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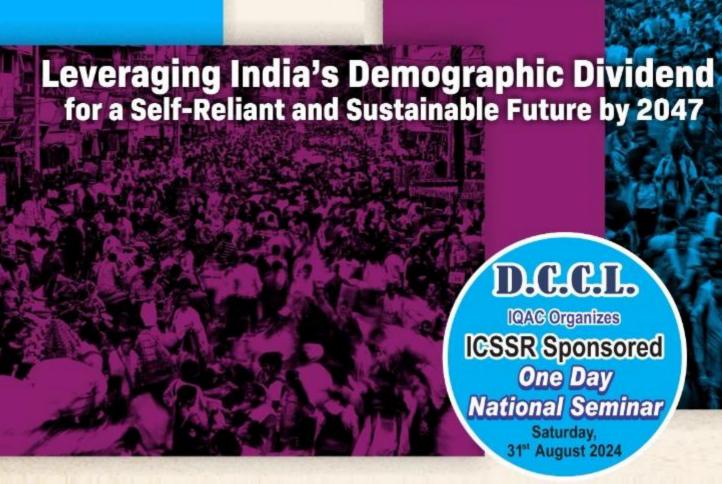
Dayanand College of Commerce, Latur

NAAC Re-accredited 'B++' (3rd Cycle)

Affiliated to Swami Ramanand Teerth Marathwada University, Nanded

Internal Quality Assurance Cell Organizes

Indian Council of Social Science Research Sponsored



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Leveraging India's Demographic Dividend For A Self-Reliant And Sustainable Future By 2047

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President's Message

I congratulate IQAC, Dayanand College of Commerce, Latur for taking initiative in organizing ICSSR Sponsored One Day National Seminar on "Leveraging India's Demographic Dividend for a Self-Reliant and Sustainable Future by 2047".

This seminar aims to explore transformation of India into a self-reliant, innovative, and sustainable nation by 2047 by effectively harnessing the potential of its youthful population, ensuring equitable growth, and establishing a resilient economy and society.

It also aims toward Cultural and Social Development by promoting and preserving India's diverse cultural heritage, which can also become a part of the economic growth strategy through tourism and cultural industries.

I hope in this one day national seminar the Guests, Resource Persons, Professors, Research Scholars and participants will surely share their broad views on India's Demographic Dividend and come out with suggestions on the seminar theme.

Laxmiraman Lahoti

President,

Dayanand Education Society, Latur.



Message

India's demographic dividend refers to the economic advantage that arises from having a large, youthful population relative to its dependent age groups. This phenomenon is often seen as a significant opportunity for economic growth and development.

The seminar theme will focus on sustainable practices to ensure that economic growth does not come at the expense of environmental degradation and will discuss to implement efficient resource management strategies to support long-term development.

In this regard, Dayanand Education Society's Dayanand College of Commerce, Internal Quality Assurance Cell is organizing one day national seminar to bring together the wisdom and experience of senior researchers and public intellectuals with the energy and inventiveness of emerging scholars and students to think collaboratively, share ideas and questions, and possibly find new ways toward India's self-reliant and sustainable future by 2047.

The seminar will provide a platform for interdisciplinary exchange and collaboration and offer opportunities for networking and learning. I wish all the best to all the participants.

Ramesh Biyani

Secretary,

Dayanand Education Society, Latur.



Message

I congratulate the IQAC & faculty of college for organizing ICSSR Sponsored One Day National Seminar on "Leveraging India's Demographic Dividend for a Self-Reliant and Sustainable Future by 2047".

Organizing this seminar is an initiative step taken by our college to understand India's demographic dividend to become self-reliant. India's demographic dividend presents a tremendous opportunity for economic growth and development. However, realizing this potential requires strategic investments in education, skill development, healthcare, infrastructure, and inclusive economic policies. By addressing these areas, India can effectively harness its youthful population to drive sustained economic progress and enhance its global standing by 2047.

India has a relatively large proportion of its population in the working-age group (15-64 years). As of 2024, approximately 65% of India's population is under the age of 35. This age group represents a potential workforce that can drive economic growth if properly educated and employed.

I am sure this one day national seminar will discuss topics pertaining to the seminar theme and will reach to the fruitful outcomes.

Dr. Prashant Mannikar

I/c Principal,

Dayanand College of Commerce, Latur.



Editor's Note

At the outset, I appreciate and congratulate IQAC team and faculty for their contribution in organizing this ICSSR Sponsored One Day National Seminar on "Leveraging India's Demographic Dividend for a Self-Reliant and Sustainable Future by 2047".

The organizers have taken conscientious efforts to reach the nation-wide research scholars and collected papers on various issues allied with the seminar theme.

The essential themes of this national seminar include Enhancing Skill Development and Vocational Training, Adapting Labor Market Dynamics for the Future Workforce, Promoting Lifelong Learning and Continuous Education, Leveraging Emerging Technologies for Innovation, Building Global Partnerships and International Collaboration, Improving Infrastructure for Sustainable Development so on and so forth.

Achieving a self-reliant India by 2047 involves developing a robust, resilient economy that minimizes dependence on external resources and maximizes internal capabilities. This vision aligns with the goal of economic independence, technological advancement, and sustainable development.

I appreciate all researchers for the time and efforts they have put in writing research papers pertaining to the seminar themes.

Dr. Balaji Kalambe

IQAC Coordinator

Dayanand College of Commerce, Latur.



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"THE INFLUENCE OF SOCIAL NETWORKS ON ENTREPRENEURIAL SUCCESS"

Dr. Satish Laxmanrao Kundalwar

Asst. Professor Shivneri Mahavidyalaya Shirur Anantpal

Abstract:

This research paper examines the pivotal role of social networks in determining the success of entrepreneurs and start ups through a network analysis approach. The study aims to elucidate how various social connections impact entrepreneurial outcomes by investigating the influence of different types of network ties, including professional, familial, and informal relationships. By employing a comprehensive network analysis methodology, this research seeks to identify key network factors—such as the strength and diversity of connections, centrality, and the presence of bridging and bonding ties—that significantly facilitate or hinder entrepreneurial success.

The findings are expected to provide valuable insights into the mechanisms through which social networks contribute to start up viability and growth, offering practical implications for entrepreneurs seeking to leverage their networks for enhanced business performance. This study contributes to the broader understanding of entrepreneurial dynamics by highlighting the critical role of social capital in shaping venture outcomes.

Keywords: social media, entrepreneurship, start up

Introduction:

In the contemporary landscape of entrepreneurship, the significance of social networks has become increasingly apparent. Entrepreneurs today operate within a complex web of relationships that span various domains, from investors and mentors to peers and customers. Understanding the impact of these networks on entrepreneurial success is crucial for both emerging and established entrepreneurs. The advent of digital platforms has further amplified this phenomenon, facilitating unprecedented levels of connectivity and interaction. This research paper delves into the intricate ways in which social networks influence entrepreneurial outcomes, utilizing a network analysis approach to uncover patterns, dynamics, and implications.

The Importance of Social Networks in Entrepreneurship

Social networks encompass the array of relationships and connections an individual has, which can significantly influence their access to resources, information, and opportunities. For entrepreneurs, these networks often provide critical support in the form of advice, funding, and market access. The role of social capital—essentially the value derived from these relationships—has been well documented in literature, yet the specifics of how network structures and interactions contribute to entrepreneurial success remain underexplored.

Research Objectives and Questions

The primary objective of this study is to explore how social network characteristics impact entrepreneurial success. Specifically, it seeks to answer the following research questions:

- 1. How do different network structures influence access to critical resources and opportunities for entrepreneurs?
- 2. What is the role of network centrality and connectivity in determining entrepreneurial outcomes?
- 3. How do strong and weak ties within entrepreneurial networks contribute to the achievement of business goals?
- 4. What patterns can be identified in successful versus unsuccessful entrepreneurial ventures in relation to their social networks?



Objectives of the study:

- 1. To investigate the role of social networks in the success of entrepreneurs and start-ups.
- 2. To analyse how different types of social connections contribute to entrepreneurial outcomes.
- 3. To identify key network factors that facilitate or hinder entrepreneurial success.

Significance of the Study

Understanding the role of social networks in entrepreneurship is not only of academic interest but also has practical implications for entrepreneurs, investors, and policymakers. For entrepreneurs, insights from this research can guide strategies for building and leveraging effective networks. Investors and support organizations can use these findings to tailor their support mechanisms and identify promising ventures. Policymakers can design interventions that foster network development, ultimately contributing to a more vibrant and innovative entrepreneurial ecosystem.

This paper aims to bridge the gap between theoretical understanding and practical application by providing a detailed analysis of how social networks influence entrepreneurial success. It seeks to shed light on the intricate interplay between social connections and entrepreneurial achievements, offering valuable insights for a wide range of stakeholders in the entrepreneurial community.

Social networks play a pivotal role in the success of entrepreneurs and start ups by offering a range of benefits that can be crucial for their growth and development. Here's a detailed breakdown of how social networks contribute to entrepreneurial success:

1. Networking and Relationship Building

Connections to Investors: Social networks provide a platform for entrepreneurs to connect with potential investors, venture capitalists, and angel investors. These connections can be vital for securing funding.

Collaborations and Partnerships: Entrepreneurs can find potential business partners, collaborators, and strategic alliances through their social networks. Collaborations can lead to shared resources, combined expertise, and enhanced business opportunities.

Mentorship Opportunities: Social networks allow entrepreneurs to connect with experienced mentors and advisors who can provide guidance, advice, and support based on their experience.

2. Marketing and Branding

Building Brand Awareness: Entrepreneurs can leverage social networks to create and promote their brand. Platforms like Instagram, Facebook, LinkedIn, and Twitter are powerful tools for reaching a broad audience and establishing a brand presence.

Customer Engagement: Social networks enable direct interaction with potential and current customers. Entrepreneurs can engage with their audience through posts, comments, and messages, allowing for real time feedback and relationship building.

Content Sharing: Sharing valuable content related to their industry, products, or services helps entrepreneurs position themselves as thought leaders and experts, which can enhance their credibility and attract attention.

3. Market Research and Validation

Understanding Market Trends: By observing discussions, trends, and interests on social networks, entrepreneurs can gain insights into market demands and emerging trends. This information can be used to adapt their business strategies and offerings.

Customer Feedback: Social networks provide a platform for entrepreneurs to gather feedback from their audience, helping them validate their business ideas, products, or services before a full scale launch.



4. Recruitment and Talent Acquisition

Finding Talent: Social networks like LinkedIn are essential for recruiting top talent. Entrepreneurs can use these platforms to search for and connect with skilled professionals who fit their company's needs.

Building a Team: Engaging with potential team members and showcasing the company's culture and values through social networks can attract candidates who align with the company's mission and vision.

5. Sales and Lead Generation

Generating Leads: Social networks can be a rich source of leads and prospects. Entrepreneurs can use targeted advertising and organic outreach to connect with potential customers who are interested in their products or services.

Driving Sales: By promoting their offerings and running targeted campaigns, entrepreneurs can drive sales and conversions directly through social networks.

6. Learning and Professional Development

Access to Knowledge: Entrepreneurs can follow industry experts, join professional groups, and participate in discussions to stay informed about the latest trends, best practices, and innovations in their field.

Educational Content: Many social networks and online communities provide access to webinars, tutorials, articles, and other educational resources that can help entrepreneurs improve their skills and knowledge.

7. Crisis Management and Reputation Management

Handling Negative Feedback: Social networks provide a platform for addressing customer complaints and managing negative feedback. A prompt and effective response can mitigate damage and maintain the company's reputation.

Managing Public Relations: Entrepreneurs can use social networks to communicate their brand values, respond to public issues, and manage their company's image proactively.

8. Community Building

Creating a Loyal Following: By engaging consistently with their audience and fostering a sense of community, entrepreneurs can build a loyal customer base that supports and advocates for their business.

Crowdsourcing Ideas: Social networks can be used to gather ideas, conduct polls, and solicit input from the community, which can provide valuable insights and foster a sense of involvement among supporters.

Hence it proves that social networks offer a multifaceted toolkit for entrepreneurs and start- ups, facilitating crucial aspects of business development, from initial networking and funding to marketing, recruitment, and customer engagement. By effectively leveraging these platforms, entrepreneurs can significantly enhance their chances of success and growth.

Different types of social connections can significantly influence entrepreneurial outcomes, each providing unique benefits and contributing to various aspects of a start up's development. Here's an analysis of how different types of social connections impact entrepreneurial success:

1. Personal Connections

Family and Friends

Support and Motivation: Family and friends often provide emotional support, encouragement, and motivation, which can be crucial during challenging times.

Initial Funding: They may also contribute initial funding or resources, especially in the early stages of a start-up.



Networking Opportunities: Personal connections can introduce entrepreneurs to their own professional networks, potentially leading to valuable business contacts.

Challenges

Bias and Conflict of Interest: Personal connections might have biased opinions or expectations, which can complicate business decisions and relationships.

2. Professional Connections

Industry Peers

Knowledge Sharing: Peers within the same industry can share valuable insights, best practices, and market trends.

Collaboration Opportunities: Professional connections can lead to potential collaborations, partnerships, or joint ventures, which can be beneficial for growth and innovation.

Referrals and Recommendations: Industry peers may refer clients or customers, enhancing business opportunities.

Mentors and Advisors

Guidance and Expertise: Mentors and advisors provide strategic advice, industry expertise, and guidance based on their own experiences.

Networking Facilitation: They often introduce entrepreneurs to their own network, providing access to investors, partners, and other influential contacts.

Challenges

Dependence on Advice: Over reliance on mentors or advisors may lead to dependency and limit the entrepreneur's own decision making growth.

3. Investor Connections

Venture Capitalists and Angel Investors

Funding: Investors provide critical capital needed for scaling operations, product development, and market expansion.

Strategic Guidance: Investors often offer strategic guidance and connections to other relevant industry players.

Credibility: Securing investment from reputable investors can enhance the start up's credibility and attract additional funding and opportunities.

Challenges

Control and Expectations: Investors may seek control or influence over business decisions and have high expectations for return on investment, which can sometimes create pressure on the entrepreneur.

4. Customer Connections

Early Adopters and Feedback Providers

Product Validation: Early adopters provide critical feedback and validation for the product or service, helping refine and improve offerings.

Word of Mouth Promotion: Satisfied customers can act as advocates, providing valuable word of mouth marketing and referrals.

Challenges

Managing Expectations: Balancing customer expectations and feedback while maintaining a clear vision for the business can be challenging.

5. Strategic Partners

Business Partners and Suppliers

Resource Sharing: Strategic partners can offer complementary resources, technologies, or services that enhance the start up's capabilities.

Market Access: Partners can provide access to new markets or customer segments, expanding business opportunities.

Challenges

Alignment of Goals: Ensuring that both parties' goals and values align is crucial to maintaining a productive and beneficial partnership.

6. Community and Social Network Connections

Online Communities and Networks

Knowledge and Learning: Participation in online forums, groups, and communities provides access to collective knowledge, industry news, and learning resources.

Networking and Exposure: Social media and online platforms offer opportunities for networking, brand building, and reaching a wider audience.

Challenges

Information Overload: The vast amount of information and competing voices online can make it challenging to filter relevant advice and opportunities.

7. Government and Institutional Connections

Regulatory Bodies and Industry Associations

Compliance and Support: Connections with regulatory bodies and industry associations can provide support with compliance, funding opportunities, and industry standards.

Advocacy and Resources: These connections can also offer advocacy, resources, and programs designed to support start-ups and entrepreneurs.

Challenges

Bureaucracy: Navigating the bureaucratic processes and regulations can be time consuming and complex.

Different types of social connections contribute to entrepreneurial outcomes in various ways. Personal connections provide emotional support and initial resources, professional connections offer industry insights and collaborative opportunities, investor connections supply crucial funding and strategic guidance, customer connections validate and promote the business, and strategic partners enhance resources and market access. Additionally, community and social network connections offer learning opportunities and broader exposure. Each type of connection has its unique advantages and potential challenges, and a successful entrepreneur typically leverages a combination of these connections to achieve their business goals.

Following are some key network factors which can either facilitate or hinder entrepreneurial success, significantly impacting the growth and development of a start-up. Here's a detailed look at these factors:



Facilitating Factors

1. Strong and Diverse Connections

- Wide Range of Contacts: Having a broad network that includes diverse connections—such as industry peers, mentors, investors, customers, and strategic partners—can provide access to various resources, expertise, and opportunities.
- Cross-Industry Relationships: Connections across different industries can lead to innovative ideas, partnerships, and cross-promotional opportunities.

2. Trust and Credibility

- Reputation: Building a reputation for reliability and competence within the network can enhance trust and credibility, making it easier to secure funding, partnerships, and referrals.
- Relationship Quality: Strong, trust-based relationships with key stakeholders (investors, mentors, customers) can lead to better support, advice, and opportunities.

3. Active Engagement

- Networking Efforts: Actively participating in industry events, online forums, and networking groups can help entrepreneurs stay informed, build relationships, and discover opportunities.
- Social Media Presence: Maintaining an active and professional presence on social media platforms can increase visibility and attract valuable connections.

4. Access to Resources and Knowledge

- Mentorship: Access to experienced mentors and advisors can provide valuable guidance, industry insights, and strategic advice.
- Educational Resources: Networking with knowledgeable individuals and participating in relevant communities can offer access to educational resources, trends, and best practices.

5. Referral and Recommendation Systems

- Word-of-Mouth: Positive referrals and recommendations from network connections can help build credibility and attract new customers or investors.
- Introductions: Networking can lead to valuable introductions to key stakeholders, including potential clients, partners, or funding sources.

6. Collaborative Opportunities

- Partnerships: Strategic alliances and partnerships within the network can lead to resource sharing, joint ventures, and expanded market reach.
- Collaborative Projects: Working on collaborative projects with other entrepreneurs or companies can enhance innovation and provide mutual benefits.

Hindering Factors

1. Weak or Limited Connections

- Narrow Network: A limited network can restrict access to resources, opportunities, and information, hindering the start-up's growth and development.
- Lack of Industry Contacts: Insufficient connections within the relevant industry can limit access to crucial industry-specific advice and opportunities.



2. Lack of Trust and Credibility

- Negative Reputation: A poor reputation or lack of trust within the network can deter potential investors, partners, and customers, impacting business growth.
- Unreliable Relationships: Weak or unreliable relationships can lead to missed opportunities and a lack of support when needed.

3. Limited Engagement and Visibility

- Passive Networking: Failing to actively engage in networking opportunities can result in missed connections and reduced visibility in the industry.
- Inadequate Online Presence: An inactive or unprofessional online presence can limit the ability to connect with potential stakeholders and customers.

4. Mismatched Goals and Expectations

- Conflicting Interests: Misalignment of goals and expectations with network connections, such as investors or partners, can lead to conflicts and hinder progress.
- Unrealistic Demands: Over-promising or failing to meet the expectations set by network connections can damage relationships and credibility.

5. Over-Reliance on Certain Connections

- Dependency: Relying too heavily on a few key connections for advice, resources, or funding can create vulnerabilities if those connections become unavailable or unreliable.
- Limited Perspective: Over-dependence on a narrow set of network connections may limit exposure to diverse viewpoints and opportunities.

6. Bureaucratic and Structural Barriers

- Regulatory Challenges: Navigating complex bureaucratic and regulatory requirements can be challenging and may impede progress, especially if the network does not include relevant regulatory or industry experts.
- Institutional Hurdles: Institutional barriers, such as those found in large organizations or government bodies, can slow down processes and create obstacles to networking and collaboration.

Findings

- 1. Social media plays an important role in promoting the start-ups as well as Entrepreneurships
- 2. It creates awareness of brand and company among the potential customers
- 3. Its enhances the brand image and loyalty among the customers
- 4. It enables the management to be able to manage the crisis as well as reputation management

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PROMOTING RENEWABLE ENERGY AND GREEN TECHNOLOGIES, AND EFFICIENT RESOURCE MANAGEMENT FOR SUSTAINABILITY

Dr. Nirgalee Shah

Founder, Image Building and Etiquette Mapping Managing Director, Dr. Niraalee Shah Travel Design Pvt. Ltd

Introduction

Background and Context

A) Overview of India's Demographic Dividend:

India is poised at a vital juncture in its demographic transition, characterised by using a burgeoning children populace, with over 65% of its 1.4 billion residents below the age of 35, India is experiencing a unique length of demographic dividend. This demographic benefit, if harnessed correctly, has the capacity to propel the kingdom toward fast monetary boom and improvement, but the demographic dividend isn't always only a count of numbers; it also requires strategic making plans and coverage interventions to make certain that this younger strength is channeled productively. Training, talent development, and employment possibilities are pivotal in remodelling this demographic gain into sustainable financial development.

Objectives of the Research

To Explore the Potential of Renewable Energy and Green Technologies:

This study aims to delve into the immense potential that renewable energy and green technology hold for India's future, as the country grapples with rising energy needs and environmental concerns, renewable energy sources such as solar, wind, and hydroelectric power offer viable alternatives to traditional fossil fuels. This study will explore the policy frameworks supporting its growth, and identify the technological advancements that could drive the adoption of green technologies, by understanding these factors, the research seeks to highlight how renewable energy can contribute to India's self-reliance and sustainability goals.

To Evaluate Green Resource Management Techniques:

Efficient resource management is a cornerstone of sustainable development. This study will assess the techniques that can be employed to manage India's natural resources more effectively, from water conservation and waste management to sustainable agriculture and land use, the study will explore various approaches to resource management that align with the principles of sustainability. The objective is to identify best practices, technological solutions, and policy interventions that can enhance resource efficiency and reduce environmental impact, by doing so, the research will provide insights into how India can manage its resources in a way that supports long-term sustainability and economic stability.

Efficient Green Resource Management For Sustainability

Assessment of Useful Resource Management in India

A) Modern Resource Management Practices:

India, with its sizeable and diverse natural resources, faces significant challenges in managing these resources sustainably. Modern practices vary widely across regions and sectors, often characterized by inefficiencies and overexploitation. Water resources are under extreme stress, with many areas facing scarcity due to unsustainable usage, pollution, and climate change influences. Additionally, waste management is still in its nascent stages in many parts of the country, leading to environmental degradation and public health risks. Agriculture, a critical sector, suffers from unsustainable practices such as excessive groundwater extraction and the overuse of chemical fertilizers, which deplete soil health and reduce productivity over time.



B) Importance of Efficient Resource Usage for Sustainability

Efficient resource management is crucial for sustaining India's economic growth, improving the quality of life, and ensuring environmental sustainability, with a population exceeding 1.4 billion, the pressure on natural resources is immense, making it vital to adopt practices that maximize efficiency, reduce waste, and promote the equitable distribution of resources. Sustainable resource usage can also mitigate the effects of climate change, preserve biodiversity, and ensure long-term food, water, and energy security for the nation.

Strategies for Sustainable Resource Management

A) Water Conservation and Management:

Water conservation is paramount for addressing the growing scarcity of water resources in India. Strategies include the promotion of rainwater harvesting, the restoration of traditional water bodies, and the implementation of efficient irrigation techniques like drip and sprinkler systems. Integrated Water Resource Management (IWRM) approaches, which consider the entire watershed and its various uses, can ensure the sustainable allocation of water across specific sectors, including agriculture, industry, and domestic use.

B) Waste Management and Recycling:

Effective waste management is vital for reducing environmental pollution and promoting sustainability. India must shift toward a circular economy model, where waste is minimized, and resources are reused and recycled. Key strategies include strengthening waste segregation at the source, expanding recycling infrastructure, and promoting the use of biodegradable materials. Public awareness campaigns and stricter enforcement of waste management policies are also essential for improving compliance and reducing the burden on landfills.

C) Sustainable Agriculture and Land Use:

Sustainable agricultural practices are critical for maintaining soil health, improving productivity, and ensuring food security. Strategies such as crop rotation, organic farming, agroforestry, and the use of biofertilizers can reduce dependence on chemical inputs and enhance soil fertility. Land use planning should prioritize the conservation of natural ecosystems, prevent land degradation, and promote the restoration of degraded lands. Sustainable practices not only enhance agricultural output but also contribute to climate change mitigation by sequestering carbon and preserving biodiversity.

