the application of safety measures in the employee's workplace.

The Researcher adopted the Chi-Square Test to analyze the impact of AI tools on employee wellbeing. The significance level taken by the researcher is five percent.

TABLE NO: 3**IMPACT OF AI TOOLS ON EMPLOYEE WELLBEING**

AI TOOLS/IMPACT	MHS	SD	SC	CP	Column Total
PA	7	5	6	6	24
TA	5	4	5	6	20
CTA	8	6	6	5	25
CS	5	7	8	8	28
WS	11	6	4	6	27
ES	13	12	5	6	36
Row Total	49	40	34	37	160

Source: Primary

X²	8.544591022
DOF	15
P VALUE	0.900101467

The null hypothesis is accepted since the P-value is greater than 0.05, meaning that AI technologies have no discernible effect on worker well-being. In this case, the abbreviations PA, TA, CTA, ES, and CS stand for predictive analysis, task automation, cyber threat analysis, workforce surveillance, and equipment surveillance, respectively.

CONCLUSION

- Technical safety in AI is essential for worker health because it guarantees that the tools and systems workers use are created, deployed, and utilized in a way that maximizes safety and reduces hazards. This entails adhering to best practices for AI creation, testing, and implementation to avoid unintentionally bad outcomes. Ensuring that people work in a safe AI environment also requires regular training, oversight, and addressing potential biases.
- Albeit AI can improve productivity and job happiness, some drawbacks may have a detrimental effect on workers' well-being. Achieving equilibrium between the human aspect and technological innovation is crucial. To reduce potential hazards and guarantee that AI favorably impacts employees' general well-being in the constantly changing workplace, organizations must place a high priority on appropriate training, open communication, and ongoing oversight.

REFERENCES

- Chaudhary, S., Kumar, S., Kumar, K., Kathuria, S., Negi, P., & Chhabra, G. (2023). Artificial intelligence's place in the workplace and organizational culture. Proceedings of the 2nd International Conference on Sustainable Computing and Data Communication Systems, ICSCDS 2023. 10104697; <https://doi.org/10.1109/ICSCDS56580.2023>.
- H, R. B. (2018). Impact of Artificial Intelligence on Cyber Security. *International Journal of Computer Sciences and Engineering*, 6(12). <https://doi.org/10.26438/ijcse/v6i12.341343>
- Oravec, J. A. (2022). The emergence of “truth machines”? Artificial intelligence approaches to lie detection. *Ethics and Information Technology*, 24(1). <https://doi.org/10.1007/s10676-022-09621-6>
- Parry, E., & Battista, V. (2019). The impact of developing technologies on work: an assessment of the evidence and implications for the human resource function. *Emerald Open Research*, 1. <https://doi.org/10.12688/emeraldopenres.12907.1>
- van Dick, R. (2023). Primary challenges for employee health and wellbeing. *Frontiers in Organizational Psychology*, 1. <https://doi.org/10.3389/forgp.2023.1223232>
- Veiga, R. A. C., & Pires, C. C. (2018). Impacto da inteligência artificial nos locais de trabalho Impact of artificial intelligence on the workplace. *International Journal on Working Conditions*, 16.
- Viegas, S., Gualano, M. R., Buttigieg, S., & Moscato, U. (2023). OPEN ACCESS EDITED AND REVIEWED BY Editorial: Impact of digitalization on workers' health and work-life balance. *Frontiers in Public Health Frontiersin.Org*.