Technological Solutions and Innovations

A) Role of Technology in Improving Resource Efficiency:

Technology plays a pivotal role in optimizing resource use and minimizing waste. Precision agriculture, powered by technologies like GPS, IoT, and AI, enables farmers to use inputs such as water, fertilizers, and pesticides with high accuracy, reducing wastage and enhancing crop yields. In the water sector, smart metering and real-time monitoring systems help track water usage, detect leaks, and ensure efficient distribution. Waste management has also seen innovations such as automated waste sorting systems, waste-to-energy technologies, and advanced recycling techniques that increase resource recovery and reduce environmental footprints.

B) Case Studies of Successful Implementations:

Several successful implementations of resource-efficient technologies can be found across India. For instance, the Andhra Pradesh Micro Irrigation Project (APMIP) has significantly improved water use efficiency in agriculture, benefiting thousands of farmers. In waste management, the Indore Municipal Corporation has set a benchmark by implementing a comprehensive waste segregation and processing system, making Indore the cleanest city in India. These case studies highlight the potential of technological innovations in driving sustainable resource management and provide replicable models for other regions.



Policy and Regulatory Framework

A) Evaluation of Policies Related to Resource Management:

India has developed various policies and regulations aimed at promoting efficient resource management. The National Water Policy emphasizes the need for integrated water resource management and equitable distribution. The Swachh Bharat Mission has been instrumental in improving sanitation and waste management practices across the country. However, there are gaps in policy implementation and enforcement that need to be addressed to achieve the desired outcomes. Additionally, regulations must be updated to incorporate emerging challenges such as climate change and urbanization.

B) Recommendations for Policy Improvements:

To enhance the effectiveness of resource management policies, it is crucial to adopt a more holistic and integrated approach. Policies should be designed to encourage the adoption of sustainable practices through incentives and support for technological innovation. Strengthening enforcement mechanisms and improving coordination among different government agencies can also enhance policy implementation. Furthermore, involving local communities in resource management decisions can lead to more effective and sustainable outcomes. Regular policy reviews and updates are necessary to adapt to changing environmental, social, and economic conditions.

Policy Recommendations

To leverage India's demographic dividend effectively and transition towards a self-reliant and sustainable future, the following policy recommendations are crucial:

1. Beef Up Renewable Energy Incentives

- Expand Financial Support: Amplify financial incentives such as subsidies, tax breaks, and low-interest loans for renewable energy projects. According to the International Renewable Energy Agency (IRENA), India invested \$12.5 billion in renewable energy in 2023—a significant increase from previous years. However, continued economic support is crucial to sustaining growth. Source: IRENA
- Support Research and Development (R&D): Enhance funding for R&D in renewable technologies. The Indian government should increase R&D spending to drive innovation in solar, wind, and battery storage technologies. The National Institute of Solar Energy (NISE) reports that India has made significant strides in solar power R&D, but further innovation is needed. Source: NISE
- Facilitate Grid Integration: Develop infrastructure to integrate renewable energy sources into the national grid. The Central Electricity Authority (CEA) highlights that integrating 175 GW of renewable energy into the grid by 2022 has been challenging, indicating a need for enhanced grid infrastructure. Source: CEA

Enhance Resource Management Policies

- **Promote Water Efficiency:** Implement policies to promote water-efficient technologies and practices in agriculture and industry. The National Water Project reports that India loses about 50% of its water due to inefficiencies, and improving this could save significant resources. Source: National Water Project
- Encourage Circular Economy Practices: Develop policies that incentivize waste reduction, recycling, and reuse. The Ministry of Environment, Forest and Climate Change (MoEFCC) emphasizes the need for a circular economy to manage waste effectively and reduce environmental impact. Source: MoEFCC
- Support Sustainable Agriculture: Promote practices that enhance soil health, reduce water utilization, and increase crop yield. The Indian Council of Agricultural Research (ICAR) reports that sustainable agriculture practices can improve productivity by up to 30%. Source: ICAR

Foster Public-Private Partnerships

• Encourage Collaboration: Develop frameworks that facilitate collaboration among the government, private sector, and non-profits. According to the World Bank, public-private partnerships can enhance efficiency and innovation in infrastructure projects. Source: World Bank

• **Support Skill Development:** Invest in training programs to develop a skilled workforce for the renewable energy and resource management sectors. The Ministry of Skill Development and Entrepreneurship (MSDE) reports that skill gaps in these sectors need to be addressed to ensure effective policy implementation. Source: MSDE

Future Research Guidelines

To achieve the goals of leveraging India's demographic dividend for a self-reliant and sustainable future, further research in the following areas is crucial:

A) Impact of Emerging Technologies

• Research Focus: Investigate how emerging technologies like artificial intelligence (AI) and blockchain can enhance renewable energy management and resource efficiency. Research should focus on the potential of AI for predictive maintenance in renewable energy systems and blockchain for enhancing transparency in resource management.

B) Socio-Economic Impacts

• Research Focus: Examine the socio-economic impacts of renewable energy adoption and resource management practices on local communities. This includes assessing job creation, changes in livelihoods, and overall economic benefits. Detailed case studies in various regions can provide valuable insights.

C) Policy Effectiveness

• Research Focus: Evaluate the effectiveness of existing policies and identify best practices for policy implementation. Research should analyse the outcomes of current policies and recommend changes based on empirical evidence to enhance their impact.

D) Integration of Renewable Energy Sources

• Research Focus: Explore innovative solutions for integrating various renewable energy sources into the national grid. This includes research on smart grid technologies, energy storage solutions, and decentralized energy systems.

E) Circular Economy Models

• Research Focus: Develop and test new models for a circular economy that can be scaled up. Research should focus on the practical aspects of implementing circular economy practices across different industries and sectors.

Conclusion

Summary of Findings

The research explored two critical areas for leveraging India's demographic dividend to achieve a self-reliant and sustainable future by 2047: promoting renewable energy and green technologies, and efficient resource management. The following key insights emerged:

A) Promoting Renewable Energy and Green Technologies:

- **Significant Progress:** India has made considerable strides in renewable energy. As of 2024, the country has installed approximately 160 GW of renewable energy capacity, including solar, wind, and hydro power (Ministry of New and Renewable Energy, 2024). The Solar Energy Corporation of India aims to reach 500 GW of renewable energy capacity by 2030, demonstrating a strong commitment to scaling up green technologies.
- **Technological Advancements:** Innovations such as floating solar panels and advanced wind turbines are enhancing efficiency and reducing costs. For instance, floating solar installations in Gujarat have achieved a capacity of 600 MW, showcasing a scalable solution for areas with limited land (Press Information Bureau, 2024).

• **Policy Impact:** Government initiatives like the National Solar Mission and the Wind Energy Mission have catalyzed growth in the sector. Policies offering tax incentives, subsidies, and support for research have been pivotal in driving renewable energy adoption (Government of India, 2024).

B) Efficient Resource Management for Sustainability:

- Resource Utilization: Efficient resource management is crucial for sustainability. India's water footprint is projected to exceed 1,200 cubic meters per person by 2030, raising concerns about water scarcity (National Institution for Transforming India, 2024). Innovative practices in water conservation, such as rainwater harvesting and wastewater recycling, are essential for addressing these challenges.
- Waste Management: The Swachh Bharat Mission has significantly improved waste management, with the recycling rate of municipal solid waste increasing to 30% in urban areas (Ministry of Housing and Urban Affairs, 2024). However, there is still a need for more comprehensive waste segregation and recycling systems.
- Sustainable Agriculture: The adoption of sustainable farming practices, including precision agriculture and organic farming, has increased. The area under organic cultivation has grown to over 2.7 million hectares, contributing to soil health and reduced chemical use (APEDA, 2024).

C) How Leveraging the Demographic Dividend Can Lead to a Self-Reliant Future:

Leveraging India's demographic dividend—the large, youthful population—can be transformative for achieving a self-reliant and sustainable future. The youthful workforce offers a unique advantage for driving technological innovation and implementation of green practices.

- Employment Opportunities: The renewable energy sector is expected to create around 10 million jobs by 2030, providing significant employment opportunities for India's young population (International Renewable Energy Agency, 2024). These jobs span across manufacturing, installation, maintenance, and research roles, facilitating economic growth and development.
- Educational and Skill Development: Investing in education and skill development tailored to green technologies and resource management will empower the youth to become leaders in sustainability. Programs focused on renewable energy technologies, environmental management, and sustainable practices can prepare the next generation to address environmental challenges effectively.
- Entrepreneurship and Innovation: The entrepreneurial spirit among India's youth is a driving force for innovation in renewable energy and resource management. Startups and new ventures focused on green technologies are emerging rapidly, contributing to technological advancements and market expansion.

In conclusion, the integration of renewable energy and efficient resource management, supported by India's demographic dividend, is crucial for building a self-reliant and sustainable future. By harnessing the potential of its young population, India can lead the way in global sustainability efforts and achieve its goals for 2047.

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"ASSESSING THE IMPACT OF LATUR DISTRICT CENTRAL COOPERATIVE BANK ON SUSTAINABLE AGRICULTURAL GROWTH: A SOCIOECONOMIC ANALYSIS OF LATUR DISTRICT"

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Abstract:

The role of financial institutions, particularly cooperative banks, is critical in fostering agricultural development, especially in rural regions. This study investigates the impact of the Latur District Central Cooperative Bank (LDCCB) on the sustainable agricultural growth of Latur District, with an emphasis on socioeconomic implications. The research evaluates how LDCCB's financial services, credit schemes, and support initiatives contribute to enhancing agricultural productivity and promoting sustainable practices among farmers. Additionally, the bank's role in financial literacy and farmer education has been pivotal in promoting sustainable practices, leading to increased agricultural productivity and income stability.

Some challenges are brought out to be addressed, mainly diversified financial products and better outreach to the most vulnerable farmers. The research concludes with some recommendations of policy interventions that will make the bank play a greater role in promoting inclusive and sustainable agricultural development. This paper contributes to the discourse at the intersection of cooperative banking and rural development with useful insights for policymakers, practitioners, and researchers.

Keywords: Latur District, Central Cooperative Bank, Agricultural Growth, Sustainable Development, Socioeconomic Analysis, Rural Banking, Financial Inclusion.

Introduction

Agriculture remains the mainstay of rural economies, particularly in districts like Latur, inhabited by large populations deriving their livelihoods from farming activities. Agricultural practices in such regions are inextricably linked to the available financial services that can help farmers acquire modern technologies, inputs, and infrastructure. In this regard, cooperative banks have turned out to be an important institution in fostering agricultural development. In this background, the Latur District Central Cooperative Bank emerges as a mainstay for offering specially designed financial products and services for farmers at the local level.

The present paper is an attempt at evaluating the role of LDCCB in promoting sustainable agricultural growth in Latur District, with special emphasis on its socioeconomic implications. Among the different cooperative banks in the country, LDCCB has played a stellar role in furthering rural development, given the gigantic network and capacity to supply cheap credit to its members. LDCCB, by providing financing to farmers for investing in advanced farming techniques, irrigation systems, and high-quality seeds, plays a very important role in improving agricultural productivity. In addition, financial literacy and education through the bank's initiatives have also contributed toward the adoption of sustainable farming practices and therefore long-term agricultural growth and environmental conservation.

Literature Review

Review Of Research Articles

1. Balasaheb Vikhe Patil (2008)

This paper titled on an, "Agricultural Indebtedness: - Crisis & Revival" done a comprehensive detail analysis about the rural indebtedness through-out the India. This paper went through & referred an earlier study on the problem of agricultural indebtedness which had been done by an Expert Group of R. Radhkrishana on the. It also stated & mentioned that the co-operatives banks proportion share of agricultural credit i.e., short-term credit has been

declined from 74.90% to 33.20% in the year of 1975-76 to 2005-06 respectively and long-term credit also drastically fall down from 61.2% to 6% in the same period. So, this article tries to give emphasis & suggestion for improvement in the area of credit delivery system.

2. Ganesan. N. (2009)

The researcher made an attempt a study on "Data Envelopment Analysis of State & District Co-operative Banks in India - Exploratory results". While carrying out research few samples size was taken i.e., 30 State Co-operative Banks (SCBs) & 20 District Central Co-operative Banks (DCCBs) in India were considered for conclusive results. With the help of direct empirical method, the researcher analyzed the performance of State Co-operative Banks (SCBs) & District Central Co-operative Banks (DCCBs). Their study highlighted the self-efficiency & performance of SCBs and DCCBs in terms of technical efficiency.

3. Role of Co-operative Banks in Rural Development in India Journal: Indian Journal of Agricultural Economics

This paper highlighted the performance of cooperative banks in furthering rural development with emphasis on agriculture was discussed. Issues were raised regarding the financial inclusions of small farmers and why cooperative banks failed, all of which can be related directly to the role of LDCCB in Latur.

Review Of Ph. D. Theses And Dissertations

1. Niti Bhasin (2007)

In his book titled "Banking Developments in India - 1947 to 2007, Growth, Reforms & Outlook" in which it highlighted some critical issues that are directly relates with the performance of the bank. This book throws a light on the concrete changes being happened & done particular in an Indian banking sector over the last few decades. This book contains the evolution of an Indian Banking System over the years, importance of banking system in India, change in the style of functioning of central bank, its history, role, challenges, adoption of modern technology in Indian Banking System over the period of time.

2. O.P. Agarwal (2008)

The Author written a book titled on the, "Modem Banking of India", had highlighted & explained the aspects that fall in the banking system since its inception such as the evolution of Indian banking system over the years, classification or types of banks, rules & regulations being done by the RBI for banks, concept of an universal banking system, retail banking, pricing of deposits, deposit schemes, appraisal of Small and Medium Enterprises, Non-Performing Assets (NPAs), Basel norms for banks, E-banking, cyber security & law etc.

3. Baldev S. Sandhu (2011)

He undertook a study titled on the, "Banking & Rural Development: Promises & its Performance" and he tried his best to establish and give due importance to the credit needs of an agriculture & non-agricultural sector as well as rural sector. This book highlighted the phases or history of Commercial Banking system in India since from its inception, credit system towards rural development, presence of agriculture-based industry for the development of rural economy. *Baldev S. Sandhu's 2011* study on "Banking & Rural Development: Promises & Performance" highlights the importance of credit for agriculture, non-agricultural, and rural sectors, highlighting the history of the Commercial Banking system in India.

4. Socioeconomic Impact of Agricultural Financing in Rural India Institution: Jawaharlal Nehru University In this study, the socioeconomic impact of agricultural financing with regard to small and marginal farmers will be discussed. The research describes clearly the role cooperative banks play in improving livelihoods and aids in the social dimension of your study.



Review Of Books

- 1. <u>T.N. Hajela (1980)</u> "Cooperation: Principles, Problems and Practice", The book tried to build upon the approach to the cooperative banking sector in India, its evolution, challenges, and role in rural development. He can provide theoretical insights into the role that cooperative banks like LDCCB play in agricultural growth.
- 2. <u>Bhuimali Anil (2003)</u> discusses the role of rural cooperatives in the Indian economy, highlighting issues faced by farmers, such as higher interest rates and indebtedness. He compares Indian cooperative societies to western societies, highlighting their instrumental role in economic growth and development.
- 3. <u>K. Prabhakar Rajkumar (2008)</u> Agricultural Finance in India: The Role of NABARD it primarily concerns NABARD, this book throws ample light on the general agricultural finance scenario in India, of which the cooperative banks are a part. It helps put in perspective the LDCCB's operations against the larger backdrop of agricultural finance.

Newspaper And Magazine Articles

1. "Cooperative Banks and Rural India: A Lifeline for Farmers" Publication: Economic and Political Weekly, The summary of the paper is a critical overview of the role cooperative banks in rural India vis-à-vis agricultural finance. These strengths and limitations of the institutions are discussed with regard to the process of agricultural development.

Objectives Of The Study:

- 1. To study the social and economic impact or outcome of the various agri-development initiatives/programs of LDCCB toward the small and marginal farmer population in Latur District, specifically in terms of stability of income and quality of life.
- 2. To Analyse & study the performance of their Lending aspects towards Agricultural & Non Agricultural practices.

Hypothesis

H1: The role of Latur DCC (District Central Co-operative) bank in agricultural development programmes improve significantly the income stability and quality of life of small and marginal farmers in Latur District, and show the critical role of the bank in socioeconomic upliftment.

H2: The Latur DCC Bank has offered the satisfactory Lending practices i.e., short term loans to the agricultural development.

Significance Of Study:

The Latur District Cooperative Central Bank of India is, therefore, the keen house in the agrarian sector and first traces financing inclusive development. The bank does offer a variety of deposit and credit schemes, including loans and credit facilities for the need of the grassroots, and in due course, it is always trying to live up to the expectations of the rural people. The guidelines stipulated by the Reserve Bank of India are followed by the Latur DCC Bank in relation to priority lending, particularly in the agricultural sector. Although the bank operates under severe energy conditions like drought and erratic rainfall, it generates handsome profits. The thrust of institutional credit is to break the vicious circle of poverty and starvation, stimulate farmers into logical production activity, and simplify the process for lenders to provide short to medium term credit for agriculture. The Latur DCC bank can beat the commercial bank operations in rural areas by linking primary agricultural credit societies to state cooperative banks.

The issue of the funding is that the various sources of funds can be traced with Latur DCC Bank, either in the form of internal or external sources, including share capital, reserves and other funds, deposits, borrowings from the government, NABARD, Maharashtra State Cooperative Bank, and commercial banks.

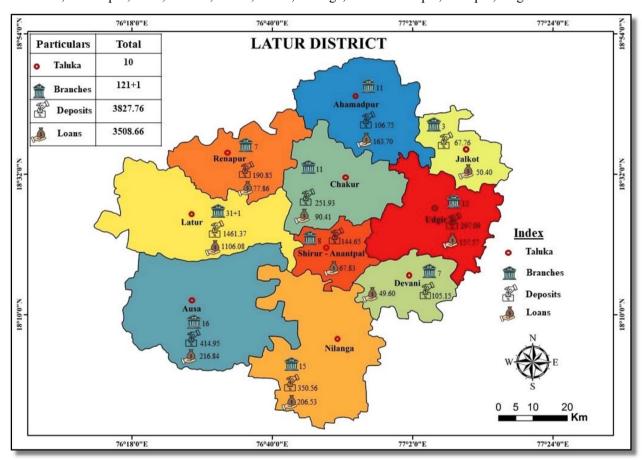


Statement Of The Problem

The present study also tries to identify the roles and challenges faced by Latur DCC Bank in an agricultural landscape in Latur District. The objective of this research is to assess the impact of DCCB on the financial status, socio-economic structure, and empowerment of the farmers. The study identifies the SWOT of the operations. The DCCB strives toward sustainable agricultural development, financial inclusion, and the improvement in the livelihood of farmers and rural populations.

Study Area:

In a research study, study area refers to considered as geographical area for analysis & discussion. The Latur is considered as district which is located or lies in the south-eastern part of the Maharashtra. The bank focuses on lending and advances to the agriculture sector and its allied areas, with its branches spread across the district i.e., from Latur, Ahmedpur, Ausa, Chakur, Deoni, Jalkot, Nilanga, Shirur Anantpal, Renapur, Udgir etc.



Research Methodology

In order to carry out comprehensive study of Latur DCC bank in the development of primary sector, the researcher has conducted thoroughly research based on the secondary sources that helps to understands the insights of performance regarding the Latur DCC bank particularly with respect to agriculture sector & in general development of Latur District & its talukas. Secondary data was gathered from published annual reports, Reserve Bank of India bulletins, committee reports, government reports, Latur District social and economic reports, internet, newspapers, magazines, research journals, and websites.

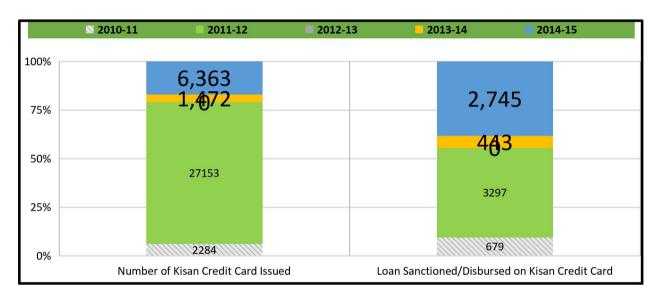


Data Analysis & Interpretation

Table No. 1

Number Of Kisan Credit Card Issued & Loans Disbursed

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Number of Kisan Credit Card Issued (In Numbers)	2284	27153	0	1472	6363
Loan Sanctioned/Disbursed on KCC Number of Kisan Credit (In Lakhs)	678.83	3296.72	0	443	2744.82

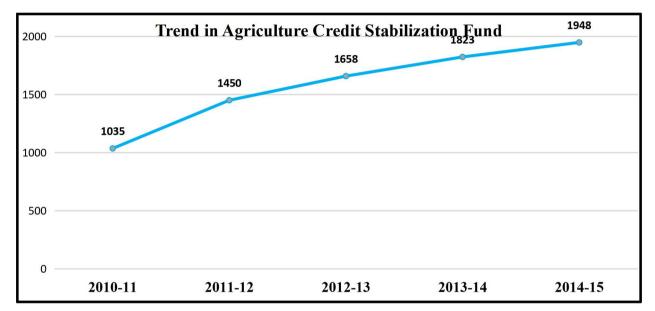


The data shows that the number of Kisan Credit Cards (KCC) issuances reached the highest level between 2010-201 and 2014-2015, reaching 6,363. This helps connect people with digital banking practices and contributes to financial inclusion programs. Loan disbursement on Kisan Credit Cards increased, with the highest amount given in 2011-12 at 3296.72 lakhs. Latur DCC bank and branches are working to provide financial assistance to farmers and tap into the untapped population in the banking sector.

Agriculture Credit Stabilization Fund

Year		2010-11	2011-12	2012-13	2013-14	2014-15
No. of Offices with H.O. (In Numbers)		113	113	113	113	113
	Statutory Reserve Funds	2753	3562	3872	4169	4401

Reserve	Agriculture Credit Stabilisation Fund	1035	1450	1658	1823	1948
& Other Funds	Other Reserve	15141	16663	24576	18361	18043
	Total Reserve Funds	18929	21675	30106	24353	24392



All these financial indicators lead to positive performance & create the capital formation & able to create more money in the local economy & certainly it will start to make a ripple effect on other parameters also for. Ex. Diversifying the loans & advances for the Agricultural sector. Also, the Latur DCC bank were able to maintain the reserve of Agriculture Credit Stabilisation Fund along with the disbursing kiss credit card that helps to bring the qualitative change in the social strata which is showing in uptrend manner & almost increased to double with respect to the base year of 2010-11 & in the near future it can be utilised for other various agricultural purposes. So, with this interpretation it supports the stated hypothesis & alternate hypothesis is accepted.

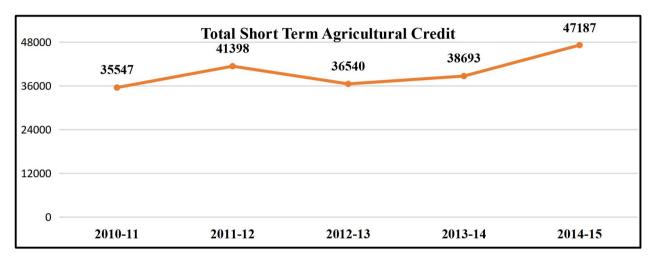
H1: The role of Latur DCC (District Central Co-operative) bank in agricultural development programmes improve significantly the income stability and quality of life of small and marginal farmers in Latur District, and show the critical role of the bank in socioeconomic upliftment.

Table No. 2: Short Term Loan Issued To Agricultural Activities

(As on 31st March) (Amount in Lakhs)

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Seasonal Agricultural	35547	41398	36540	38693	47187
Activities					

Marketing of Crops	0	0	0	0	0
Supply & Distribution	0	0	0	0	0
Total Short Term Agricultural Credit	35547	41398	36540	38693	47187



On the basis of above given table & graph, we can easily infer a conclusion that the Latur DCC bank continuously providing short term loan from 35547 lakhs to 47187 Lakhs for the year of 2010-11 to 2014-15 lakhs respectively which was grown over the years & that benefits a lot to the farmers specially for Seasonal Agricultural Activities for less than one year i.e. for Kharif & Rabbi crops along with the bank able to carry out loan facilities to other allied sector such as silk industries at 0% rate of interest, drip irrigation, sprinkler irrigation, harvester etc. Hence, with this interpretation it supports the stated hypothesis & alternative hypothesis is accepted.

Short Term Loan Issued To Non - Agricultural Activities

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Industrial Loans	0	0	0	0	0
Consumption Loans	0	0	0	0	0
Others	73544	92308	128051	79427	87400
Total Short Term Non- Agricultural Loans	73544	92308	128051	79427	87400

The Latur District Cooperative Central (LDCC) bank has been providing short-term agricultural and non-agricultural loans to various diversified areas since 2010-2011 to 2014-15. The bank has seen an increase in loan disbursement towards seasonal agricultural operations, reaching 47187 lakhs from 35547 lakhs in 2010-11. However, short-term loans for crop marketing, supply, and distribution were not issued during this period. The

bank's regular lending practice has expanded its scope, catering to the needs of farmers and other sections of the population. The bank's growth in short-term agricultural credit is expected to benefit all sections of the population.

H2: The Latur DCC Bank has offered the satisfactory Lending practices i.e., short term loans to the agricultural & Non agricultural development.

Findings

As we can see, the Latur District Cooperative Central (DCC) bank's performance is trending positively during the study research period on a number of financial indicators, which includes the number of bank branches or offices, loans & advances, agriculture credit stabilization fund, as well as total reserve funds. Total short-term agricultural credit seems to have increased between 2010–2011 and 2014–2015, as a result of the implementation of multiple initiatives developed by the Reserve Bank of India (RBI) and NABARD and the same introduced by the Latur District Cooperative Central (DCC) bank for the agricultural & rural growth & development of Latur district. Such initiatives consist of the Interest Subsidy Scheme, Personal Accident Insurance Scheme (PAIS), NABARD's Farmers' Club Program, National Agricultural Insurance Scheme (NAIS), etc.

Suggestions

A centralized system needs to be established by the District Cooperative Central (DCC) bank in Latur to cater to the general public's credit demands and requirements. The bank must enhance infrastructure in deep rural areas and add branches in proportion to the number of people living there. Strict penalties for intentional defaulters can contribute to higher loan recovery rates.

Conclusion

Following instructions from the Reserve Bank of India (RBI) or the National Bank for Agriculture & Rural Development (NABARD), emphasis is being set upon the need for continuous, hierarchical monitoring to ensure that all bank branches complying to regulatory requirements, which include the Capital to Risk (Weighted) Assets Ratio (CRAR), which is regularly prescribed by the apex bank. The Latur DCC bank ought to undertake an organized effort to engage the community and make continuous policy decisions as the years go by. These measures may lead to even better financial practices and eventually assist society as a whole.

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PROBLEMS AND PROSPECTS OF ONLINE BANKING SYSTEM IN NANDED CITY

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Abstract

Banking activities have been into existence since 18th century BC. The main purpose that banks have been serving since their inception is keeping our money safe for us. Traditional banks have been doing this, and internet banks continue the same function. The only difference is in the way the transactions are made. The Internet is rapidly turning out to be a tool of worldwide communication. The increasing use of Internet earlier promoted producers and entrepreneurs to sell their products online. It has also become an important source of information and knowledge. Due to this, many banking and finance organizations have come up with the idea of Internet banking or online banking. In this research project, I have tried to study the nature, problems, challenges and opportunities of the Online Banking System in India. Internet banking has revolutionised from homemade personal computers to handmade android phones. Online banking, also known as internet banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. The paper aims to bring out the challenges faced by customers in operating through internet banking. The samples are limited to the Internet banking uses of Chennai city of Tamil Nadu state. The sample size is limited to 100 respondents using convenient sampling. Convince, Flexibility and Time Saver are some of the advantages of the internet banking. The challenges faced in internet banking are low broadband internet penetration followed by Banks' Ambivalent Commitment Levels, Fear of Online Threats/Scams, Digital and Financial Divide. Accessibility of Internet Banking, Network Challenging Factors and Gender of the respondent determines the major challenges of Internet Banking.

Introduction

"Banks are to the economy what the heart is to the human body. They cycle necessary capital through the whole, and they are barely noticed until pressure, necessity, or crises." — **Hendrith Smith**

A bank is a place that lends money to individuals. It is a financial system that accepts deposits and provides money as loans/credit.

Definition Of Bank: -

The definition of a bank varies from country to country. Under the English Common Law, a banker is defined as a person who carries on the business by conducting Current Accounts for his/her customers, paying cheques drawn on him/her and collecting cheques for his/her customers.

In most common law jurisdictions, there is a Bills of Exchange Act that codifies the law in relation to negotiable instruments including cheques and this Act contains a statutory definition of the term banker. Banker includes a body of persons, whether incorporated or not, who carry on the business of banking (Section 2 Interpretation). Although this definition seems circular, it is actually functional because it ensures that the legal basis for bank transactions such as cheques does not depend on how the bank is structured or regulated.

The business of banking is seen in many English common law countries is not defined by statute but by the common law, as per the definition stated above. In other English common law jurisdictions, there are statutory definitions of the banking business. While looking at these definitions it is important to keep in mind that they are defining the business of banking for the purposes of the legislation and not necessarily in general. In particular, most of the definitions are from the legislation that has the purpose of regulating and supervising banks rather than regulating the actual business of banking. However, in manydefinitions the statutory definition closely mirrors the common law one. Examples of Statutory definitions are as follows:

i. Banking business means the business of receiving money on current or deposit account, paying and collecting cheques drawn by or paid in by customers, the making of advances to customers and includes such other

businesses as the Authority may prescribe for the purposes of this Act [Banking Act (Singapore), Section 2 Interpretation].

- ii. Banking business means the business of either or both of the following:
 - a. Receiving from the general public money on current, deposit, savings or other similar account repayable on demand or within less than 3 months or with a period of call or notice of less than that period.
 - b. Paying or collecting cheques drawn by or paid in by customers.

Since the advent of EFTPOS (Electronic Fund Transfer at Point of Sale), direct credit, direct debit and internet banking, the cheque has lost its primacy in most banking systems as a payment instrument. This has led legal theorists to suggest that the cheque based definition should be broadened to include financial institutions that conduct current account for customers and enable customers to pay and be paid by third parties, even if they do not pay or collect cheques.

Scope Of The Study: -

The study looks at the problems faced by the individuals due to the Online Banking System. The study was conducted in the Nanded region. The study period was for 3 months, from January to March 2019.

Research Methodology

Statement Of The Problem: -

Once a time, people have to spend three to four hours to go for bank transaction sometimes cost of transaction was more than that of money deposited or withdrawn. E-banking allows customer to conduct financial transaction on a secure website. Nowadays User - Friendly Technology is becoming more popular among customers, most of the banks are providing e-banking facility. Today, most of the customers are increasingly using the technological banking facilities available in banking sector. It reduces cost and saves time. From the customers perceptive towards technological banking provides a convenient and effective way to manage finance that is easily accessible at 24hours a day in 7 days a week. On the other hand, online banking has certain problems such as lack of knowledge to operate the technology, set-up cost, legal issues, lack of relationship among banker and customer, securely and privacy issues. For some people the User Friendly Technology really simplifies their life style, while for others it is very much threatening and complex. Therefore, in this context, it is necessary to study the perception of customers' challenges towards User Friendly Technology.

Sampling Method: -

The sampling methods that have been adopted for the research is as follows:

Sample Size:

70 people were interviewed who use the Online Banking System. So the sample size is 70.

Objectives: -

The following objectives are focused in this study:

- a) To study how many people are aware about the Online Banking System.
- b) To study how many people use the Online Banking System.
- c) To study about the online transactions done by the people using the Online Banking System individually.
- d) To study the problems faced by the individuals of all the age groups due to the Online Banking System.

Limitations Of The Study: -

Time is the major constraint in collecting the data from the respondents. Most of the respondents are college students who belong to the age group of 15-25, working crowd who belong in the age group of 25-40 and 41-60 as well as the old aged people who belong to the age group of Above 60. In case of doubt, a cross checking was made in order to avoid bogus or biased information. The market survey was conducted only in Nanded region. Hence, the results arrived from the study may or may not be applied to other status. Further, the survey method which was



adopted for collecting the data in study has its own limitations. Hence, the generalization of the findings of the study is subject to these limitations.

Review Of Literature

• Meaning of Literature Review: -

Review of Literature provides an overview and a critical evaluation of a body of literature relating to a research topic or a research problem. It analyses a body of literature in order to classify it by themes or categories rather than simply discussing individual works one after another. It presents the research and ideas of the field rather than each individual work or author by itself. A literature review often forms part of a larger research project such as within a thesis (or major research paper) or it may be an independent written work such as a synthesis paper.

• Purpose of a Literature Review: -

A literature review situates your topic in relation to previous research and illuminates a spot for your research. It accomplishes several goals which are stated as follows:

- 1. Review of Literature provides background for your topic using previous research.
- 2. It shows you are familiar with previous relevant research.
- 3. It evaluates the depth and breadth of the research in regards to your topic.
- 4. It determines remaining questions or aspects of your topic in need of research.

1. Dr. Renu Arora and Dr. Surabhi Singh (2011): -

In their research paper "Service quality of online banking services in public, private and foreign banks in India" This paper present recent developments in information technology have led to major changes in service providing organizations such as banks. Every bank realizes that they must use information technology to survive in this era. Through information technology, banks can better maintain the relationship with customers as customers tend to interact more with provided services through information technology. The emergence of new technologies is enabling new competitors to enter the financial services market quickly and efficiently. Therefore, it becomes imperative for service providers to meet or exceed the target customers' satisfaction with quality of services expected by them. This paper presents customers' perception of quality of online banking services in terms of its constituent factors in public sector, private sector and foreign banks. The scale was prepared on the basis of five factors of service quality, i.e., tangibility, reliability, responsiveness, assurance and empathy. Mean scores were also calculated to find out mean difference between factors affecting service quality of banking services and three types of banks. Overall evaluation showed that private and foreign banks were performing better than the public sector banks with regard to five factors.

2. Suresh (2008): -

He highlighted that recently developed e-banking technology had created unpredicted opportunities for the banks to organize their financial products, profits, service delivery and marketing. The objectives of the study were to evaluate the difference between traditional and e-banking, and to identify the core capabilities for the best use of e-banking. The author analyzed that e-banking will be an innovation if it preserved both business model and technology knowledge, and disruptive if it destroys both the model and knowledge. He also differentiated e-banking from traditional banking in five ways, namely, value proportion, market scope, cost structure, profit potential and value network. However, in order to exploit technical and business capabilities of ebanking, banks should generate more customers inside and outside India so that more revenues could be generated that lead to better future of Indian economy.

3. Kautish (2008) :-

He described the paradigm shift of banking sector from traditional banking to online banking. The objective of the paper was to discuss the derivation of value added tool of online banking system which was used to attract new customers and retain the existing ones. It helped the banks to acquire more business from existing customers. People preferred to use online banking because of its availability, better performance, ubiquity, speed and its



effectiveness. Further, the author discussed two bank models integrated banking model where the banks provide internet banking services as an extension to their basic services like ATM and phone banking. So, it is a kind of hybrid approach and the other was standalone internet banking model, where the banks totally rely on the online channel. To improve the services through e-banking, banks should think from the customers' perspective and there should be creativity and 51 innovations in designing and implementation of e-banking processes. The author concluded that as e-banking was a relatively new concept in the global banking scenario so the best of this concept was yet to come.

4. Raja et al. (2008): -

He evaluated the impact of e-payment system on the business opportunities. They identified that due to the growth of internet users, various electronic payment mechanisms had been developed to cater the diversity of applicants. The researchers classified the e-payments into three main groups, namely, cash like systems, check like systems, and hybrid systems which were further classified into credit cards, debit cards and electronic cheques. They identified three main issues related to epayment that were security issues, low interest among businessmen, and heavy reliance on traditional payment methods. They also analysed that there were technical and cultural problems which hinder the path of e-payments. However, to make e-payments more effective, security threats should be reduced; and people should be realized that traditional payment methods were more time consuming than electronic payment methods.

They should also be realized that plastic card payments were more convenient, easier and more secure than cash or cheques.

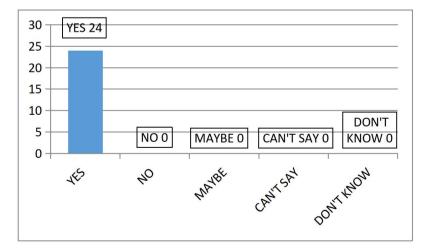
Data Analysis And Interpretation

I. Age Group 15-25: -

There were 24 people who fall under this age group when the survey was conducted. Almost all of them were students who were pursuing their studies in various courses like undergraduate, postgraduate courses, etc. and the others were the newly graduated students who are working now. All these respondents belong to the Western Suburban Mumbai region. Some of them are from Malad, Kandivali, Borivali, Dahisar and Mira Road.

Q.1) Have you heard about the 'Online BankingSystem'?

Yes / No / Maybe /Can't Say / Don't know



Findings:

- A) Yes -100%
- B) No 0%
- C) Maybe 0%
- D) Can't Say -0%



E) Don't Know – 0%

Analysis:

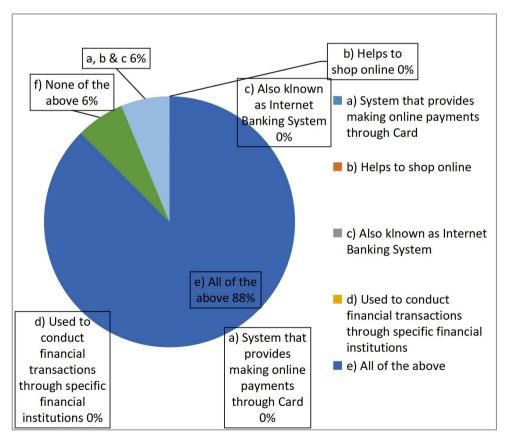
From the above bar graph, it is observed that 100% of the respondents are familiar about the Online Banking System.

II. Age Group 26 – 40: -

There were 16 people who fall under this age group when the survey was conducted. All of them belong to the working category. All these respondents belong to the Western Suburban Mumbai region. Some of them are from Andheri, Malad, Kandivali, Borivali, Dahisar and Mira Road.

Q.) What is Online Banking System?

- a) System that provides making online payments through Card
- b) Helps to shop online
- c) Also known as Internet Banking System
- d) Used to conduct financial transactions through specific financial institutions
- e) All of the above
- f) None of the above



Findings:

System that provides making online payments through card $-\,0\%$ Helps to shop online $-\,0\%$

Also known as Internet Banking System – 0%



Used to conduct financial transactions through specific financial institutions – 0% All of the above – 88% None of the above – 6% a, b & c – 6%

Analysis:

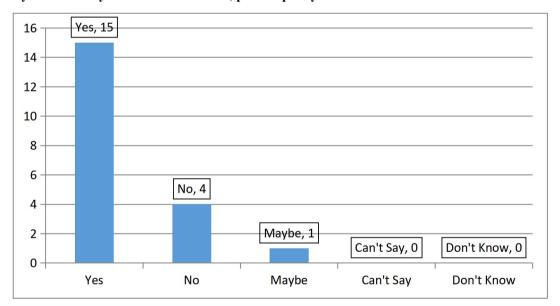
From the above pie chart, it can be seen that 88% of the respondents agree that Online Banking System is a system that provides making online payments through card, helps to shop online, also known as internet banking system and it is used to conduct financial transactions through specific financial institutions. 6% of the respondents think that Online Banking System is none of these as they are not aware about it. 6% of the respondents feel that Online Banking System is a system that provides making online payments through card, helps to shop online and it is also known as Internet Banking System.

III. Age Group 41-60: -

There were 20 people who fall under this age group when the survey was conducted. All of them belong to the working category. All these respondents belong to the Western Suburban Mumbai region. Some of them are from Andheri, Malad, Kandivali, Borivali, Dahisar and Mira Road.

Q.1) Have you ever used the Online Banking System?

Yes/No/Maybe/Can't Say/Don't Know. If Yes, please specify for what?



Findings:

Yes – 75%

No-20%

Maybe – 5%

Can't say -0%

Don't Know - 0%

Analysis:

From the above bar graph, it is clear that 75% of the respondents have used the Online Banking System and they have used it for Online payments, payment of utility bills, banking transactions, transfer of funds, check loan A/c



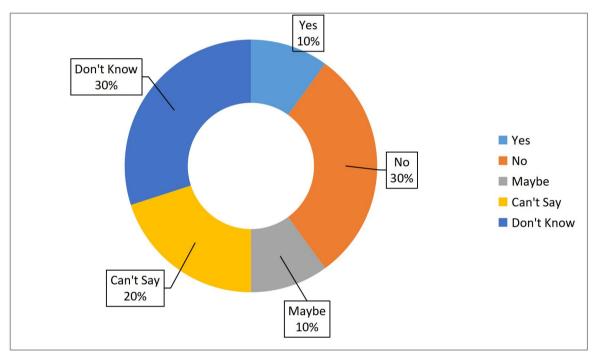
details and for financial transactions. 20% of the respondents have not used the Online Banking System yet. 5% of the respondents have answered that they may be or may not be using the Online Banking System.

IV. Age Group Above 60: -

There were 10 people who fall under this age group when the survey was conducted. All of them are retired professionals. All these respondents belong to the Western Suburban Mumbai region. Some of them are from Malad, Kandivali, Borivali, Dahisar and Mira Road.

Q.) Do you think that the Online Banking System is safe? Yes/No/Maybe/Can't

Say/Don't Know



Findings:

Yes – 10% No- 30% Maybe – 10% Can't Say – 20% Don't Know – 30%

Analysis:

From the above doughnut diagram, it is known that 10% of the respondents' view that Online Banking System is safe. 30% of the respondents have pointed out that Online Banking System is not safe. 10% of the respondents answered that Online Banking System may be or may not be safe. 20% of the respondents stated that they are not sure about the Online Banking System being safe or not. 30% of the respondents don't know whether the Online Banking system is safe or not.

Conclusions: -

The Questionnaire for the Survey was circulated among different age groups of people ranging from 15 years of age to Senior Citizens. The questionnaire was also circulated to both Males and Females of different age groups. The respondents included students from schools and colleges, training institutes, Salaried employees of Private and Government sectors, Bureaucrats, State Government employees, Professionals such as Doctors, Lawyers, engineers,

Retired senior citizens. The questionnaire forms were distributed in person and were requested to fill-up. Almost all of the persons filled-up the questionnaire spontaneously. However, some of them persons wanted some time to fill-up.

However, the analysis of the survey managed to find out two different aspects from the respondents and the third to enhance their knowledge about the risk and the reasons for the risk related to the Online Banking System.

- 1. To assess the basic knowledge on the subject from the persons.
- 2. To also the assess the knowledge of risks, reasons for the risks involved in the Online Banking System as well as the problems faced by them individually.
- 3. To provide an insight and also to create an awareness among the people for the need to protect the Online Banking System while using it on a personal level.

It was interesting to note that several persons were not much aware of the Online Banking System. This survey was therefore very valuable to not only assess the general awareness of the persons at large, but also to provide an insight into the importance and need to protect Online Banking System at individual levels first and then at large.

From this whole research project, we have learnt a lot about Banks such as its meaning, origin, history, etc. More of the focus was on the Online Banking System. The start of online banking system, its operation, features, advantages, disadvantages and above all the problems faced by the individuals due to this system and the main focus was on the people residing in the Western Suburban Mumbai Region.

Suggestions: -

The few suggestions that I would want to give are stated as follows:

- 1. Create an awareness about the Online Banking System as in its uses, operation, advantages and disadvantages, risks involved and the problems faced.
- 2. Help the individuals when they are stuck up while using the Online Banking System.
- 3. Even though you won't be an expert but try to solve the problems that the opposite person is experiencing while using the Online Banking System.
- 4. Educate the need and importance to protect the Online Banking on an individual basis.

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HARNESSING INDIA'S YOUTH POTENTIAL: PATHWAYS TO ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT BY 2047, WITH SPECIAL REFERENCE TO MAHARASHTRA STATE

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Abstract

The research titled "Harnessing India's Youth Potential: Pathways to Economic Growth and Sustainable Development by 2047, with Special Reference to Maharashtra State" focuses on exploring the role of youth in driving economic and sustainable development. The study was conducted in the districts of Beed, Latur, Nanded, and Aurangabad in Maharashtra, engaging 300 respondents aged between 18 and 40. The research aimed to assess youth participation in the economy, identify barriers to their contribution, and examine the role of education, technology, and entrepreneurship.

Findings indicate that despite high potential, youth participation is challenged by limited job opportunities (50%) and a skills mismatch (43.33%). Sectors such as Information Technology (66.67%) and entrepreneurship (53.33%) were identified as having the highest potential for youth involvement. Respondents emphasized the importance of entrepreneurship (90%) in unlocking youth potential, particularly through better access to capital and supportive policies.

The study also highlights the crucial role of youth in achieving India's Sustainable Development Goals (SDGs), with 56.67% of respondents stressing the need for engagement in clean energy, education, and infrastructure development. Digital literacy (53.33%) and technical skills (50%) were identified as essential for future economic contributions. The research concludes by recommending targeted policies to enhance employment opportunities, close the skill gap, and foster an entrepreneurial ecosystem in Maharashtra, aligning youth potential with India's development goals by 2047.

Keywords

Youth Potential, Economic Growth, Sustainable Development, Entrepreneurship, Maharashtra State

Introduction

India's economic growth and sustainable development by 2047 hinge significantly on the potential contributions of its youth. As the nation prepares to celebrate its centenary of independence, harnessing the capabilities of its young population has emerged as a critical strategy for fostering long-term prosperity and achieving sustainable progress. Maharashtra, a key state in India with a diverse demographic landscape, presents a unique case study for exploring the intersection of youth potential, economic growth, and sustainable development.

This research paper, titled 'Harnessing India's Youth Potential: Pathways to Economic Growth and Sustainable Development by 2047, with Special Reference to Maharashtra State,' aims to investigate the role of Maharashtra's youth in driving economic growth and advancing sustainable development goals (SDGs). The study focuses on four sample districts—Beed, Latur, Nanded, and Aurangabad—to provide a comprehensive analysis of regional variations and specific challenges faced by youth in these areas.

The significance of this research is underscored by the pressing need to address barriers that impede youth participation in the economy. Our findings reveal a high level of potential among the youth in Maharashtra, particularly in fields such as information technology and entrepreneurship. Despite this potential, challenges such as limited job opportunities and skills mismatches are prevalent. For instance, the data indicates that 66.67% of respondents view IT as a crucial area for youth involvement, while 50% cite job shortages as a major constraint.

The study employs a Chi-Square Test of Independence to analyze the relationship between perceived impact and contribution of youth participation to economic growth and sustainable development. The results demonstrate a significant association, highlighting that youth engagement is indeed a vital factor in achieving developmental goals. This statistical evidence supports the alternative hypothesis that youth participation significantly contributes to economic and sustainable development in Maharashtra.

By identifying key areas for improvement and providing targeted recommendations, this research seeks to inform policymakers, educators, and stakeholders about effective strategies to enhance youth involvement. This will not only contribute to Maharashtra's growth but also align with national objectives for economic and sustainable advancement. As India looks toward 2047, the insights from this study offer valuable guidance for leveraging the full potential of its youthful population.

Review of Literature

Focusing on harnessing youth potential for economic growth and sustainable development in India, with special reference to Maharashtra State following literature of the different authors are used:

1. Youth and Development: Perspectives from India (2020) by Dr. Amitabh Kundu

This book explores various dimensions of youth development in India, including economic participation, education, and skill development. Dr. Kundu examines the challenges and opportunities faced by Indian youth, with a focus on policy interventions and their effectiveness. The book provides insights into how youth can be harnessed for economic growth and sustainable development, relevant to your research context in Maharashtra.

Offers a comprehensive overview of youth development in India, providing foundational knowledge on youth economic participation and policy frameworks that can be applied to Maharashtra.

2. India's Youth and Employment: A Study of Policy and Practice (2019) by Dr. Rekha Sharma

Dr. Sharma's book discusses the employment challenges faced by Indian youth and evaluates various policy measures aimed at improving job opportunities. The book includes case studies and data from different states, including Maharashtra, making it highly relevant to understanding regional employment dynamics and policy impacts.

Provides detailed insights into employment issues specific to Maharashtra and other regions, aligning with the focus of your research on economic growth and sustainable development.

3. Entrepreneurship and Innovation in India: Challenges and Opportunities (2021) by Dr. Rajeev Kumar

This book delves into the state of entrepreneurship in India, highlighting both challenges and opportunities for youth. Dr. Kumar discusses how entrepreneurial activities can drive economic growth and offers strategies for fostering innovation. It includes examples from Maharashtra, emphasizing the role of entrepreneurship in regional development.

Essential for understanding the entrepreneurial landscape in Maharashtra and its impact on harnessing youth potential for economic and sustainable development.

4. Sustainable Development in India: Policy and Practice (2018) by Dr. Meera S. Sharma

Dr. Sharma's work focuses on sustainable development strategies in India, with a specific look at policy initiatives and their effectiveness. The book covers various aspects of sustainable development, including environmental, social, and economic dimensions, and provides examples from different states, including Maharashtra.

Offers a broad perspective on sustainable development policies and practices, providing context for how youth can contribute to achieving sustainability goals in Maharashtra.



5. The Future of Work and Youth: Innovations and Solutions (2022) by Dr. Anil Kapoor

This book explores the future of work, emphasizing the role of youth in adapting to new economic realities. Dr. Kapoor discusses innovations in the labour market and how youth can leverage new technologies and opportunities for economic advancement. It includes case studies from Maharashtra and other Indian states.

Provides insights into how technological and economic changes impact youth employment and development, directly related to your research on pathways to economic growth and sustainable development in Maharashtra.

These books offer a range of perspectives and insights into youth potential, economic growth, and sustainable development, with a focus on Maharashtra and broader Indian contexts. They should provide a solid foundation for understanding the various factors influencing youth participation and development.

Research Methodology

The study titled 'Harnessing India's Youth Potential: Pathways to Economic Growth and Sustainable Development by 2047, with Special Reference to Maharashtra State' aims to explore how youth can contribute to India's long-term growth and sustainability goals. Focusing on the districts of Beed, Latur, Nanded, and Aurangabad, this research examined the potential of youth in driving economic growth and sustainable development. It evaluated the role of education, entrepreneurship, and digital literacy in empowering youth. The study also identified barriers hindering youth involvement and offer recommendations to policymakers for creating an environment conducive to growth.

This research explores how India's youth, with a special focus on Maharashtra State, can be harnessed for economic growth and sustainable development by 2047. The study investigated about the factors influencing youth participation in key sectors such as entrepreneurship, information technology, and renewable energy, while addressing barriers like unemployment and skills mismatch. This research Conducted across the districts of Beed, Latur, Nanded, and Aurangabad, this study adopted a mixed-methods approach to assess both quantitative data from surveys and qualitative insights from interviews. The period of the study spanned from January 2024 to August 2024, ensuring the data collection was aligned with recent economic trends.

Objectives of the study

- 1. To analyse the role of Maharashtra's youth in contributing to India's economic growth by 2047.
- 2. To assess the barriers limiting youth participation in the economy, such as skills mismatch and lack of opportunities.
- 3. To evaluate the impact of entrepreneurship and digital literacy on youth-driven development.
- 4. To explore the role of government policies in supporting sustainable youth development.
- 5. To identify key skills required for youth to contribute to sustainable development in Maharashtra.

Hypothesis of the study

- 1. **Null Hypothesis** (H₀): Youth participation in Maharashtra does not significantly contribute to India's economic growth and sustainable development by 2047.
- 2. **Alternative Hypothesis (H₁):** Youth participation in Maharashtra significantly contributes to India's economic growth and sustainable development by 2047.

Data Sampling and Selection: The research employed a stratified random sampling method, focusing on youth aged 18-40 in the districts of Beed, Latur, Nanded, and Aurangabad. A total of 300 respondents were surveyed, representing a diverse cross-section of socio-economic backgrounds. The sample selection ensured adequate representation of both urban and rural populations to reflect the varied economic and social contexts within Maharashtra.



Research Universe: The research universe consisted of youth residing in the districts of Beed, Latur, Nanded, and Aurangabad, where developmental indicators showed significant variance. These districts were selected to provide a comprehensive view of the challenges and opportunities in semi-urban and rural Maharashtra.

Limitations of the Study:

Time Frame: The study was conducted from January 2024 to August 2024. Economic conditions and employment trends may have shifted post-data collection.

Geographical Limitations: The study was restricted to the districts of Beed, Latur, Nanded, and Aurangabad, limiting the generalization of findings to other regions of Maharashtra or India.

Other Limitations: Data collection challenges such as varying levels of digital literacy among rural youth could have influenced responses, particularly in sections concerning technology-driven development.

Research Gaps

Limited research on how youth potential varies within different regions of Maharashtra, especially between urban, semi-urban, and rural areas. Further studies could explore regional differences in youth skills, opportunities, and challenges, and how these differences impact economic and sustainable development at a more granular level.

Lack of longitudinal studies tracking the impact of youth-focused policies over time on economic growth and sustainable development. This Research suggested that to Conduct research that examines the long-term effects of specific youth policies implemented in Maharashtra, assessing their effectiveness and identifying areas for improvement.

Limited research on how emerging technologies (e.g., AI, automation) are affecting youth employment and skill requirements in Maharashtra. This study suggested to Examine the role of new technologies in shaping future employment opportunities for youth and their implications for skill development and economic participation.

The research concludes that Maharashtra's youth possess significant potential to drive economic growth and sustainable development by 2047, particularly through entrepreneurship and digitalization. However, realizing this potential requires overcoming barriers such as job shortages, skill gaps, and inadequate government support. Policymakers must focus on targeted interventions, improving education systems, and creating favorable conditions for entrepreneurship, especially in rural areas. Despite the limitations, this study provides critical insights into how regional youth can contribute meaningfully to India's broader developmental goals.

Data Collection and Analysis

Below is given the Data Collection of the research followed by some tables for analysis.

Section 1: Demographic Information

Category	Option	Number of Respondents	Percentage (%)
	18-25	120	40%
	26-30	90	30%
Age	31-35	60	20%
	36-40	30	10%
	41 and above	0	0%
Gender	Male	150	50%
37.1401	Female	140	47%

	Other	10	3%
	High School	50	16.67%
	Undergraduate	100	33.33%
Education	Graduate	100	33.33%
	Postgraduate	40	13.33%
	Doctorate	10	3.33%
Employment	Employed	140	46.67%
	Self-employed	50	16.67%
	Unemployed	60	20%
	Student	40	13.33%
	Other	10	3.33%
	Urban	150	50%
Location	Semi-Urban	100	33.33%
	Rural	50	16.67%

Section 2: Understanding Youth Potential

Question	Response	Number of Respondents	Percentage (%)
	Very high	60	20%
	High	90	30%
Current Involvement of Youth in Economy	Moderate	100	33.33%
	Low	40	13.33%
	Very low	10	3.33%
	Information Technology	200	66.67%
	Agriculture	70	23.33%
	Manufacturing	80	26.67%
Sectors with Youth Potential	Services	150	50%
	Renewable Energy	120	40%
	Startups and Entrepreneurship	160	53.33%
	Other (unspecified)	20	6.67%
Education System	Yes	90	30%
Preparation	No	150	50%

Not sure 60 20%

Section 3: Economic Growth and Youth Contribution

Question	Response	Number of Respondents	Percentage (%)
	Lack of job opportunities	150	50%
	Skills mismatch	130	43.33%
Biggest Barriers to Youth Participation	Access to capital for startups	100	33.33%
	Government regulations	90	30%
	Social and cultural barriers	50	16.67%
	Extremely important	180	60%
Importance of	Important	90	30%
Entrepreneurship	Neutral	20	6.67%
	Not important	10	3.33%
	Strongly agree	140	46.67%
	Agree	100	33.33%
Role of Digitalization and Technology	Neutral	30	10%
	Disagree	20	6.67%
	Strongly disagree	10	3.33%

Section 4: Sustainable Development

Question	Response	Number of Respondents	Percentage (%)
	Very important	170	56.67%
Importance of Youth	Important	90	30%
Engagement for SDGs	Somewhat important	30	10%
	Not important	10	3.33%
	Clean energy and environment	150	50%
Areas for Youth in	Education and skill development	190	63.33%
Sustainable Development	Healthcare and wellbeing	110	36.67%
	Urban and rural infrastructure	130	43.33%
	Social equality and justice	90	30%
Sufficient Government	Yes	80	26.67%

Policies

 No
 140
 46.67%

 Not sure
 80
 26.67%

Question	Response	Number of Respondents	Percentage (%)
	Digital literacy	160	53.33%
I A CINI C	Leadership and management	120	40%
Important Skills for Youth Contribution	Technical skills	150	50%
	Creative and critical thinking	140	46.67%
	Environmental awareness	110	36.67%

Analysis of Data

- 1. **Youth Participation in Economy**: 50% of respondents felt youth involvement in the economy is moderate to high, with the highest potential in Information Technology (66.67%) and Startups/Entrepreneurship (53.33%). This shows strong interest in tech-related and entrepreneurial ventures.
- 2. **Barriers to Participation**: The primary barriers identified were lack of job opportunities (50%) and a skills mismatch (43.33%). This suggests the need for improved job creation strategies and better alignment between education and market demands.
- 3. **Role of Entrepreneurship**: 90% of respondents agreed that entrepreneurship is crucial for youth contribution to economic growth, highlighting the need for supporting entrepreneurial ventures through policy changes and better access to capital.
- 4. **Sustainable Development**: 56.67% of respondents emphasized the importance of youth engagement in achieving sustainable development goals by 2047. Priority areas include education and skill development (63.33%) and clean energy (50%).
- 5. **Future Skills**: Skills identified as most important for future growth include digital literacy (53.33%) and technical skills (50%), signaling a shift towards a more technologically driven economy.

Hypotheses testing

Data Table:

Perceived Impact of Youth Participation	Significant Contribution	Some Contribution	No Contribution	Total
High Impact	100	40	10	150
Moderate Impact	60	70	30	160
Low Impact	20	30	30	80
Total	180	140	70	390

Calculation of Expected Frequencies:

$$E_{ij} = \frac{R_i \times C_j}{N}$$



Where \mathbf{R}_{i} is the row total, \mathbf{C}_{i} is the column total, and N is the grand total.

For High Impact and Significant Contribution:

$$E_{11} = \frac{150 \times 180}{390} = 69.23$$

For High Impact and Some Contribution:

$$E_{12} = \frac{150 \times 140}{390} = 53.85$$

For High Impact and No Contribution:

$$E_{13} = \frac{150 \times 70}{390} = 26.92$$

For Moderate Impact and Significant Contribution:

$$E_{21} = \frac{160 \times 180}{390} = 74.15$$

For Moderate Impact and Some Contribution:

$$E_{22} = \frac{160 \times 140}{390} = 57.44$$

For Moderate Impact and No Contribution:

$$E_{23} = \frac{160 \times 70}{390} = 28.72$$

For Low Impact and Significant Contribution:

$$E_{31} = \frac{80 \times 180}{390} = 36.92$$

For Low Impact and Some Contribution:

$$E_{32} = \frac{80 \times 140}{390} = 28.72$$

For Low Impact and No Contribution:

$$E_{33} = \frac{80 \times 70}{390} = 14.36$$

The Chi-Square statistic is calculated using the formula:

$$X^2 = \sum \frac{\left(O_{ij} - E_{ij}\right)^2}{E_{ij}}$$

Where O_{ij} is the observed frequency and E_{ij} is the expected frequency.

For High Impact and Significant Contribution:

$$X^2 = \sum \frac{(100 - 69.23)^2}{69.23} = 13.54$$

For High Impact and Some Contribution:



$$X^2 = \sum \frac{(40-53.85)^2}{53.85} = 3.58$$

For High Impact and No Contribution:

$$X^2 = \sum \frac{(10 - 26.92)^2}{26.92} = 10.56$$

For Moderate Impact and Significant Contribution:

$$X^2 = \sum \frac{(60 - 74.15)^2}{74.15} = 2.66$$

For Moderate Impact and Some Contribution:

$$X^2 = \sum \frac{(70 - 57.44)^2}{57.44} = 2.71$$

For Moderate Impact and No Contribution:

$$X^2 = \sum \frac{(30-28.72)^2}{28.72} = 0.06$$

For Low Impact and Significant Contribution:

$$X^2 = \sum \frac{(20 - 36.92)^2}{36.92} = 7.64$$

For Low Impact and Some Contribution:

$$X^2 = \sum \frac{(30 - 28.72)^2}{28.72} = 0.06$$

For Low Impact and No Contribution:

$$X^2 = \sum \frac{(30-14.36)^2}{14.36} = 17.23$$

Sum of Chi-Square Values:

$$X^2 = 13.54 + 3.58 + 10.56 + 2.66 + 2.71 + 0.06 + 7.64 + 0.06 + 17.23 = 40.28$$

Degrees of Freedom (df):

$$\mathbf{df} = (r-1) \times (c-1) = (3-1) \times (3-1) = 2 \times 2 = 4$$

At the 0.05 significance level with 4 degrees of freedom, the critical value from the Chi-Square distribution table is approximately 9.488.

If the calculated Chi-Square statistic is greater than the critical value, reject the null hypothesis.

Since $\chi 2=40.28$ is greater than 9.488, we reject the null hypothesis.

The Chi-Square Test of Independence shows a significant relationship between the perceived impact of youth participation and its contribution to economic growth and sustainable development in Maharashtra. This suggests that youth participation significantly influences economic and developmental outcomes, supporting the alternative hypothesis. Therefore, the study concludes that enhancing youth involvement is crucial for achieving India's economic and sustainable development goals by 2047, particularly in Maharashtra.



Findings and Suggestions

Findings:

The research indicates that youth in Maharashtra, specifically in the districts of Beed, Latur, Nanded, and Aurangabad, exhibit substantial potential to contribute to economic growth and sustainable development. Key findings include:

- 1. **Economic Participation**: A significant portion of the youth is engaged in economic activities, with high potential identified in sectors like Information Technology (66.67%) and entrepreneurship (53.33%). However, barriers such as limited job opportunities (50%) and skills mismatch (43.33%) restrict their full participation.
- 2. **Importance of Entrepreneurship**: Entrepreneurship is seen as a critical avenue for economic growth, with 90% of respondents agreeing on its importance. The focus on supporting startups and innovative ventures is crucial for leveraging youth potential.
- 3. **Sustainable Development Goals (SDGs)**: Youth engagement is deemed essential for achieving sustainable development goals, particularly in areas like education and clean energy. 56.67% of respondents emphasize the need for targeted policies in these domains.
- 4. **Skill Requirements**: Digital literacy (53.33%) and technical skills (50%) are identified as crucial for future economic contributions. There is a clear need for educational institutions and training programs to align with market demands.

Suggestions:

- 1. **Address Barriers**: Policymakers should focus on creating more job opportunities and bridging the skills gap through tailored educational programs and vocational training.
- 2. **Enhance Support for Entrepreneurship**: Increase support for youth entrepreneurship through improved access to capital, mentorship, and entrepreneurial training programs.
- 3. **Focus on Sustainable Development**: Implement policies that encourage youth participation in sustainable development initiatives, particularly in clean energy and environmental conservation.
- 4. **Regional Disparities**: Conduct further research to understand regional differences within Maharashtra, tailoring strategies to address specific local needs and challenges.

Conclusion:

The study underscores the immense potential of Maharashtra's youth in driving economic growth and achieving sustainable development by 2047. However, realizing this potential requires overcoming significant barriers, including job shortages and skills mismatches. By focusing on enhancing entrepreneurship, improving educational alignment with market needs, and addressing regional disparities, stakeholders can better harness youth potential for broader developmental goals. This approach will not only contribute to Maharashtra's growth but also align with national objectives for economic and sustainable advancement.

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WOMEN EMPOWERMENT THROUGH EMPLOYMENT OPPORTUNITIES IN INDIA

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Abstract

Indian women are almost 50% of the Indian population and they directly as well as indirectly contribute to the economic parameters of the nation. Since ages most of their economic contributions have not been accounted and their humble services have been taken for granted. It's high time to recognize the role of women fraternity in the growth of an economy and take necessary steps to involve the rural uneducated females in the growth process simultaneously along with the urban uneducated as well as educated females. Generally it has been observed that females are more involved into small scale business activities as entrepreneurs but with time change has been noticed and they are moving towards IT/ITES, Apparel/accessories and Food & Beverages. Also traditionally wage employment was noticed in agricultural sector but now service and industrial sectors are witnessing the growth of female workers. Government has come up with several sachems to enhance the role and contribution of women. This paper will look into various growth prospects financial empowerment of women and highlight the major issues that hinder these growth processes. The basic objectives of the paper have been mentioned below.

Keywords: Empowerment, Employment, Equity, Growth, Economy

Objectives of the paper:

- 1. Overview of the currently self-employed and wage- employed women.
- 2. Financial issues and other major problems faced by women entrepreneurs.
- 3. Government schemes to empower women through skill formation, financial assistance, education etc.
- 4. Growth trends in women employment in recent years.
- 5. Impact of women employment on economic parameters for Indian economy.

1. Introduction

The early Vedic period suggests that Indian women enjoyed the status of equality with men in terms of social freedom, education and other rights. But with time their condition decorated as we started living in a male chauvinistic society. In the present social and economic environment women are not treated on equal parameters with the males regarding issues like having authority in the family, property rights, employment opportunities, social and security aspects. Females face different kinds of exploitation in Indian economy and the panacea to all female exploitation is women empowerment in terms of financial statusA strong patriarchal society with deeprooted socio-culture values continues to affect gender equity and women's empowerment. With time Indian women have evolved under the British rule as well as in the independent economy due to various cultural and economic exposures. Now they participate fully in areas such as education, sports, politics, media, art and culture, service sectors, science and technology, etc.

2. Overview of the Currently Self-employed and Wage-employed Women

Education and employment are the two basic tools which can change the economic and social status of females in the near future as well as over a long time. Further women empowerment is the utmost requirement for the inclusive growth and development of a nation like India which is emerging over time and accounts for 614.4 million female population (1.27 billion total populations). According to the 2011 census female literacy rate happens to be 65.56% as compared to male literacy of 82.14%. If we consider the next major issue which can lead to female empowerment then disguised employment underpayment of remuneration is quite visible. Contrary to

common perception, a large percentage of women in India work. National data collection agencies accept that statistics seriously understate women's contribution as workers. However, there are far fewer women than men in the paid workforce. In urban India, women participate in the workforce in impressive numbers.iAccording to the ILO's Global Employment Trends 2013 report, India's labor force participation rate for women fell from just over 37 per cent in 2004-05 to 29 per cent in 2009-10. Out of 131 countries with available data, India ranks 11th from the bottom in female labor force participation.

Over time, the share of the self-employed has been rising among women. Large sections of women are self-employed in both rural and urban areas, with their share being higher in the villages (close to 64 per cent of women workers). Women are more inclined towards achieving economic independence and as there is limited number of opportunities in the male dominated society, they look for small business organizations. It is the need of the hour to support such women so that economic potentiality of the fair sex increases which will help in the overall growth.

3. Financial Issues and other Major Problems Faced by Women

Entrepreneurs Women in India and even other countries face gender biasness and at times working in government or private organizations lead to many types of exploitations like low wage rates as compared to their male counterparts, sexual harassment, family pressure etc. Self-employed women or upcoming female entrepreneurs are free from few of the above mentioned problems. The government is also trying to tap the skills of these ambitious females by providing them the required support. But the fact remains that females face immense problems in rural as well as urban areas to start a business. Developed countries like Britain and Canada show that females own one third of the business in the society and they enjoy much more freedom as compared to females in emerging economies. Gender budgeting at the government's end and family support on the personal front is a must for females in a patriarchal society like India. Given these conditions, the basic problems still jolting on women entrepreneurship are the following:

- Stiff competition from male establishments.
- Shortage of raw materials
- Family conflicts
- Legal awareness
- Low risk taking ability
- Limited financial capacity
- Requirement of Entrepreneurial training

Apart from these basic problems, availability of finance and credit facilities for females is a big issue. Generally banks or other credit lending institutions fail to recognize women entrepreneurial aptitude and do not want to take a chance by providing them financial assistance. Hence the role of the government becomes very important. Tiwari et al (1981) found that the government was assisting the women for entrepreneurship development by providing financial assistance in the form of term loans, interest, subsidy, unsecured loans and concession in the form of subsidies in the capital, self employment loan etc. Kumar (1998) reported from Bangalore that Canara Bank's Centre for Entrepreneurship Development gives training to women and helps them to set up small industrial units besides providing assistance for marketing their product.

4. Government Schemes to Empower Women through skill Formation, Financial Assistance, Education etc

Development of women has been a policy objective of the government since independence. Until the 70s the concept of women's development was mainly welfare oriented. In 1970s, there was a shift from welfare approach to development approach that recognized the mutually reinforcing nature of the process of development. In the 80s a multi-disciplinary approach was adopted with an emphasis on three core areas of health, education and employment. Women were given priorities in all the sectors including SSI sector. Government and non government bodies have paid increasing attention to women's economic contribution through self employment and industrial

ventures. Further the government has come up with many schemes from time to time to educate females. Though the government has come up with many schemes for social welfare of the weaker sex, the end result has been depressing because the implementation process is either very slow or graft and nepotism is very prevalent in the economy. Government should take special care to implement the policies with honesty and on time so that the growth process of the nation speeds up. Along with it the private sector should also take the initiative in assisting women skill formation. And finally well educated, financially sound and resource full women should take necessary steps to help uneducated and poor women in attaining education as well as vocational trainings for required skill formation which open up employment opportunities for the needful. There are such NGOs, training centers and government schemes which aid urban as well as rural females. Few recent initiatives need mention eg, Federation of Indian Women Entrepreneurs (FIWE), a National-level organization, founded in 1993 and registered under Society Act of India in May 1999, is today, one of India's Premier Institution for Women thoroughly devoted towards Entrepreneurship Development in the country.

5. Impact of Women Employment on Economic Parameters for Indian economy

India is an emerging economy with eye catching demographic dividend within its reach. As the economy has to compete with developed south Asian countries as well as western economies, full utilization of the available limited raw material as well as manpower resources is the only way to grow faster and capture international markets. Indian women have proved their mettle in large as well as small industries. Few big names are Kiran Mazumdar Shaw, Ila Bhatt ,Indra Nooyiand Chanda Kochar. An eye opener is the fact that under SEWA some 60000 poor women could create assets worth Rs. 200 million (6.6 million U.S.\$). Therefore women literacy and women employment will add to the gross domestic product of the nation and raise the per capita income of the country also. With rising incomes and education there is a profound impact on consumption. The rates of growth of several discretionary categories are nothing short of dramatic as a result. Female consumers have impacted the market structure. The rural as well as urban women have shown interest in having financial status in the family. So with the increase in population and female awareness, the growth prospects of a nation will also change leading to development in the long term. Indian women are moving towards achieving high growth targets along with their male counterparts and adequate assistance will embrace a bright future in rural and urban areas.

6. Conclusion

Despite significant problems in a male dominated society, Indian women have found their way out for growth and empowerment either through self-help groups, NGOs, banks, government assistance, and micro finance institutions or through private sectors. In the coming years the role of women will be of immense importance for competing with the developed world as they are man power source as well as diverse consumer group. The civilization of the country will undergo a noteworthy positive change with educated and financially sound women folk. Given that one-third of the estimated 480 million jobs in the country are being performed by women, more than half of the advertising is targeted towards the homemaker.

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ASSESSING THE IMPACT OF INDIAN KNOWLEDGE SYSTEMS ON CONTEMPORARY LIFELONG LEARNING PRACTICES: A COMPARATIVE STUDY

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Abstract

The need for holistic and culturally relevant lifelong learning approaches has become increasingly apparent in an era of globalization and rapid technological advancements. This paper examines the integration of Indian Knowledge Systems into contemporary lifelong learning frameworks and evaluates their impact on educational practices.

The adaptation of traditional Indian knowledge frameworks to meet modern educational needs, the improvement of learner engagement and outcomes, and the cultural significance of incorporating IKS into global lifelong learning curricula are among the key areas of research. The paper also investigates how IKS supports holistic learning approaches, personalized learning experiences, and the development of critical thinking and ethical principles.

This paper uses a quantitative technique to assess the impact of Indian Knowledge Systems (IKS) on current lifelong learning practices. A sample of 100 educators working in lifelong learning programs that utilize IKS were surveyed using structured questions. The paper examines how IKS-based teaching approaches affect instructional quality and learner outcomes by examining demographic data, implementation tactics, and their effects on educational effectiveness.

Survey results show that educators who incorporate IKS into their teaching practices use culturally aware pedagogy and traditional knowledge frameworks to improve learning experiences.

The findings provide useful insights for educational institutions and governments, demonstrating the benefits and challenges of incorporating Indian Knowledge Systems within lifelong learning frameworks.

This study intends to help educators design more effective educational strategies by highlighting successful practices and offering enhancements to maximize the impact of IKS on teaching quality and learner accomplishment.

Keywords: Indian Knowledge Systems, Lifelong Learning, Educational Practices, Teaching Quality, and Learning Outcomes.

Introduction

The Indian Knowledge System (IKS) encompasses the rich wisdom of ancient India, addressing both historical achievements and contemporary challenges while reflecting future aspirations in education, health, the environment, and more. Focusing on holistic health, psychology, and sustainable development, IKS promotes interdisciplinary research and the preservation of traditional knowledge.

This seeks to support and advance research in addressing contemporary societal challenges across areas such as holistic health, psychology, neuroscience, nature, environment, and sustainable development. By drawing on ancient knowledge and integrating traditional perspectives, IKS aims to tackle both current and future global issues through its unique, enduring approach (Bhāratiyu Drishti).

By integrating tribal, indigenous, and traditional learning methods, IKS not only enhances tourism but also fosters cultural appreciation. Universities are encouraged to offer IKS elective courses, with the University Grants Commission mandating 5% of total credits for IKS courses. Additionally, proposed IKS centers aim to advance research, education, and outreach across the country.

The paper demonstrates that incorporating IKS not only provides a deeper, more holistic perspective on learning but also equips individuals with tools to address current and future global issues. By embracing these traditional practices, modern education can benefit from a richer, more diverse approach, ultimately leading to a more inclusive and effective lifelong learning experience.

Literature Review

M.J. Kumar (2024) examined the incorporation of Indian Knowledge Systems (IKS) into higher education. IKS, encompassing traditional knowledge in disciplines such as mathematics, astronomy, medicine, and ecology, has frequently been neglected despite its significant potential to enhance contemporary scientific understanding. Initiatives like the National Innovation Foundation and the Honey Bee Network illustrate the advantages of integrating IKS with modern technological advancements. The National Education Policy 2020 endorses this integration, providing a comprehensive perspective on sustainability and societal challenges. Leading Indian institutions, including IIT Kanpur and IIT Madras, are actively advancing the integration of IKS into their curricula and research programs, bolstered by extensive faculty training initiatives aimed at preserving and leveraging this rich body of knowledge.

Panchali Moitra and Jagmeet Madan. (2024) reviewed stakeholder perceptions regarding the integration of Indian Indigenous Knowledge Systems (IKS) into mainstream higher education. Their exploratory study highlights the need for inclusive and interdisciplinary approaches, emphasizing awareness sessions, skill-building workshops, and interdisciplinary research to effectively incorporate IKS. They advocate for viewing the inclusion of IKS not as a bureaucratic or political task but as a valuable resource that can be optimized through well-defined policies and instructional strategies.

Amita Gupta. (2024) explored if ancient practices prevalent in India fostered or hindered the development of a scientific mindset. Ancient Indian scholars made significant strides in mathematics and astronomy, with figures like Aryabhata pioneering trigonometric functions and algebra long before similar developments in the West (Yates, 2017). Ayurveda, with its holistic approach to medicine, integrates complex chemical processes and therapeutic practices, showcasing early advancements in medicinal chemistry (Yogini & Jaiswal, 2017). The integration of IKS with modern scientific education, as promoted by the NEP 2020, underscores its enduring relevance and potential for innovation in addressing contemporary challenges.

Sandhya Tiwari. (2023) analyzed the credibility of the Indian Knowledge System (IKS) and Indigenous resource inclusion at various levels of the teaching and learning process for inculcating socio-emotional intelligence. Socio-emotional intelligence (SEI), which includes self-awareness, empathy, emotional regulation, and interpersonal skills, is critical to personal and professional success, especially in India's complex social milieu. India's educational programs seek to improve SEI by incorporating real-life scenarios and ethical quandaries into courses to encourage responsible decision-making. However, difficulties like as limited resources and the need for continual teacher development continue. Integrating Indian epics such as the Bhagavad Gita and the Mahabharata into school is a possible approach since it teaches pupils significant lessons in emotion management, empathy, and ethical behavior, increasing their socio-emotional learning and cultural appreciation. Despite the difficulties in connecting these ancient books with modern teaching norms, their inclusion can greatly benefit students by improving their awareness of socio-emotional skills and preparing them for an increasingly complex world.

Mishra, S., & Singh, A. (2021). traced the evolution of IKS from ancient times through various historical periods, highlighting how traditional knowledge has been integrated into educational practices. They emphasize the impact of historical contexts on the development and preservation of IKS and argue for a re-evaluation of historical educational paradigms to better incorporate these systems into modern education.

Kumar and Kumar (2020) explored the current state of IKS within the Indian education system, focusing on contemporary challenges and opportunities. They analysed recent initiatives aimed at integrating IKS into modern curricula and assessed the effectiveness of these efforts. Their study highlights the gaps between traditional knowledge and contemporary educational practices, advocating for innovative approaches to bridge these gaps and enhance the relevance of IKS in today's educational landscape.

Singh (2019) provided a philosophical analysis of IKS in the context of education. discusses how traditional Indian philosophies inform educational practices and suggests ways in which these philosophies can be reconciled with modern educational theories to create a more holistic educational approach.

Gupta (2017) takes a comparative approach to analyze IKS and its role in education relative to other knowledge systems. The paper compares IKS with Western educational paradigms, highlighting both similarities and differences. Gupta argues for a more integrative approach that values the unique contributions of IKS while also learning from other educational systems to create a more robust and diverse educational framework.

Joshi (2016) explores pedagogical strategies for integrating IKS into the Indian education system. The paper discusses various teaching methods and curricular designs that can effectively incorporate IKS, offering practical recommendations for educators. Joshi emphasizes the importance of pedagogical innovation to ensure that IKS is taught in a way that is both engaging and educationally effective.

Raman (2015) provides a scientific analysis of IKS and its relevance to modern education. The study evaluates the empirical evidence supporting traditional knowledge practices and their scientific validity. Raman argues that scientific scrutiny of IKS can validate its effectiveness and support its integration into contemporary educational practices, promoting a more evidence-based approach to incorporating traditional knowledge.

Research Gap

Despite the growing interest in incorporating ancient knowledge systems into modern educational methods, there is little empirical study on how Indian Knowledge Systems (IKS) influence contemporary lifelong learning practices. Existing research frequently examines either traditional or modern educational techniques in isolation, without doing a comparative review of how these systems can work together. Furthermore, there is a scarcity of comprehensive research evaluating the efficacy and adaptability of IKS in today's different learning situations. This study seeks to address this gap by conducting a comparative examination of IKS and contemporary lifelong learning techniques, as well as investigating potential synergies between them.

Problem Statement

The integration of Indian Knowledge Systems (IKS) into contemporary lifelong learning techniques is still underexplored, with little understanding of how these ancient frameworks might improve or modify modern learning methodologies. This divide impedes the development of more inclusive and diverse educational approaches that can benefit from IKS's rich tradition. This study aims to solve this issue by looking into the effects of IKS on lifelong learning and determining how these ancient systems might be integrated with modern educational approaches to promote more holistic and effective learning experiences.

Objectives of the research

- To analyze Indian Knowledge Systems (IKS)
- To evaluate contemporary lifelong learning practices
- To compare and integrate IKS with Modern Practices
- To develop Integration Recommendations

Research Methodology

Research Design

Research design is a structured plan for guiding a research study. It's all about seeking knowledge. Research involves discovering new facts or confirming existing ones by using scientific methods on natural or social phenomena.

Sampling Technique - Probability sampling is used for this research paper and respondents are randomly selected especially those who are within the area of Palghar District Region and are hence selected for primary data collection.

Source of data -Primary data - In this paper, primary data were mainly collected through surveys using a detailed structured questionnaire. Secondary data - In this paper, secondary data was obtained from various textbooks, registers, magazines, and journals.

Structure of Questionnaire - A well-structured questionnaire is used for this research paper which includes multiple choice questions and closed-ended questions.

Sample Size - A sample of 100 respondents both male and female were selected.

Tools Used - An Independent sample t-test was used

Sampling Unit – The sampling unit is Palghar District

Hypothesis 1

- HO There is no significant relationship between familiarity with Indian Knowledge Systems (IKS) and the perceived relevance of IKS principles to contemporary lifelong learning practices.
- H1 There is a significant relationship between familiarity with Indian Knowledge Systems (IKS) and the perceived relevance of IKS principles to contemporary lifelong learning practices.

Independent Samples T-Test	T	DF	P
How familiar are you with Indian Knowledge Systems (IKS)?	-1.308	98	0.194

Since the p-value is greater than the commonly used significance level of 0.05, one fails to reject the null hypothesis (H0). This indicates that there is no statistically significant relationship between familiarity with Indian Knowledge Systems (IKS) and the perceived relevance of IKS principles to contemporary lifelong learning practices.

Hypothesis 2

- HO There is no significant relationship between familiarity with Indian Knowledge Systems (IKS) and the perception of the effectiveness of IKS compared to Western educational frameworks in promoting lifelong learning.
- H1 There is significant relationship between familiarity with Indian Knowledge Systems (IKS) and the perception of the effectiveness of IKS compared to Western educational frameworks in promoting lifelong learning.

Independent Samples T-Test	T	DF	P
How familiar are you with Indian Knowledge Systems (IKS)?	-0.667	98	0.506

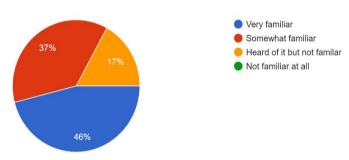
Since the p-value is greater than 0.05, one fails to reject the null hypothesis (H0). This means there is not enough statistical evidence to support the claim that there is a significant relationship between familiarity with IKS and the perception of the effectiveness of IKS compared to Western educational frameworks in promoting lifelong learning.



Data Analysis and Findings

Figure 1



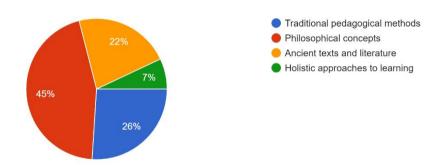


The data indicates that 46% of respondents are very familiar with Indian Knowledge Systems (IKS), 37% are somewhat familiar, and 17% have heard of IKS but lack detailed knowledge, suggesting varying levels of awareness and a need for increased educational outreach.

Figure 2

Which component of Indian Knowledge Systems do you believe has the most potential for modern education?

100 responses

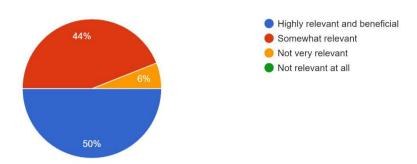


Philosophical concepts from Indian Knowledge Systems are seen as having the most potential for modern education, with 45% of respondents identifying them as the most promising component, compared to 26% for traditional pedagogical methods, 22% for ancient texts and literature, and 7% for holistic approaches to learning.



Figure 3

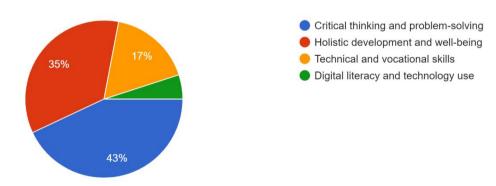
In your opinion, how relevant are IKS principles to contemporary lifelong learning practices? 100 responses



Half of the respondents (50%) view Indian Knowledge Systems principles as highly relevant and beneficial to contemporary lifelong learning practices, while 44% see them as somewhat relevant, and only 6% find them not very relevant.

Figure 4

Which aspect of modern lifelong learning practices could be enhanced by integrating IKS? 100 responses

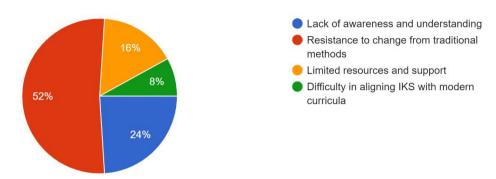


Integrating Indian Knowledge Systems (IKS) into modern lifelong learning practices could most effectively enhance critical thinking and problem-solving skills, as indicated by 43% of respondents, followed by holistic development and well-being at 35%, with technical and vocational skills at 17%, and digital literacy and technology use at 5%.



Figure 5

What is the primary barrier to integrating IKS into current educational frameworks? 100 responses



The primary barrier to integrating Indian Knowledge Systems (IKS) into current educational frameworks is resistance to change from traditional methods, cited by 52% of respondents, followed by lack of awareness and understanding at 24%, limited resources and support at 16%, and difficulty in aligning IKS with modern curricula at 8%.

Figure 6

Which method of IKS integration would be most effective in a contemporary classroom setting? 100 responses



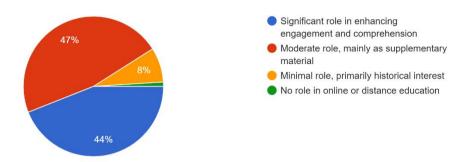
The most effective method for integrating Indian Knowledge Systems (IKS) into contemporary classroom settings is using IKS principles to develop new teaching methodologies, as preferred by 50% of respondents, followed by incorporating IKS-based case studies and examples at 32%, conducting workshops and seminars on IKS at 12%, and integrating IKS into digital learning platforms at 6%.



Figure 7

What role do you think traditional Indian pedagogical approaches could play in online or distance education?

100 responses

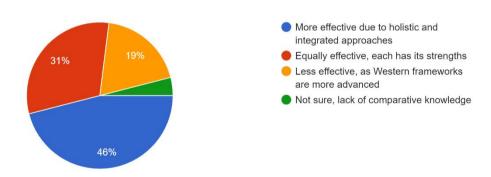


Traditional Indian pedagogical approaches could play a significant role in online or distance education by enhancing engagement and comprehension, as indicated by 44% of respondents, while 47% see them as having a moderate role, mainly as supplementary material, and only 8% view them as having minimal historical interest and 1% see no role at all.

Figure 8

How do you perceive the effectiveness of IKS compared to Western educational frameworks in promoting lifelong learning?

100 responses

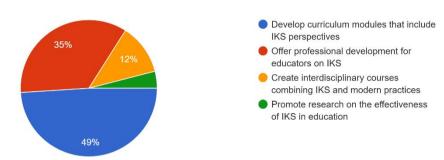


Indian Knowledge Systems (IKS) are perceived as more effective than Western educational frameworks in promoting lifelong learning by 46% of respondents due to their holistic and integrated approaches, while 31% view both as equally effective, 19% consider Western frameworks more advanced, and 4% are unsure due to a lack of comparative knowledge.



Figure 9

Which recommendation would you prefer for integrating IKS into modern education? 100 responses



The preferred recommendation for integrating Indian Knowledge Systems (IKS) into modern education is to develop curriculum modules that include IKS perspectives, as supported by 49% of respondents, followed by offering professional development for educators on IKS at 35%, creating interdisciplinary courses combining IKS and modern practices at 12%, and promoting research on the effectiveness of IKS in education at 4%.

Conclusion

This paper investigates the integration of Indian Knowledge Systems (IKS) into contemporary lifelong learning frameworks. The findings indicate that while familiarity with IKS does not significantly impact perceptions of its relevance or effectiveness compared to Western educational models, there is notable recognition of IKS's value in enhancing critical thinking and holistic development.

However, the literature review highlights that IKS offers substantial benefits for holistic development, critical thinking, and ethical education.

Barriers such as resistance to change and limited awareness hinder the integration of IKS. However, respondents favour strategies like developing IKS-based teaching methodologies and incorporating IKS perspectives into curricula. These insights highlight the potential of IKS to enrich educational practices and support lifelong learning.

The papers concludes that educational institutions should focus on creating IKS-integrated curricula and providing professional development to effectively incorporate these traditional systems, thus enhancing the overall learning experience.

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EFFICIENT HUMAN RESOURCE MANAGEMENT AND SUSTAINABILITY

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Abstract

This paper explores the efficiency of Human Resource Management (HRM) practices and their role in achieving sustainability within organizations. By analyzing modern HRM strategies, data collection methods, and measurement models, we aim to provide insights into how efficient HRM can drive sustainable organizational growth. The study employs both qualitative and quantitative approaches to assess the impact of various HRM practices on long-term sustainability. Our findings highlight the correlation between efficient HRM and improved organizational performance, employee satisfaction, and environmental sustainability.

Introduction

Human Resource Management (HRM) is a crucial function in organizations that involves the strategic approach to managing people. Efficient HRM not only optimizes workforce performance but also contributes to the overall sustainability of organizations. As businesses face increasing pressure to align with sustainability goals, understanding how HRM practices can support these objectives is imperative. This paper examines the intersection of HRM efficiency and sustainability, exploring how effective HR practices can enhance organizational performance while contributing to broader social and environmental goals.

New Words:

Sustainability in HRM: The integration of environmental and social responsibility within HR practices.

Efficiency Metrics: Quantitative measures used to assess the effectiveness of HRM practices.

Organizational Resilience: The ability of an organization to adapt to changes and continue functioning effectively over time.

Human Resource Management has evolved from traditional administrative functions to a strategic role in organizations. Effective HRM practices are known to enhance employee performance, satisfaction, and organizational culture. However, with the growing emphasis on sustainability, HRM must now address environmental and social concerns as well. This paper reviews the historical development of HRM, its current practices, and how these practices align with sustainable development goals.

1. Training and Development Programs:

- **Skill-Based Training:** Focuses on developing specific skills that are critical for current job roles. This includes technical skills, software proficiency, and operational procedures.
- Leadership Development: Prepares employees for managerial and leadership roles through programs that cover strategic thinking, decision-making, and team management.
- **Soft Skills Training:** Enhances interpersonal skills such as communication, teamwork, and problem-solving, which are essential for effective collaboration and conflict resolution.

2. Career Development Planning:

- Individual Development Plans (IDPs): Personalized plans that outline an employee's career goals, required skills, and the steps needed to achieve those goals. IDPs are developed in collaboration with the employee and their manager.
- Career Pathing: Provides employees with clear pathways for career advancement within the organization. This includes mapping out potential career trajectories and the competencies needed for progression.



3. Performance Management:

- **Regular Feedback and Reviews:** Implementing a structured performance review process that includes regular feedback sessions, goal setting, and performance evaluations.
- **360-Degree Feedback:** A comprehensive feedback system that collects input from peers, subordinates, and supervisors to provide a well-rounded view of an employee's performance.

4. Mentoring and Coaching:

- **Mentoring Programs:** Pairing employees with experienced mentors who can provide guidance, share knowledge, and offer support for personal and professional development.
- Executive Coaching: Personalized coaching for senior executives to enhance leadership skills, strategic thinking, and decision-making capabilities.

5. Educational Opportunities:

- **Formal Education:** Supporting employees in pursuing further education such as degrees, certifications, or specialized courses relevant to their roles.
- Workshops and Seminars: Providing access to industry-specific workshops, seminars, and conferences to keep employees updated on the latest trends and best practices.

6. Knowledge Management:

- **Knowledge Sharing Platforms:** Implementing systems such as intranets, wikis, and collaborative tools to facilitate the sharing of knowledge and best practices across the organization.
- **Communities of Practice:** Creating groups where employees with similar roles or interests can collaborate, share insights, and learn from each other.

7. Succession Planning:

- **Talent Identification:** Identifying high-potential employees who can be groomed for future leadership roles. This involves assessing their skills, performance, and career aspirations.
- **Development Plans for Successors:** Creating tailored development plans for identified successors to ensure they are prepared for key positions when they become available.

8. Employee Engagement Initiatives:

- **Recognition Programs:** Implementing recognition and reward programs to acknowledge and celebrate employee achievements and contributions.
- **Employee Surveys:** Conducting regular surveys to gauge employee satisfaction, engagement levels, and areas for improvement.

9. Diversity and Inclusion Training:

- Cultural Competency Training: Educating employees on cultural differences and fostering an inclusive work environment.
- **Bias Awareness Programs:** Training to help employees recognize and mitigate unconscious biases in decision-making processes.

10. Health and Wellness Programs:

• **Physical Wellness Initiatives:** Offering programs that promote physical health, such as fitness memberships, health screenings, and wellness challenges.



• **Mental Health Support:** Providing resources for mental health support, including counseling services, stress management workshops, and a supportive work environment.

11. Change Management:

- Change Readiness Training: Preparing employees for organizational changes by providing training on change management principles and techniques.
- Communication Strategies: Developing effective communication plans to keep employees informed and engaged during periods of change.

12. Technology Integration:

- HR Tech Tools: Leveraging technology such as HR management systems (HRMS), learning management systems (LMS), and performance tracking software to streamline HR processes and enhance development efforts.
- **E-Learning Platforms:** Utilizing online learning platforms to provide flexible and accessible training options for employees.

Hypothesis: Efficient HRM practices significantly contribute to the sustainability of organizations by improving employee performance, fostering a positive organizational culture, and aligning with environmental and social sustainability goals.

Human Resource Development: Human Resource Development (HRD) focuses on the growth and improvement of employees through training, development programs, and career planning. Efficient HRD practices are essential for maintaining a skilled and adaptable workforce, which in turn supports organizational sustainability. This section will discuss various HRD strategies and their impact on organizational efficiency and sustainability.

The research employs a mixed-methods approach, combining quantitative data analysis with qualitative insights. Surveys, interviews, and case studies are used to gather comprehensive data on HRM practices and their impact on sustainability.

Surveys: Distributed to HR professionals and employees to gather quantitative data on HRM practices and perceived efficiency.

Interviews: Conducted with key stakeholders, including HR managers and organizational leaders, to gain qualitative insights.

Case Studies: Examination of organizations with well-established HRM practices and their sustainability outcomes.

Results: The results indicate a positive correlation between efficient HRM practices and organizational sustainability. Key findings include:

- 1. Improved Employee Engagement: Efficient HRM practices lead to higher levels of employee satisfaction and productivity.
- **2. Enhanced Organizational Performance:** Organizations with effective HRM strategies demonstrate better financial and operational performance.
- **3. Alignment with Sustainability Goals:** Efficient HRM practices support the achievement of environmental and social sustainability targets.

Measurement Model: The study utilizes a multi-dimensional measurement model to evaluate HRM efficiency and sustainability. This model includes:

Performance Metrics: Employee productivity, retention rates, and engagement levels.

Sustainability Metrics: Environmental impact reduction, social responsibility initiatives, and compliance with sustainability standards.

Disclosure: The paper provides full disclosure of the research methodology, data sources, and potential limitations. Ethical considerations, such as participant confidentiality and informed consent, are also addressed.

Conclusion: Efficient Human Resource Management plays a crucial role in driving organizational sustainability. By implementing effective HRM practices, organizations can enhance employee performance, foster a positive work environment, and align with broader sustainability goals. The findings suggest that organizations that invest in efficient HRM are better positioned to achieve long-term success and contribute positively to society and the environment. Future research should explore the longitudinal impact of HRM practices on sustainability and investigate best practices across different industries.

References Books:

1. "Human Resource Development" by Jon M. Werner and Randy L. DeSimone

This book provides a comprehensive overview of HRD, covering training and development, organizational development, and career development. It includes theories, case studies, and practical applications.

- 2. "Foundations of Human Resource Development" by Richard A. Swanson and Elwood F. Holton III
- 3. "Human Resource Development: Theory and Practice" by John P. Wilson

A detailed exploration of HRD, focusing on theoretical frameworks and practical applications. The book covers key concepts, research findings, and their application in organizational settings.

4. "Sustainability: A Comprehensive Foundation" by Tom Theis and Jonathan Tomkin

This book provides an in-depth overview of sustainability, including its environmental, social, and economic dimensions. It is an open-access textbook that discusses sustainable development principles, practices, and challenges.

5. "The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic, and Environmental Responsibility" by William R. Blackburn

This handbook is a practical guide for implementing sustainability in organizations. It offers strategies and tools for achieving sustainability goals across various sectors and industries.

6. "Sustainability and Human Resource Management: Developing Sustainable Business Organizations" edited by Ina Ehnert, Wes Harry, and Klaus J. Zink

A comprehensive collection of essays and studies that link HR practices with sustainability initiatives. It covers theoretical perspectives, empirical research, and practical applications.



"BUILDING A SUSTAINABLE INDUSTRIAL ECOSYSTEM IN LATUR DISTRICT: CHALLENGES AND OPPORTUNITIES."

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Abstract

The industrialization of Latur District presents a unique blend of challenges and opportunities as the region seeks to build a sustainable industrial ecosystem. The concept of a sustainable industrial ecosystem in Latur district is critical to addressing global environmental challenges while fostering industrial and economic growth. This paper wanted to explore the multidimensional challenges and opportunities in building such ecosystems, focusing on the integration of sustainable practices across industries. Key challenges include profit maximization object of each industry requires to use of resource resulting into depletion, the environmental degradation in Indian economy and implementation of environmental laws and regulatory complexities, etc. all of which require a balance between industrial growth and ecological preservation in Latur district. Industries are required to use large amount of water and basically it is too much scare in latur districet. As well as to reduce the pollution generated by industries, the forestation is very less. So in addition, there is a need to shift towards circular economy models, where waste is minimized and resources are reused.

Technological advancements, such as renewable energy innovations and digitalization, present opportunities to enhance efficiency and reduce the water footprint and carbon footprint. Collaboration between governments, industries, and communities is vital to overcoming financial and policy barriers. The paper highlights case studies of industries adopting green technologies, sustainable supply chains, and innovative business models. Ultimately, a sustainable industrial ecosystem is achievable through systemic changes, including investment in research and development, regulatory reforms, and a commitment to sustainability across sectors.

Companies remain trapped in an outdated approach to value creation, focusing on short-term financial performance while neglecting customer needs with satisfaction and broader influences that determine their long-term success through sustainability.

This research concludes that while challenges are significant, the opportunities for innovation and long-term benefits make the shift towards a sustainable industrial ecosystem for economic growth and development is necessary and also economically feasible.

Key Concepts

The **circular economy** is an economic model designed to minimize waste and make the most of resources. Unlike the traditional linear economy—which follows a "take-make-dispose" pattern—the circular economy emphasizes reducing resource input, reusing materials, and recycling waste to create a closed-loop system. This approach seeks to extend the lifecycle of products, keep materials in use for as long as possible, and regenerate natural systems, making it a key strategy in achieving sustainability.

Design Out Waste and Pollution: Products are designed with longevity, reparability, and recyclability in mind. This reduces the creation of waste and minimizes pollution during production and disposal.

Regenerate Natural Systems: The circular economy promotes the use of renewable resources and ensures that human activities enhance, rather than degrade, the environment. It seeks to return valuable nutrients to the soil and reduce reliance on non-renewable energy sources.

Introduction

The development of a sustainable industrial ecosystem is critical to balancing economic growth with environmental stewardship, especially the regions like Latur district, which is experiencing rapid industrialization. Latur, located in the Marathwada region of Maharashtra, has traditionally been an agricultural hub, but in recent years, it has

attracted industrial activity, particularly in agree products based processing, manufacturing and energy sectors. However, the expansion of industries in the region brings with it both opportunities and challenges in terms of ecological and economical sustainability.

This study aims to explore the specific challenges and opportunities in building a sustainable industrial growth and development with ecosystem in Latur district. The region faces unique challenges with references to environmental, social, and economic factors that must be considered, including limited natural resources, water scarcity, less forestation and the need for infrastructural development. At the same time, Industries in Latur district has the potential to leverage green technologies, renewable energy sources, and circular economy practices to build a resilient industrial base that supports long-term economic and environmental sustainability.

The transition towards sustainable industrial development requires active participation of local government bodies, industries, and communities to implement environment friendly policies and practices. The transition to a sustainable industrial ecosystem is critical in ensuring that Latur's industrial development does not come at the cost of its natural resources, which are already under strain due to frequent droughts and water shortages. This research aims to explore the challenges and opportunities associated with building a sustainable industrial ecosystem in Latur and propose strategies for achieving sustainable industrial growth. This paper will examine how Latur can develop a mechanism to overcome barriers such as limited resources, lack of modern technological infrastructure to produce maximum good at low pollution level and maximum resources utilization and financial limitations while seizing opportunities presented by modern innovations in sustainable production, renewable energy, and waste management.

By focusing on Latur district, this research provides valuable insights into how emerging industrial regions in India can grow sustainability, ensuring that industrial growth & development does not come at the cost of environmental degradation.

Latur District: Socio-Economic and Environmental Context

Latur is primarily known for its agricultural economy, with a large portion of the population engaged in farming. The district's agro-climatic conditions, particularly its reliance on monsoon rains, make it susceptible to droughts. As a result, water availability is a significant concern for both agriculture and industrial activities in the region (Jadhav, 2019).

In recent years, Latur has seen an increase in small and medium-sized industrial enterprises, particularly in agroprocessing industries. Like daal mill, oil mill, sugar industry, etc. The region is also attracting investment in renewable energy, specifically solar and wind power projects, due to its favorable geographic conditions. Despite these advancements, Latur's industrial development has lagged behind than other districts in Maharashtra due to limited infrastructure, inadequate access to modern technology, and a shortage of skilled labor and manpower.

Challenges in Building a Sustainable Industrial Ecosystem in Latur

1. Water Scarcity

One of the most pressing challenges in Latur's industrial development is water scarcity. Industries require a stable water supply, but Latur's frequent droughts pose a significant threat. According to the Government of Maharashtra's reports, the region has faced severe water shortages, which have impeded both agricultural and industrial activities (Patil et al., 2020). Industries like sugar production is using around 1500 liter of water for producing a 1 kg sugar. It increase water footprint. It shows the dependence of industries on water resource otherwise they require shutting their industry.

2. Resource Constraints

Latur have limited access to natural resources such as minerals and raw materials poses a challenge for industrial growth. Importing raw materials increases production costs due to additional transportation cost of raw material and carbon footprints, making local industries less competitive. In addition, energy supply is inconsistent, which limits the potential for scaling industrial operations (Kumar & Pandey, 2018). As well as due to water scarcity agro based



raw material production is uncertain, so the industrial sustainability is dependent. It creates a need of using Design Out Waste and Pollution technique in production.

3. Lack of Technological Infrastructure

The industrial sector in Latur has not fully embraced modern technological advancements, leading to inefficiencies in production processes. Without access to advanced technologies, industries struggle to improve energy efficiency, reduce waste, or transition to more sustainable production models (Deshmukh, 2021). There is also a shortage of skilled labor, which further hampers the adoption of innovative product and production practices in industry. As well as there is challenge of E Waste Management. In Latur there are only 6 dedicated Collection Centres provided by ULBs and PROs under EPR scheme. There is authorized E-Waste recyclers / Dismantler.

4. Regulatory and Policy Barriers

While there have been efforts at the state and national levels to promote sustainable development, bureaucratic hurdles, lack of coordination between governmental bodies, and weak enforcement of environmental regulations have slowed progress in Latur. Furthermore, industries face difficulties in securing funding and incentives for transitioning to greener practices (Singh & Reddy, 2020).

Opportunities for Building a Sustainable Industrial Ecosystem

1. Adoption of Circular Economy Models

The circular economy is an approach that focuses on keeping products and materials in use for as long as possible and minimizing waste. i.e. durable goods production is expected. For Latur, the adoption of circular economy principles could play a transformative role. The agro-processing industries, in particular, can benefit from recycling organic waste into bioenergy or fertilizers (Geissdoerfer et al., 2017). Additionally, industrial symbiosis, where one industry's waste serves as another's input, could be a valuable strategy for optimizing resource use.

2. Renewable Energy Potential

Latur has great potential for renewable energy production, particularly solar and wind energy. Given the region's abundant sunlight, solar energy could become a primary energy source for industries, reducing their dependency on non-renewable energy sources. State incentives and partnerships with private firms could further accelerate the adoption of renewable energy projects (Kamble, 2021). It improves the scope for Regenerating Natural Systems to use of renewable resources and ensures that human activities enhance, rather than degrade, the environment

3. Green Technologies and Sustainable Practices

The adoption of green technologies such as energy-efficient machinery, waste-reducing production processes, and sustainable supply chain management could significantly reduce the environmental impact of industries in Latur district. Innovations in agro-processing, such as water-efficient processing techniques, Effluent Treatment Plant for wastewater management and bio-based packaging, offer additional avenues for sustainable industrial practices (Rashid et al., 2013).

4. Policy Interventions and Capacity Building

The Maharashtra government has already initiated programs to promote sustainable industrial practices, but further policy interventions are needed to address Latur's unique challenges. This includes providing subsidies for green technologies, incentivizing water conservation in industries, and strengthening environmental regulations. Moreover, capacity-building initiatives aimed at upskilling the local workforce would enable industries to adopt advanced, sustainable practices more effectively (Schot & Steinmueller, 2018). DIC and MITCON is organizing training programs for entrepreneurship development for capacity building.



Case Studies: Successful Models of Sustainable Industrial Ecosystems

1. Kalundborg, Denmark

The industrial symbiosis model in Kalundborg, Denmark, serves as an exemplary case of how industries can work together to reduce waste and share resources such as energy and water. In this system, the waste or by-products from one industry are used as inputs for another, thereby reducing overall waste and environmental impact. Latur district can could adapt similar strategies, particularly in the agro-processing sector, where organic waste can be converted into valuable resources (Ellen MacArthur Foundation, 2013).

2. Gujarat Solar Park, India

Gujarat's large-scale solar energy projects demonstrate the viability of renewable energy in powering industrial zones. Latur, with its favorable conditions for solar energy, could implement a similar model to power its growing industries while reducing reliance on traditional energy sources (Kumar, 2019).

Recommendations

- 1. Water Management Practices: Implement water-efficient technologies and establish rainwater harvesting systems for industrial use. Policies should encourage industries to adopt closed-loop water systems like Effluent Treatment Plants to reduce waste and increase water reusage.
- 2. **Renewable Energy Integration**: Foster public-private partnerships to expand renewable energy infrastructure in Latur, with an emphasis on solar and wind energy projects. These initiatives could provide stable, clean energy sources for industries.
- 3. **Incentives for Green Technologies**: Provide subsidies and financial incentives for industries to adopt energy-efficient machinery, waste-reduction techniques, and sustainable supply chains.
- 4. **Capacity Building**: Invest in education and vocational training to upskill the local workforce, enabling industries to adopt advanced technologies and sustainable practices.
- 5. **Circular Economy Models**: Promote circular economy principles across industries to encourage resource reuse, recycling, and waste minimization.

Conclusion

Building a sustainable industrial ecosystem in Latur District presents significant challenges, particularly with respect to water scarcity, resource constraints, and technological limitations. However, the region also offers numerous opportunities, including the potential for adopting circular economy models, leveraging renewable energy, and embracing green technologies. With the right policy interventions, community engagement, and industrial innovation, Latur can overcome its barriers and establish a resilient, sustainable industrial ecosystem that supports both economic growth and environmental preservation.

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LEVERAGING INDIA'S DEMOGRAPHIC DIVIDEND FOR A SELF-RELIANT AND SUSTAINABLE FUTURE

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Abstract

India stands at a pivotal moment in its demographic history, with a significant proportion of its population in the working-age group. This demographic dividend presents a unique opportunity for economic growth and social development. This article explores how India can leverage this advantage to build a self-reliant and sustainable future through a conceptual discussions and review of literature. 5 dimensions have been considered for the discussions namely comprehensive framework, population dynamics, challenges of harnessing India's demographic dividend, waste management, circular economy, examples of successful sustainable urbanization initiatives The data collected is through secondary sources and the discussions were concluded.

Keywords: Demography, economic growth, social development, self-reliant, sustainability

Introduction

Definition of Demographic Dividend: Explain the concept of demographic dividend, which occurs when the proportion of the working-age population (15-64 years) is higher than the non-working-age population (youth and elderly).

India's Demographic Profile: Highlight India's youthful population, with a median age projected to be around 29 years by 2025-2030

1. Economic Opportunities

- Boost in Economic Productivity: Discuss how a larger working-age population can lead to increased economic productivity and growth.
- Employment Generation: Emphasize the need for creating sufficient job opportunities to absorb the growing workforce.
- Skill Development: Highlight the importance of skill development programs to ensure the workforce is equipped to meet modern economic challenges.

2. Social and Infrastructural Policies

- Education: Stress the need for universal access to high-quality education, focusing on both foundational and higher education.
- Healthcare: Discuss the importance of promoting health and well-being, with a focus on reproductive health to maintain a healthy and productive workforce.
- Gender Equality: Advocate for gender parity to ensure both men and women can contribute to and benefit from economic prosperity.

3. Sustainable Development

- Environmental Sustainability: Explore how a balanced demographic structure can support sustainable development goals, including environmental conservation.
- Urbanization and Infrastructure: Address the challenges and opportunities of urbanization, and the need for robust infrastructure to support a growing population.



4. Challenges and Solutions

- Dependency Ratio: Analyze the implications of a changing dependency ratio and the need for policies to support the elderly population as the demographic dividend phase ends2.
- Regional Disparities: Discuss the varying pace of demographic transition across different states and the need for tailored policies to address these disparities.

Comprehensive framework

The demographic dividend refers to the economic growth potential that arises from shifts in a country's age structure, primarily when the working-age population is larger than the non-working-age population. For India, this window of opportunity is significant, given its youthful population and low dependency ratio.

Literature Review

- 1. (Srivastava, 2020). For safe living and a stable economy in the coming future, the lockdown provides strategic opportunities for planned sustainable development in the following ways: Improved government policies in job creation The manufacturing industry is highly diversified in India. The majority of industrial workers are engaged in smallscale handicraft enterprises and about 30% of the industrial workers depend on daily wages.
- 2. (Jain, 2020) stated that the current lockdown has disrupted the livelihoods of many people. Hence, this is the time when the government can focus on job sectors by strengthening labor schemes, local startups, and small to medium enterprises to ensure employment for laborers
- 3. (Jain, 2020). Adapt strategies to go digital Due to infinite days of lockdown period, Covid-19 has encouraged to adopt strategies related to going digital. Therefore it is expected that in the future, organizations will encourage employees for various digital activities such as work from home and conducting video conferences instead of face to face meeting.
- 4. (Guest, 2020) mentioned that Scope and strategic opportunities in agricultural sector More than 70% of the Indian population, directly and indirectly, depends on agricultural activities for their livelihood. This is means that the country cannot have a development model that ignores its agriculture. India is not self-reliance on various essential agricultural commodities and it heavily depends on imports, for example, India imports around 15 million tons of edible oil, more than 9 million tons of palm oil, and about 2.5 million tons of soy oil and sunflower oil every year from Indonesia, Malaysia, Argentina, Brazil, Ukraine, and Russia
- (Singh &Ranjith, 2020) observed that in order to achieve a self-reliant economy and sustainable development, India should think about its agricultural development first, and it is easier and more cost-efficient than other sectors
- 6. (Roy, 2020) in their study identified that the possible measures should be, branding of local farms products to be sold globally and employing the CSA (Climate Smart Agriculture) technologies, the practices and services of which would ensure stability and suitability in agricultural production, and enhance output, yield and income

Several studies have highlighted the potential and challenges of harnessing India's demographic dividend:

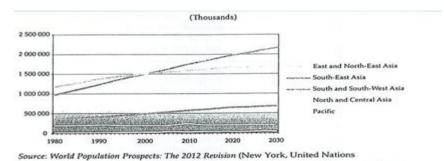
- Economic Development and Growth: Research indicates that a large working-age population can boost national productivity and GDP if supported by appropriate policies.
- Employment Generation: Creating sufficient job opportunities is crucial to absorb the growing number of young people entering the labor force.
- Skill Development and Education: Enhancing the quality of education and vocational training is essential to equip the workforce with necessary skills.



- Health and Gender Equality: Improving healthcare and promoting gender equality are vital for maximizing the demographic dividend.
- Technological Advancement and Entrepreneurship: Encouraging innovation and entrepreneurship can drive economic growth and sustainability.
- India's demographic profile presents both opportunities and challenges:
- Population Structure: As of 2021, India's median age was around 29 years, making it one of the youngest countries globally.
- Labor Force Participation: The labor force participation rate for ages 15-64 is approximately 53.5%.
- Education and Skills: Despite improvements, there is a significant gap in skill levels, with only 10% of the workforce receiving formal vocational training.
- Healthcare: Access to quality healthcare remains uneven, with rural areas particularly underserved.

Dimension-1 Sustainable development in the context of demographics involves understanding how population dynamics—such as growth, aging, migration, and urbanization—interact with economic, social, and environmental factors to shape development outcomes.

Population size by ESCAP sub region 1980-2030



Department of Economic and Social Affairs, 2013). Available from http://esa.un.org/wpp.

Here are some key aspects:

• Population Growth and Resource Management

Resource Pressure: Rapid population growth can strain natural resources like water, land, and energy, making sustainable management crucial.

Environmental Impact: Increased population leads to higher consumption and waste, contributing to environmental degradation and climate change.

• Aging Population

Economic Implications: An aging population can affect economic growth by increasing the dependency ratio, which is the number of dependents (young and elderly) relative to the working-age population.

Healthcare and Social Services: There is a need for robust healthcare systems and social services to support an aging population.

Urbanization

Infrastructure Needs: Rapid urbanization requires sustainable urban planning to ensure adequate housing, transportation, and sanitation.



Environmental Concerns: Urban areas need to manage pollution and waste effectively to maintain environmental sustainability.

Migration

Economic Opportunities: Migration can help balance labor markets and contribute to economic growth, but it also requires policies to integrate migrants effectively.

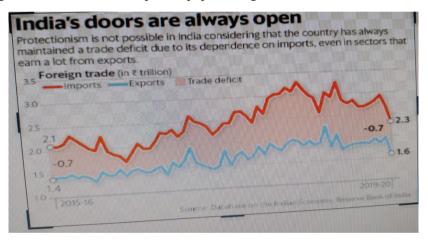
Social Integration: Ensuring social cohesion and access to services for migrants is essential for sustainable development.

• Policy Recommendations

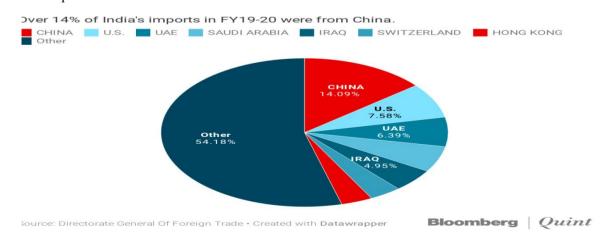
Education and Health: Investing in education and healthcare can improve human capital and support sustainable economic growth.

Gender Equality: Promoting gender equality ensures that all members of society can contribute to and benefit from development.

Environmental Policies: Implementing policies that promote renewable energy, conservation, and sustainable agriculture can mitigate the environmental impact of population growth



India's Imports from china



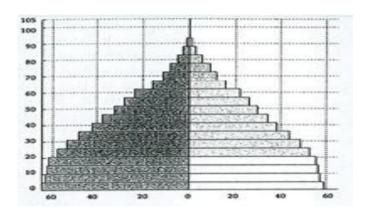


India's Demographic Dividend: Harnessing the Potential for Economic Growth

India's demographic dividend refers to the economic growth potential that arises from shifts in a country's age structure, primarily when the working-age population is larger than the non-working-age segments. This scenario presents a unique opportunity for India, which boasts one of the youngest populations in the world. Here's a detailed look at how India can harness its demographic dividend and the challenges it must address to fully capitalize on this potential.

Age structure changes in the balance between vital rates not only determines the growth rate of population but also its age-gender structure. the age –gender pyramid base indicates the low-fertility and high base indicate high fertility, and the last row-Age structure for India indicate the **young age** structure

Age Structure-India



Source: World Population Prospects: The 2010 Revision (New York, United Nations Department of Economic and Social Affairs, 2011). Available from http://esa.un.org/wpp.

Key Components of India's Demographic Dividend

Young Workforce

Large Working-Age Population: Over 65% of India's population is under the age of 35. This provides a significant labor force that can drive productivity and economic growth.

Innovation and Dynamism: A young population tends to be more open to innovation, technology adoption, and entrepreneurial ventures, fueling economic dynamism.

• Economic Growth Potential

Increased Savings and Investment: A larger working-age population leads to higher income levels, increased savings, and greater investment in the economy.

Consumer Market Expansion: A young, economically active population expands the consumer base, driving demand for goods and services and stimulating economic activity.

Technological Advancement

Digital Economy: The tech-savvy young population is accelerating the growth of India's digital economy, with sectors like e-commerce, fintech, and IT services leading the way.

Innovation Ecosystem: Startups and new business ventures, often driven by young entrepreneurs, are thriving, contributing to job creation and economic diversification.



• Human Capital Development

Education and Skills Development: Investments in education and vocational training are enhancing the skills and employability of the young population.

Healthcare Improvements: Better healthcare services are ensuring a healthier workforce, reducing the economic burden of disease and increasing productivity.

Opportunities for Leveraging the Demographic Dividend

Job Creation

Industrial Growth: Promoting manufacturing and industrial growth can create numerous employment opportunities.

Service Sector Expansion: Strengthening the service sector, particularly IT, healthcare, and education, can absorb a significant portion of the workforce.

• Skill Development

Vocational Training: Enhancing vocational training programs to meet industry needs can ensure that the workforce is adequately skilled.

- Higher Education: Improving the quality of higher education and aligning it with global standards can prepare the youth for competitive job markets.
- Entrepreneurship and Innovation
- Startup Ecosystem: Supporting startups through funding, mentorship, and incubation can foster innovation and create jobs.
- Research and Development: Investing in R&D can drive technological advancements and economic growth.

Policy and Governance

Labor Market Reforms: Implementing labor market reforms to ensure flexibility and fairness can attract investment and create jobs.

Social Security Nets: Strengthening social security measures can provide a safety net for the working population, ensuring economic stability.

Dimension: 2 several cities around the world have implemented successful sustainable urbanization initiatives. Here are a few notable examples:

1. Barcelona, Spain

Barcelona has introduced the concept of superblocks, which are groups of city blocks where traffic is restricted to the perimeter, creating pedestrian-friendly spaces within. This initiative has reduced traffic, improved air quality, and increased green spaces.

2. Singapore

Singapore is known for its comprehensive approach to sustainability, including green building standards, extensive public transportation systems, and water management strategies. The city has also implemented vertical gardens and green roofs to enhance urban greenery.

3. Copenhagen, Denmark

Copenhagen aims to become the world's first carbon-neutral capital by 2025. The city has invested heavily in bicycle infrastructure, renewable energy, and sustainable urban planning. Over 60% of Copenhagen's residents commute by bike.



4. Tianjin Eco-City, China

Tianjin Eco-City is a collaborative project between China and Singapore, designed to be a model for sustainable urban living. The city incorporates green buildings, renewable energy sources, and efficient public transportation.

5. Amsterdam, Netherlands

Amsterdam has implemented various sustainable initiatives, including self-watering green tram shelters and extensive cycling infrastructure. The city also focuses on reducing waste and promoting circular economy practices.

6. Durban, South Africa

Durban has made strides in sustainable urbanization through projects like the Durban Climate Change Strategy, which focuses on reducing greenhouse gas emissions, enhancing biodiversity, and improving water management.

7. Mexico City, Mexico:

Mexico City has introduced the ECOBICI bike-sharing program and expanded its public transportation network to reduce traffic congestion and pollution. The city also promotes green spaces and urban agriculture.

These examples demonstrate how cities can adopt innovative and sustainable practices to improve the quality of life for their residents while addressing environmental challenges.

Dimension 3.Innovative waste management solutions are essential for urban areas to handle the increasing volume of waste efficiently and sustainably. Here are some cutting-edge approaches being implemented around the world:

1. Smart Waste Bins

Smart waste bins use artificial intelligence (AI) and sensors to automatically sort recyclables from general waste. These bins can also compact waste and monitor fill levels, notifying collection services when they need to be emptied. This reduces human error and improves recycling rates.

2. Waste Level Sensors

These sensors are installed in waste bins to monitor their fill levels in real-time. They help optimize collection routes, reducing fuel consumption and operational costs. This technology ensures that bins are emptied only when necessary, improving efficiency.

3. AI Recycling Robots

AI-powered robots are used in recycling facilities to sort waste more accurately and quickly than humans. These robots can identify and separate different types of materials, increasing the efficiency of recycling processes.

4. Pneumatic Waste Collection Systems

These systems use underground pipes to transport waste from collection points to central processing facilities. This reduces the need for traditional garbage trucks, cutting down on traffic congestion and emissions.

5. Solar-Powered Trash Compactors

These compactors use solar energy to compress waste, allowing bins to hold more and reducing the frequency of collections. They are particularly useful in public spaces and parks.

6. E-Waste Kiosks

Specialized kiosks for electronic waste (e-waste) allow residents to safely dispose of items like old phones, batteries, and computers. These kiosks ensure that hazardous materials are handled properly and recycled1.



7. Recycling Apps

Mobile apps help residents learn about recycling practices, locate nearby recycling centers, and schedule pickups for bulky items. These apps can also provide rewards for proper recycling habits1.

8. Vertical Gardens and Green Roofs

Vertical gardens and green roofs not only beautify urban spaces but also help manage organic waste. They use compostable materials and can turn kitchen scraps into fertile compost for urban farming.

9. Kitchen Composting Systems

In urban kitchens, composting systems convert food scraps into compost, reducing the amount of organic waste sent to landfills. These systems can be integrated into kitchen designs, promoting sustainable living2.

10. Upcycled Interior Decor

Using upcycled materials for interior decor helps reduce waste and promotes sustainability. Furniture made from reclaimed wood or art installations from recycled metal are examples of how waste can be transformed into valuable items. These innovative solutions demonstrate how technology and creative thinking can transform waste management in urban areas, making cities cleaner, more efficient, and more sustainable.

Dimension: 4 circular economy

A circular economy aims to minimize waste and make the most of resources by creating a closed-loop system where products, materials, and resources are reused, recycled, and regenerated. Here are some key practices related to waste management in a circular economy:

1. Reduce

Design for Longevity: Products are designed to last longer, reducing the need for frequent replacements and minimizing wastel.

Minimize Resource Use: Efficient use of materials and energy in production processes helps reduce waste at the source1.

2. Reuse

Product Life Extension: Encouraging the repair, refurbishment, and remanufacturing of products to extend their lifecycle1.

Second-Hand Markets: Promoting the use of second-hand goods through resale platforms and thrift stores1.

3. Recycle

Material Recovery: Efficiently separating and processing waste materials to recover valuable resources like metals, plastics, and paper1.

Closed-Loop Recycling: Designing products so that materials can be easily recycled back into the same product, maintaining material quality1.

4. Recover

Energy Recovery: Converting non-recyclable waste into energy through processes like incineration with energy recovery1.

Biological Recovery: Composting organic waste to produce nutrient-rich soil amendments1.



5. Redesign

Circular Product Design: Creating products with modular components that can be easily replaced or upgraded, reducing the need for complete disposal1.

Eco-Friendly Materials: Using biodegradable or recyclable materials in product design to facilitate easier recycling and reduce environmental impact1.

6. Sharing Economy

Shared Use Models: Implementing systems where products are shared among multiple users, such as car-sharing or tool libraries, reducing the overall demand for new products1.

7. Industrial Symbiosis

Resource Exchange: Industries collaborate to use each other's by-products and waste materials as inputs, creating a network of resource efficiency1.

8. Policy and Education

Regulations and Incentives: Governments can implement policies that encourage circular practices, such as extended producer responsibility (EPR) and tax incentives for sustainable practices1.

Public Awareness: Educating consumers about the benefits of a circular economy and how they can participate in reducing waste.

These practices help create a sustainable system where waste is minimized, resources are conserved, and environmental impact is reduced.

Dimension 5. Challenges do developing countries face in adopting circular practices: Developing countries face several challenges in adopting circular economy practices. Here are some of the key obstacles:

1. Institutional Capacity

Limited Governance Structures: Many developing countries lack the robust institutional frameworks needed to implement and enforce circular economy policies effectively.

Regulatory Challenges: Inconsistent or weak regulations can hinder the adoption of circular practices.

2. Financial Constraints

Access to Capital: Limited access to financial resources makes it difficult for businesses and governments to invest in the necessary infrastructure and technologies for circular practices.

High Initial Costs: The upfront costs of transitioning to circular systems can be prohibitive for many developing economies1.

3. Technological Barriers

Lack of Advanced Technologies: Developing countries often lack access to the advanced technologies required for efficient recycling, waste management, and resource recovery1.

Innovation Gaps: There is often a gap in local innovation capabilities, making it challenging to develop and implement new circular solutions1.

4. Informal Economy

Fragmented Waste Management: A significant portion of waste management in developing countries is handled by the informal sector, which can be difficult to regulate and integrate into formal circular economy strategies 1.

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Health and Safety Concerns: Informal waste workers often operate in unsafe conditions, posing health risks and reducing the efficiency of waste recovery processes 1.

5. Cultural and Behavioral Factors

Lack of Awareness: There is often a lack of awareness and understanding of circular economy principles among businesses and consumers1.

Resistance to Change: Cultural resistance to new practices and behaviors can slow the adoption of circular economy initiatives1.

6. Economic Dependencies

Reliance on Extractive Industries: Many developing countries rely heavily on extractive industries (e.g., mining, oil) for economic growth, which can conflict with circular economy principles 1.

Market Dynamics: The global market dynamics and trade policies can also pose challenges, as developing countries may face difficulties in competing with established economies that have already adopted circular practices1.

7. Infrastructure Deficiencies

Inadequate Infrastructure: Poor infrastructure for waste collection, sorting, and recycling can impede the implementation of circular economy practices 1.

Urbanization Pressures: Rapid urbanization in developing countries can strain existing infrastructure and complicate efforts to implement sustainable waste management systems.

Conclusion

India's demographic dividend presents a significant opportunity for economic growth and development. By investing in education, healthcare, job creation, and infrastructure, and by fostering an environment conducive to innovation and entrepreneurship, India can turn its youthful population into a powerful engine for progress. Addressing the accompanying challenges effectively will be key to fully realizing the potential of this demographic advantage. Policy recommendations are required to harness the demographic dividend effectively. Future Outlook: Provide a forward-looking perspective on how India can leverage its demographic dividend for a self-reliant and sustainable future

Policy Recommendations

To fully leverage the demographic dividend, India must implement comprehensive policies:

- Economic Policies: Focus on sectors with high employment potential, such as manufacturing and services.
- Education and Training: Invest in education and vocational training to enhance skill levels.
- Healthcare: Improve healthcare infrastructure, especially in rural areas.
- Gender Equality: Promote gender equality through policies that support women's participation in the workforce.
- Innovation and Entrepreneurship: Foster a culture of innovation and support startups through favorable policies and funding. Addressing these challenges requires a coordinated effort from governments, businesses, and international organizations to build capacity, provide financial and technical support, and promote awareness and education about the benefits of a circular economy.

Challenges to Overcome

Employment

Job Shortage: Creating sufficient jobs to match the growing workforce is a significant challenge.

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Underemployment: Addressing the issue of underemployment, where individuals are employed below their skill level, is crucial.

• Education Quality

Education System Reform: Enhancing the quality and accessibility of education is essential to prepare the youth for future opportunities.

• Skill Mismatch: Aligning educational outcomes with industry requirements to reduce the skill gap.

• Healthcare Access

Healthcare Infrastructure: Expanding and improving healthcare infrastructure to ensure a healthy and productive workforce.

 Preventive Care: Promoting preventive healthcare to reduce the incidence of diseases and associated economic costs.

Urbanization

Sustainable Urban Development: Managing rapid urbanization through sustainable development practices to ensure livable cities.

• Infrastructure Investment: Investing in infrastructure to support the growing urban population

India's demographic dividend offers a unique opportunity for economic and social advancement. However, realizing this potential requires strategic planning and effective policy implementation. By focusing on education, healthcare, gender equality, and innovation, India can build a self-reliant and sustainable future.

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LEVERAGING POWER BI FOR DATA-DRIVEN DECISION MAKING

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Abstract:

In today's data-driven world, organizations rely heavily on insights gleaned from data to make informed decisions. Business Intelligence (BI) tools play a crucial role in enabling this process, transforming raw data into actionable insights. Power BI, developed by Microsoft, stands out as a leading BI platform, empowering users with powerful data visualization and analysis capabilities. This paper will delve into the multifaceted world of Power BI, exploring its features, capabilities, and applications in various industries.

Introduction

In today's data-driven world, businesses generate and collect vast amounts of data from various sources. However, deriving meaningful insights from this data can be challenging. This is where Power BI, a business analytics service by Microsoft, comes into play. Power BI enables organizations to analyze and visualize data, creating interactive and immersive reports and dashboards. As a result, businesses can make data-driven decisions and enhance their overall performance. Businesses are constantly seeking ways to leverage their vast amounts of data to make informed decisions and gain a competitive edge. Power BI, a suite of business analytics tools developed by Microsoft, has emerged as a powerful solution for empowering organizations with data visualization, reporting, and analysis capabilities. This paper delves into the key features, benefits, and applications of Power BI, exploring its significance in the realm of business intelligence.

Understanding Power BI:

Power BI is a suite of business analytics tools that deliver insights throughout your organization. It allows users to connect to hundreds of data sources, simplify data preparation, and drive ad hoc analysis. Power BI comprises several components, including Power BI Desktop, Power BI Service, Power BI Mobile, and Power BI Report Builder. These components work together to provide a seamless experience for data analysis and visualization.

Key Features of Power BI:

Data Connectivity and Preparation: Power BI supports connections to various data sources, including Excel, SQL Server, Azure, Salesforce, and Google Analytics. Once connected, Power BI provides tools for data cleaning, transformation, and mashup, enabling users to prepare data for analysis.

Data Visualization: Power BI offers a wide range of visualization options, including charts, graphs, maps, and gauges. These visualizations can be customized and tailored to meet specific business needs, providing users with an engaging and interactive way to consume data.

Reporting: Power BI enables users to create stunning reports using a drag-and-drop interface. Users can add visualizations, tables, and matrices to their reports and publish them to the Power BI Service for sharing and collaboration.

Dashboards: Power BI dashboards provide a bird's-eye view of critical data points, enabling users to monitor and track key performance indicators (KPIs) in real-time. Dashboards can be customized with tiles from multiple reports, providing a single pane of glass for data analysis.

Artificial Intelligence and Machine Learning: Power BI integrates with Azure's AI and Machine Learning services, enabling users to apply advanced analytics and predictive modeling to their data. As a result, businesses can unlock hidden insights, identify patterns, and make data-driven decisions with confidence.

Collaboration and Sharing: Power BI enables users to share reports and dashboards with colleagues, both inside and outside their organization. Users can also collaborate on reports in real-time, streamlining the decision-making process.

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Mobile Access: Power BI Mobile allows users to access their reports and dashboards from anywhere, at any time. Users can view, interact with, and share data on the go, ensuring they stay informed and up-to-date.

Use Cases for Power BI:

Sales and Marketing: Power BI can help sales and marketing teams track and analyze sales performance, customer behavior, and campaign effectiveness. By visualizing this data, teams can identify trends, optimize marketing strategies, and improve sales forecasting.

Finance: Power BI can be used to monitor financial performance, track budgets, and analyze expenses. Users can create detailed reports and dashboards to gain insights into financial data, enabling them to make informed decisions about resource allocation and cost management.

Human Resources: Power BI can help HR teams analyze employee performance, track recruitment efforts, and monitor employee engagement. By visualizing this data, HR teams can identify trends, optimize recruitment strategies, and enhance employee engagement and retention.

Supply Chain and Operations: Power BI can be used to monitor and manage supply chain operations, track inventory levels, and analyze production data. Users can create detailed reports and dashboards to gain insights into supply chain performance, enabling them to optimize operations and reduce costs.

IT Operations: Power BI can help IT teams monitor and manage infrastructure, track system performance, and analyze user behavior. By visualizing this data, IT teams can identify trends, optimize system performance, and enhance user experience.

Benefits of Using Power BI:

- Improved Decision-Making: Data-driven insights gleaned from Power BI empower organizations to make more informed and strategic decisions.
- Enhanced Efficiency: Automating data analysis and reporting processes streamlines workflows and improves operational efficiency.
- **Increased Productivity**: Users can access and analyze data quickly and easily, freeing up time for higher-value tasks.
- Improved Communication: Interactive dashboards and reports facilitate clear communication of data insights to stakeholders.
- Competitive Advantage: Harnessing the power of data analytics provides a competitive edge by enabling organizations to anticipate trends, identify opportunities, and optimize performance.

Applications Across Industries:

Power BI has found widespread adoption across diverse industries, empowering organizations to make better decisions through data-driven insights. Some prominent use cases include:

- Sales and Marketing: Tracking sales performance, identifying customer trends, and optimizing marketing campaigns.
- Finance: Analyzing financial performance, forecasting future trends, and managing budgets.
- **Human Resources:** Monitoring employee performance, analyzing hiring patterns, and identifying training needs.
- Healthcare: Tracking patient outcomes, optimizing resource allocation, and improving patient care.
- Manufacturing: Monitoring production processes, identifying bottlenecks, and enhancing efficiency.



Conclusion:

Power BI is a powerful business analytics tool that enables organizations to analyze and visualize data, creating interactive and immersive reports and dashboards. By leveraging Power BI's features and capabilities, businesses can make data-driven decisions, enhance their overall performance, and gain a competitive edge in their industry. From sales and marketing to finance, HR, supply chain, and IT operations, Power BI provides valuable insights and analytics for various business functions. As a result, Power BI is an invaluable tool for any organization looking to harness the power of data and unlock the potential of organization.

Power BI has emerged as a powerful and versatile business intelligence platform, empowering organizations to unlock the potential of their data. Its user-friendly interface, comprehensive features, and wide range of applications make it a valuable tool for businesses across all industries. By embracing Power BI, organizations can drive better decision-making, enhance operational efficiency, and gain a competitive advantage in a data-driven world. As technology continues to evolve, we can expect Power BI to further enhance its capabilities, providing even more robust solutions for data visualization and business intelligence in the future.

Further Research

- Explore the integration of Power BI with other Microsoft products like Azure and Microsoft 365.
- Investigate the use of Power BI in specific industries and its impact on their operations.
- Analyze the future of Power BI and its potential for advancements in artificial intelligence and machine learning.

This paper provides a comprehensive overview of Power BI, highlighting its key features, benefits, and applications. By leveraging Power BI's capabilities, businesses can unlock the value of their data and drive informed decision-making for sustainable growth and success.

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FINANCIAL ENGINEERING WITH NIFTY BANK AND NIFTY FINANCE

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Abstract:

The Nifty Banking Services Index tracks the performance of Indian Banking services companies including nationalised banks and private banks. The index comprises a maximum of 12 stocks and a stock's weight is based on its free float market capitalization.

Banking services firms are crucial to the success of the economy in the long run. The banking services landscape in India is constantly changing and evolving. Banks have historically played a critical role in the financial system, channelling surplus funds from savers to borrowers, and continue to do so. However, in recent years other subsectors of the banking services including Insurance, Housing Finance, NBFCs, Asset Management Companies etc. have gained increased prominence. Similar to Banks, Housing Finance companies and NBFCs support credit creation and growth across the economy.

Insurance companies facilitate pooling of risks so individuals and firms can focus on their core business, knowing they are financially protected against unforeseen circumstances. Asset Management Companies facilitate savings and investment and help investors achieve their financial goals. The Nifty Banking Services Index aims to capture this diversity of subsectors within financial services and track their performance in a single index.

Introduction:

The index has a base date of September 3,2003, with a base value of 1000 H. The index tracks the performance of Indian banking services companies including PSU Banks, Private Banks, Housing Finance, Insurance, NBFCs, other financial services companies etc. The index comprises a maximum of 12 stocks the index is reconstituted semi-annually. A buffer based on free float market capitalization is applied to reduce turnover. The companies should form part of Nifty 500 at the time of review to be eligible for inclusion in the index. The weight of each stock is based on its free float market capitalization

The Nifty Banking Services Index offers diversified exposure to Banks, PSU Banks, Private Banks, and other financial companies. The Nifty Banking Services Index offers broad and diversified exposure to the Banking Services sector. The subsectors and constituents of the Nifty Banking Services Index are shown as above.

Exhibit 1: Nifty Financial Serviceses

BANKS	WEIGHT	MARKET CAP	STOCK PRICE	P/E
	(%)	(CR)		RATIO
HDFC Bank	27.04	12,31,108.31	1618.15	18.93
ICICI BANK	23.03	8,49,664.37	1207.20	20.79
Kotak Mahindra Bank	11.72	3,60,584.55	1813.85	25.96
SBIN	11.27	7,69,703.16	862.45	12.61
Axis Bank	11.18	3,63914.59	1177.35	14.50
Indusind Bank	5.58	1,09325.2	1403.90	12.21
AU Bank	2.69	48,335.07	650.40	28.22
Bandhan Bank	1.98	31,011.18	192.50	13.91



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Baroda Bank	1.84	1,29,128.91	249.70	7.26
Fedral Bank	1.68	48,475.33	198.00	12.51
IDFC Bank	1.08	52,740.19	74.48	17.83
PNB	0.91	1,32,077.13	119.95	16.03

Source: NSE Indices

Objective of the study:

- i. To study the Indian stock market indices i.e. Banknifty and Nifty Financial.
- ii. To analyse Index returns in price within five years.
- iii. To make conclusion on best performing index.

Hypothesis of the study:

i. Financial index i.e. Banknifty and Financenifty are best performing index.

Data Collection and Research Methodology:

The study is based on secondary data. The secondary data have been collected from various sources, such as Stock market related books, Journals, Magazines, internet materials etc.

The researcher used observation method for analysing the data and also used percentage calculation. Price is basic tool used to evaluate return of stock which clarify the study.

Limitations of the Study:

- i. The study is limited to Banknifty and Financenifty index only.
- ii. The study includes assessment of prices within 2016 to 2020.
- iii. The study analyses only price changes of stocks.

As seen in the Exhibit 2 below, Banks account for 27% of weight of the HDFC bank, followed by ICICI bank at 23%. Kotak Mahindra bank, State Bank of India bank and Axis bank have 11.72%, 11.27 and 11.18% weight respectively. Indusind bank, AU bank, Bandhan bank, Baroda bank, fedral bank, IDFC bank and Punjab National bank 5.58%, 2.69%, 1.98%, 1.84%, 1.68% 1.08 and 0.91%% respectively of the weight of the Nifty Financial Services Index. These categories include only banking companies not any Asset Management Companies and Public Sector Undertaking (PSU) lending institutions.



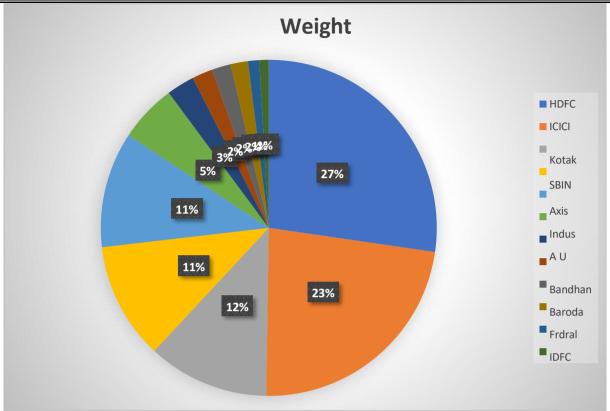


Exhibit 2: Distribution of Nifty Financial Services Index weights by Banks

Investors can obtain greater exposure to various subsectors of the Financial Services sector through the Nifty Financial Services Index compared to Nifty Bank Index and broad market indices. The Nifty Financial Services Index allows investors to get diversified exposure to financial services sector as compared to Nifty Bank Index and more focused exposure as compared to broad market indices. The exhibit below shows the weights of various subsectors of financial services in the Nifty Financial Services Index versus their weights in the Nifty Bank Index and in the broader Nifty 50 Index and Nifty 500 Index.

Exhibit 3: Distribution of Nifty Banking Services Index weights (%) by subsector compared to Nifty 50 Index, Nifty 500 Index and Nifty Financial Index

Particulars	Nifty Finance	Nifty50	Nifty 500	Nifty Bank
Banks	63.1	26.5	20.3	100.0
Housing Finance Companies	18.5	7.5	5.6	0.0
NBFC	8.1	2.3	3.0	0.0
Insurance Companies	8.0	2.5	2.5	0.0
Other Financial Services	1.3	0.0	1.4	0.0
Financial Institutions	1.1	0.0	0.3	0.0
Total Financial Services	100.0	38.7	33.2	0.0

Banks account for 63.1% weight of the Nifty Financial Services Index compared to 26.5% in the Nifty 50 Index, 20.3% in the Nifty 500 Index and 100.0% in the Nifty Bank Index, as of December 29, 2020. Similarly, the weight



of Insurance companies in the Nifty Financial Services Index is 8.0% compared to 2.5% in the Nifty 50 Index and Nifty 500 Index and 0.0% in the Nifty Bank Index. Thus, the Nifty Financial Services Index gives investors more targeted and larger exposure to these subsectors of the Financial Services sector than broad market indices. Likewise, Nifty Financial Services Index provides more diversified exposure to various subsectors of financial services sector as compared to exposure to only banking sector in case of Nifty Bank Index.. The weights of sectors like Insurance and NBFC sub- sector have increased in Nifty Financial Services Index through time

The Exhibit 4 below shows how the weights of various subsectors have changed through time in the Nifty Financial Services Index. As of December 31, 2016, the weight of insurance companies in the Nifty Financial Services Index was 1.9%. Since then, more insurance companies have been listed on the exchanges and the weight of the sector has steadily increased to 8.0% as of December 29, 2020. The weight of the NBFCs has increased from 5.9% as of December 31, 2016 to 8.1% as of December 29, 2020. Through the same period, the weight of Banks has decreased marginally from 67% as of end CY 2016 to 63.1% as of December 29, 2020. Housing Finance companies' weight has reduced from 23% as of end CY 2016 to 18.5% as of December 29, 2020.

Chart Title Total Fin. Inst. Other Ins. Comp **NBFC** 0 50 100 150 200 250 ■ Nifty500 ■ Nifty Bank2 Nifty Fin. ■ Nifty 50

Exhibit 4: Distribution of Nifty Banking Services Index by subsector over the last 5 calendar years

Conclusion at a glance with graphical presentation:

The Nifty Financial Services Index has outperformed the Nifty 50 Index and Nifty Bank Index for most of the calendar years. The Nifty Financial Services Index has outperformed the Nifty 50 Index in 10 out of the last 17 calendar years and outperformed the Nifty Bank Index in 11 out of the last 17 calendar years from 2004 onward.

The Nifty Financial Services Index has generally underperformed the Nifty 50 Index in years of global turmoil. For example, underperformance of the financial services index vs the Nifty 50 Index occurred in 2008 (Global Financial Crisis), 2011 (European sovereign debt crisis), 2013 ('Taper Tantrum' in the US as the Federal Reserve considered slowing its QE program), 2015 (commodity price crash) and 2020 (COVID pandemic).³



Exhibit 5: Performance of Nifty Financial Services Index, Nifty 50 Index, Nifty Bank Index and Nifty 500 Index by calendar year



Source: NSE Indices. *Data as of December 29, 2020

- 1. The Nifty Financial Services Index tracks the performance of Indian financial services companies including banks, housing finance, insurance, NBFCs, other financial services companies etc
- 2. Presently, with 63.1% exposure to Banks, 18.5% exposure to HFCs, 8.1% exposure to NBFCs and 8.0% exposure to Insurance companies, the Nifty Financial Services Index provides a more diversified exposure to the Indian financial services sector as compared to Nifty Bank Index.
- 3. Since inception on January 1, 2004, the Nifty Financial Services Index has returned 18.7% p.a. return vs 13.9% p.a. return of the Nifty 50 Index and 16.9% p.a. return of the Nifty Bank index
- 4. Consistent long-term outperformance of Nifty Financial Services Index vs Nifty 50 and Nifty Bank Index: The Nifty Financial Services Index has outperformed the Nifty 50 Index over the last 3, 5, 7, 10 and 15 years on a point-to-point CAGR return basis, 100% times on a rolling return basis over 7-year and 10-year periods, and returned 16.9% p.a. on average over 7-year horizons on a rolling return basis compared to 12% p.a. for the Nifty 50 Index The Nifty Financial Services Index has outperformed the Nifty Bank Index over the last 1, 3, 5, 7, 10 and 15 years on a point-to-point CAGR return basis, 82.5% times on a rolling return basis over 7-year periods, and returned 16.9% p.a. on average over 7-year horizons on a rolling return basis compared to 16.0% p.a. for the Nifty Bank Index
- 5. The Nifty Financial Services Index is expected to serve as a reference index, which can be tracked by passive funds in the form of Exchange Traded Funds (ETFs), index funds and structured products.

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FINANCIAL INCLUSION OF STREET VENDORS IN LATUR DISTRICT

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Abstract

Financial inclusion is pivotal for the economic empowerment of marginalized communities, particularly street vendors who play a crucial role in urban economies. This paper explores the current state of financial inclusion for street vendors in Latur District, Maharashtra. It examines the challenges these vendors face in accessing financial services and highlights the importance of tailored financial products to meet their diverse needs. Recommendations for enhancing financial inclusion through policy interventions, financial literacy programs, and partnership with local stakeholders are also discussed.

Introduction

Street vendors represent a significant segment of the informal economy in India, contributing to urban employment and providing essential goods and services. In Latur District, street vendors not only support their families but also contribute to the local economy. However, their lack of access to formal financial services limits their capacity to expand their businesses, manage risks, and improve their livelihoods. This paper aims to assess the financial inclusion of street vendors in Latur District and propose actionable solutions to bridge the financial gap.

Literature Review

Financial inclusion is defined as the availability and equality of opportunities to access financial services. Various studies have illustrated the intricate relationship between financial inclusion and poverty alleviation (Kumar & Kumar, 2020; Sharma et al., 2019). The significance of financial products tailored for informal workers, including street vendors, is emphasized in the literature, arguing that such services can facilitate micro-entrepreneurship and socio-economic development (Chakrabarty & Chatterjee, 2021)

Objectives:

- 1. To assess the current state of financial inclusion among street vendors in Latur District using secondary data.
- 2. To identify key challenges faced by street vendors in accessing financial services.
- 3. To discuss opportunities for enhancing financial inclusion based on existing data.

Importance of Financial Inclusion

- **Economic Stability**: Access to financial services enables street vendors to manage their finances effectively, save for future needs, and invest in their businesses.
- **Business Growth**: Financial products such as microloans and credit can facilitate business expansion and innovation.
- Risk Management: Insurance and savings accounts help street vendors manage risks and unexpected financial shocks.

Barriers to Financial Inclusion for Street Vendors

Street vendors face several barriers to financial inclusion, including:

- Lack of Documentation: Many vendors do not have the necessary identification or business documentation required by financial institutions.
- Informal Business Operations: The informal nature of their businesses makes it challenging to access formal financial services.

- **Financial Literacy**: Limited understanding of financial products and services can prevent effective use of available options.
- Collateral Requirements: Traditional financial institutions often require collateral, which street vendors typically do not possess.

Financial Inclusion Initiatives in India

India has implemented various initiatives to promote financial inclusion, such as:

- Pradhan Mantri Jan Dhan Yojana (PMJDY): Aims to provide universal access to banking services.
- Microfinance Institutions (MFIs): Offer small loans to underserved populations.
- **Digital Payment Platforms**: Facilitate cashless transactions and enhance financial access.
- 7. Challenges Faced by Street Vendors
- > Street vendors in Latur face numerous challenges, including:
- Lack of Access to Financial Services: Many vendors rely on informal lending sources, resulting in high-interest rates and debt cycles.
- > Inadequate Financial Literacy: Limited understanding of financial products and services prevents vendors from effectively utilizing available financial resources.
- Regulatory Barriers: The lack of proper identification and registration inhibits vendors from accessing government schemes and formal financing.

Methodology

This study uses secondary data sources to analyze the financial inclusion of street vendors in Latur District. The following sources were utilized:

- 1. Government Reports: Data from government reports on financial inclusion and street vendors.
- 2. **Surveys and Studies**: Existing surveys and research studies focusing on street vendors and financial inclusion in Maharashtra.
- 3. **Institutional Data**: Information from banks, microfinance institutions, and NGOs involved in financial inclusion initiatives.
- 4. **Academic and Policy Papers**: Relevant academic articles and policy papers providing insights into financial inclusion issues.

Findings

1. Financial Access

The survey revealed that only 15% of street vendors in Latur have bank accounts, while access to microcredit is even more limited. The primary reasons cited for not having bank accounts included a lack of necessary documentation, distance to bank branches, and a general distrust of formal financial institutions.

2. Financial Literacy

A significant gap in financial literacy was identified. Many vendors expressed uncertainty about how to save, invest, or manage their finances effectively. Only 10% reported having received any form of financial education.



3. Economic Impact

The inability to access formal financial services has led to stagnant business growth for many street vendors. Those who successfully managed to avail loans from informal sources reported lower profits due to high repayment burdens.

Recommendations

To enhance financial inclusion among street vendors in Latur, the following recommendations are proposed:

1. Improved Access to Financial Services

Tailored Financial Products: Financial institutions should develop low-cost, flexible microloans designed for street vendors, including collateral-free loans.

Mobile Banking Solutions: Leveraging technology to introduce mobile banking services can help overcome barriers related to geographical access.

2. Financial Literacy Programs

Workshops and Training: Implementing regular financial literacy workshops that educate vendors about budgeting, saving, and investment strategies will empower them to utilize financial services more effectively.

3. Policy Support

Government Regulations: Establishing friendly regulations that recognize street vendors and provide them with legal identity can help them gain better access to financial services and government benefits.

4. Collaboration with NGOs

Partnership Initiatives: Engaging NGOs to assist in the outreach and education of street vendors can amplify the impact of financial literacy programs and help connect vendors with financial institutions.

Conclusion

Financial inclusion is a critical component of social and economic development, particularly for marginalized groups such as street vendors. In Latur District, targeted interventions focusing on improving access to financial services and enhancing financial literacy can significantly uplift the livelihoods of street vendors. By recognizing their contributions and addressing their unique challenges, stakeholders can foster an inclusive economy that benefits all.

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- 3. Sharma, P., Gupta, R., & Sinha, A. (2019). Bridging the Gap: Financial Inclusion Strategies for the Urban Poor in India. Development Studies Research, 6(1), 128-146.
- 4. This paper serves as a comprehensive overview of the financial inclusion scenario for street vendors in Latur District while offering actionable solutions to enhance their economic wellbeing.



"ROLE OF TEACHERS IN DEVELOPING PRACTICAL ACCOUNTING SKILLS AMONG COLLEGE STUDENTS OF LATUR CITY"

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The journey to economic development undertaken by a country has much to depend for its success on the development of human resources. Education is one of the key instruments of human resource development. This direct link between education and economic development exists only when the national education system, both quantitative and qualitative, is properly organized. A system of education which produces a high proportion of able manpower is of great assist in increasing productivity and promoting economic growth. The argument of producing a high proportion of proficient manpower would succeed if we can identify the areas of knowledge correctly conducive to affect the desired level of development.

As accounting is an area of human knowledge which assures planned development. It provides safeguards for rational exploitation of national resources. Right education in accounting can be of great help to achieve the goal of desired socio-economic development. In fact, accounting, as history says, has played a crucial role in a country's success story. That fact has led to a global awareness as to the effectiveness of accounting education that has reorganized the debate of accounting and no-accounting into the debate of how much accounting should be introduced. One may simply realize the importance of accounting education in that accountancy finds a place in diverse curricula starting from school level to post-graduate level in different faculties, including engineering, all over the world.

Objectives:

- 1) To test the degree of knowledge of accountancy among commerce students
- 2) To develop interest of commerce students in practical accounting

Hypothesis:

1) There is positive relationship between practical accountancy events to create awareness among students.

Research Methodology:

Data plays an important role in research. Both primary and secondary data is collected with an object of careful analysis and interpretation.

Primary Data:

A well designed, structured and orderly formed questionnaire has been used to collect responses from the targeted respondents. Feedback is obtained through it by personally visiting the respondents at their workplace. The sample of 50 respondents from commerce faculty has been selected for the study.

Secondary Data:

Following are some of the prominent features of secondary data used for this research work.

Referred interviews and articles published in news papers, referred research articles published in various journals and magazines, referred books, referred Ph.D. thesis and internet sites to access latest information related to research topic



Data Analysis and Interpretation:

Table No.1

Information Technology impacts on practical accounting knowledge

Sr. No	Variables	Percentage
1	Strongly Agree	96
2	Agree	4
3	Undecided	0
4	Disagree	0
5	Strongly Disagree	0

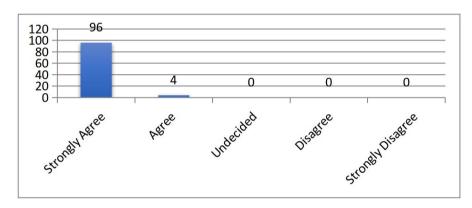


Fig. No. 1

Information Technology impacts on practical accounting knowledge

Interpretation:

Above table and graph indicates the analysis based on the impact of Information Technology on practical accounting knowledge. 96% respondents were strongly agree with said scenario i.e. knowledge of information technology affects on practical accounting skills among both students and teacher which contributes in students and teachers overall development. Whereas, 4% respondents were only agree with this. And 0 % respondents were undecided and strongly disagree with this.

Conclusion:

It is clear that major portion of respondents were strongly agreed with the impact of Information Technology on practical accounting knowledge for the development of the students.

Table No. 2

Development of accounting aptitude within the students by training and practice

Sr. No	Variables	Percentage
1	Strongly Agree	92
2	Agree	5

3	Undecided	3
4	Disagree	0
5	Strongly Disagree	0

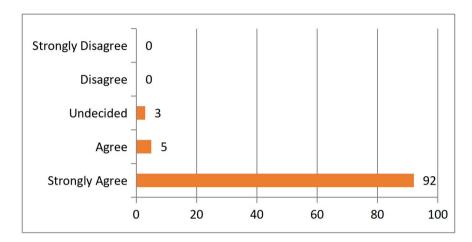


Fig. No. 2

Development of accounting aptitude within the students by training and practice

Interpretation:

Above table and graph indicates the analysis based on development of accounting aptitude within the students by training and practice. 92% respondents were strongly agree with said scenario i.e. knowledge of practical accounting would be developed by continuous training and practice more effectively among the students which contributes practical accounting skills among the students. Whereas, 5% respondents were only agree with this. And 3% respondents were undecided and 0% respondents strongly disagree with this.

Conclusion:

It is clear that major portion of respondents were strongly agreed with training and practice on practical accounting knowledge for the development of the students.

Table No. 3

Accountancy events will create practical accounting awareness among commerce all faculties as well as students

Sr. No	Variables	Percentage
1	Strongly Agree	85
2	Agree	10
3	Undecided	5
4	Disagree	0
5	Strongly Disagree	0



Interpretation:

Above table and graph indicates the analysis based on Accountancy events will create practical accounting awareness among commerce all faculties as well as students. 85% respondents were strongly agree with said scenario i.e. knowledge of practical accounting would be developed by organizing accountancy events more effectively among the faculties as well as students which contributes a lot. Whereas, 10% respondents were only agree with this. And 5 % respondents were undecided and 0% respondents disagree and strongly disagree with this.

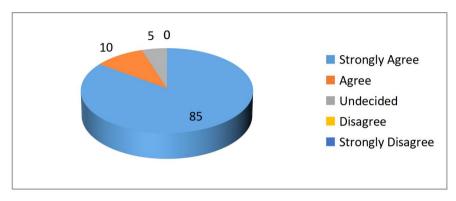


Fig. No. 3

Accountancy events will create practical accounting awareness among commerce all faculties as well as students

Conclusion:

It is clear that major portion of respondents were strongly agreed with organizing accountancy events for the development of practical accounting skills among the faculties as well as students.

Table No. 4

Efforts are to be taken for providing practical knowledge of accounting

Sr. No	Variables	Percentage
1	Events/Programmes of Accountancy Introduced	32
2	Practical Projects	48
3	In House Training	5
4	Creating Awareness	3
5	All of the above	12



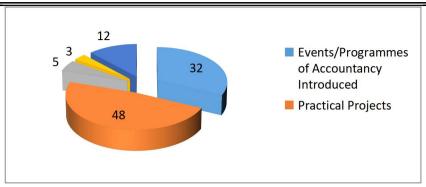


Fig. No. 4

Efforts are to be taken for providing practical knowledge of accounting

Interpretation:

Above table and graph indicates the analysis based on efforts is to be taken for providing practical knowledge of accounting. 32% respondents were said that events or programmes of accountancy should be introduced to develop the knowledge of practical accounting more effectively among the students. 48% respondents said that practical projects should be given to the students during the learning process. 5%, 3% respondents said in house training and creating awareness respectively. And 12 % respondents were said all variables should be considered with this.

Conclusion:

It is clear that major portion of respondents were strongly agreed with practical projects and introduction of accountancy events for the development of practical accounting skills among students.

Findings:

- Information Technology affects on practical accounting knowledge.
- * Knowledge of practical accounting would be developed by continuous training and practice more effectively among the students.
- * Knowledge of practical accounting would be developed by organizing accountancy events more effectively among the faculties as well as students.
- Practical projects should be given to the students during the learning process to develop the knowledge of practical accounting more effectively among the students.

Conclusion:

The practices implemented for students are ultimately impacting on overall growth and development because a well structured and designed curriculum can emphasis fruitful knowledge to the students. This study concludes with the accomplishment of institutional objective, there is need of development of curriculum regarding to current updates in the market. Students have to be motivated to participate in practical accountancy events more efficiently.

Suggestions:

- Deliberate, thoughtful efforts are to be taken to establish the practical accounting events of assigning challenging responsibilities to some of the students in order to sharpening of their capabilities.
- ❖ At least some of the selected teachers should be deputed for gaining nice experiences in renowned institution for reasonable period, by which the teachers may perceive their knowledge to the students overall development.
- ❖ Well equipped computer lab should be developed by the institutions for practical accounting training purpose



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"HR ANALYTICS: A STUDY OF CURRENT TRENDS AND IMPACTS"

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Abstract

Human Resource (HR) analytics has gained prominence as organizations seek to use data-driven insights to inform strategic decisions. This paper explores the use of HR analytics in enhancing strategic decision-making, drawing on secondary data from various studies and reports. It investigates current trends in HR analytics, examines its impact on strategic HR practices, and provides recommendations for effectively integrating analytics into HR functions.

Introduction

HR analytics refers to the application of data analysis tools and techniques to human resource data to make informed decisions that drive organizational performance. With the increasing availability of data and advanced analytical tools, organizations are leveraging HR analytics to gain insights into employee behavior, performance, and other critical HR functions. This paper examines how HR analytics influences strategic decision-making and explores the trends and impacts associated with its adoption.

Objectives

- 1. To analyze current trends in HR analytics and their applications in organizations.
- 2. To evaluate the impact of HR analytics on strategic HR decision-making.
- 3. To provide recommendations for effectively utilizing HR analytics in HR functions.

Literature Review

- Opatha and Uresha, 2020: Human resource management has become one of the most critical functional fields in an organization. Opatha (2009) defines HRM as the efficient and effective utilization of human resources to achieve goals of an organization and the generic purpose of HRM is to generate and retain appropriate and contented employees who give their maximum contribution to achieve organizational objectives and goals.
- 2. Jain and Nagar, 2015: Human resources include all types of employees who work for the organization. In present competitive business environment human resource has become a strategic asset to the company as it is rare, valuable, inimitable and non-substitutable.
- 3. Dr. Jac Fitz-enz: It was in 1978 that emphasized the idea of developing metrics that can determine the impact of HR activities on organization's bottom line and developed the notion as HR analytics.
- 4. Reddy and Lakshmikeerthi, 2017: After the great recession period 2008, most of the organizations recognized the necessity of accurate evidence based people management practices which involve analytics, decision making and problem solving ().
- 5. Big data in HR gifted HR analytics to the evidence based HRM concept to make accurate decisions regards to HR.
- 6. Bassi & McMurrer, 2007: Common applications of HR analytics include talent management, employee performance, turnover prediction, and workforce planning.

Methodology

This research paper employs a secondary data analysis approach, using data from academic journals, Books & Periodicals and case studies.

The sources include:

1. **Academic Journals**: Articles from Human Resource Management Journal, Journal of Applied Psychology, and other relevant publications.

- 2. **Books & Periodicals**: Reports from organizations such as Deloitte, McKinsey, and Gartner on HR analytics trends and impacts.
- 3. Case Studies: Case studies from companies that have successfully implemented HR analytics to inform strategic decisions.

should be done?" or "why should it be done?" (Jabir et al., 2019).

HR Analytics: Definition

1. Definition of HR Analytics

• HR analytics involves using statistical methods and data analysis to gain insights into HR processes and improve decision-making (Fitz-enz & Mattox, 2014).

Current Trends in HR Analytics

1. Increasing Adoption of Predictive Analytics

 Organizations are increasingly using predictive analytics to forecast future trends, such as employee turnover and talent needs.

2. Integration of AI and Machine Learning

• AI and machine learning are being integrated into HR analytics to enhance the accuracy and depth of insights.

3. Emphasis on Employee Experience and Engagement

There is a growing focus on using analytics to understand and improve employee experience and engagement.

Impact of HR Analytics on Strategic Decision-Making

1. Talent Management

 Analytics can help in identifying high-potential employees and aligning talent strategies with organizational goals.

2. Performance Management

• Data-driven performance management systems enable more objective and actionable performance evaluations.

3. Workforce Planning

 HR analytics supports strategic workforce planning by providing insights into future talent needs and potential skill gaps.

Findings:

- HR analytics helps in identifying key talent and aligning HR strategies with organizational goals.
- Data-driven performance management systems provide more objective and actionable feedback.
- HR analytics supports strategic workforce planning by analyzing trends and forecasting future talent needs (Sharma & Golembiewski, 2020).
- Effective workforce planning ensures that organizations are prepared for future challenges and can address skill gaps proactively.
- Enhanced talent management practices lead to better alignment of employee skills with organizational needs, improving overall performance.

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 Improved performance evaluations and feedback mechanisms enhance employee development and organizational effectiveness.

Recommendations

- 1. **Invest in Predictive Analytics**: Organizations should invest in predictive analytics tools to anticipate future workforce needs and manage talent effectively.
- 2. Leverage AI and Machine Learning: Integrate AI and machine learning into HR analytics to enhance the accuracy and depth of insights.
- 3. **Focus on Employee Experience**: Use analytics to understand and improve employee engagement and satisfaction, fostering a positive organizational culture.

Conclusion

HR analytics has become a vital tool for enhancing strategic decision-making in organizations. By leveraging datadriven insights, organizations can improve talent management, performance management, and workforce planning. As trends such as predictive analytics and AI continue to evolve, organizations should focus on integrating these tools to maximize their strategic HR capabilities.

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DIGITAL LEARNING IN EDUCATION

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Abstract:

The educational pattern has been changed as a result of digital learning, which presents new possibilities for learning experiences. This paper is the evolution of digital learning, current trends, and future prospects. It explores the challenges and opportunities associated with digital learning, including issues of accessibility.

Introduction:

Digital learning become a revolutionary force in today's suddenly changing educational system challengs of teaching and learning. Digital learning is the term for a broad range of methods, including online courses, virtual classrooms, systems. The use of digital technologies to deliver educational content and support interactive learning. This paper attempts to provide efficiency of digital learning approaches and impact on students. The importance of digital learning in the modern educational cannot be overstated. In an era characterized by rapid technological advancements and evolving educational needs, digital learning offers a myriad of benefits that are crucial for preparing learners to thrive in the 21st century.

Access Digital learning bridges geographical barriers and provides access to education for learners who may be geographically isolated or unable to attend traditional brick-and-mortar institutions. It promotes equity by offering opportunities for underserved populations, including individuals with disabilities, adult learners, and those from disadvantaged backgrounds.

Flexibility: Learners may access instructional materials at any time, location, and at their own speed thanks to digital learning systems. People can customize their learning experiences to fit their own needs and interests thanks to this flexibility, which supports a variety of learning preferences and methods. Improved learning outcomes can result from personalized learning paths that increase motivation and engagement.

Interactivity: Interactive multimedia resources, simulations, and gamified learning experiences foster active engagement and deeper learning. Digital tools facilitate collaboration, communication, and knowledge sharing among learners, creating a dynamic and interactive learning environment. Furthermore, digital platforms often incorporate features such as instant feedback and adaptive learning algorithms, which help learners track their progress and receive targeted support.

Origin Of Digital Learning:

Digital learning has undergone a remarkable evolution since its inception, driven by advancements in technology, changes in educational paradigms, and shifts in societal needs. This section traces the key milestones and developments that have shaped the evolution of digital learning, highlighting its transformative impact on education.

Early Beginnings:

Digital learning can trace its roots back to the early experiments with educational technology in the 20th century. Initiatives such as programmed instruction, audio-visual aids, and early computer-assisted learning systems laid the groundwork for the integration of technology into education.

The advent of computers in the 1970s and 1980s brought new possibilities for interactive learning experiences. Early educational software and multimedia programs introduced concepts such as computer-based training (CBT) and multimedia learning.



Emergence of the Internet:

The 1990s saw a revolution in the field of digital learning with the widespread use of the internet. Online learning communities and the distribution of educational materials were made possible by the World Wide Web. The introduction of WebCT (1996) and Blackboard (1997) signified the beginning of learning management system (LMS) platforms, which made it easier to administer educational resources and offer online courses.

Rise of Online Education:

The early 2000s witnessed the rapid growth of online education, fueled by the expansion of broadband internet access and the increasing demand for flexible learning options.

Institutions and organizations began offering fully online degree programs and courses, enabling learners to pursue education remotely without the constraints of time and location.

Massive open online courses, or MOOCs, gained popularity with the introduction of platforms like Coursera (2012) and edX (2012), which offered free access to excellent educational content from prestigious colleges and institutes.

Shift to Blended Learning:

As digital learning matured, educators recognized the potential of blending online and face-to-face instruction to create hybrid learning environments.

Blended learning models emerged, combining the benefits of online resources and activities with traditional classroom experiences. This approach offered greater flexibility, personalization, and interactivity for learners.

Digital Learning:

Digital learning is continuously evolving, driven by technological innovations, pedagogical advancements, and shifts in educational paradigms. This section explores some of the prominent trends shaping the landscape of digital learning today:

Massive Open Online Courses (MOOCs):

MOOCs have gained popularity as a flexible and accessible way to access high-quality educational contentfrom leading institutions and educators around the world.

Platforms such as Coursera, edX, and Udacity offer a wide range of courses spanning diverse subjects, allowing learners to study at their own pace and often for free or at a lower cost compared to traditional education.

Blended Learning:

Blended learning is a hybrid technique that blends online and in-person training to optimize the advantages of each modality.

Educational institutions are increasingly adopting blended learning models to provide flexibility, personalized learning experiences, and opportunities for collaboration and interaction among students.

Adaptive Learning Technologies:

Adaptive learning systems leverage artificial intelligence and data analytics to customize learning experiences according to the requirements, interests, and performance of each individual learner. With the aid of these technologies, learners may meet specific learning problems and advance at their own pace. They also provide tailored recommendations, adaptive assessments, and customized learning pathways.



Mobile Learning

With the widespread adoption of smartphones and tablets, mobile learning has become increasingly popularas a convenient and accessible way to learn anytime, anywhere.

Mobile learning apps, responsive websites, and mobile-friendly course content enable learners to engage with educational materials on their mobile devices, facilitating seamless learning experiences on the go.

Challenges

1) Accessibility

Access to digital learning resources and technologies may be limited by factors such as socioeconomic status, geographic location, disabilities, and digital literacy skills.

Inequities in access to reliable internet connectivity, hardware devices, and digital literacy training can exacerbate disparities in educational outcomes, widening the digital divide.

2) Digital Literacy

Digital learning requires learners to possess basic digital literacy skills to navigate online platforms, use digital tools effectively, and critically evaluate digital content

3) Security

Digital learning platforms collect vast amounts of learner data, raising concerns about privacy, data security, and potential misuse of personal information.

Data breaches, cyberattacks, and unauthorized access to sensitive information pose risks to learner privacyand institutional security, undermining trust in digital learning technologies.

4) Infrastructure

Educational institutions must invest in robust technological infrastructure, including reliable internet connectivity, hardware devices, and technical support services, to support digital learning initiatives.

5) Pedagogical Challenges:

Effective digital learning requires pedagogical approaches that promote active learning, critical thinking, and collaboration in online environments.

Educators may face challenges in adapting instructional strategies, designing engaging learning activities, and providing meaningful feedback in digital learning contexts.

Opportunities

Digital learning presents a myriad of opportunities and benefits that have the potential to revolutionize education and enhance learning outcomes. This section explores some of the key advantages of digital learning:

1) Flexibility:

Digital learning eliminates geographical barriers and provides access to educational resources and opportunities for learners regardless of their location.

Online courses, resources, and platforms offer flexibility in terms of scheduling, allowing learners to study at their own pace and accommodate work, family, and other commitments.

2) Personalization and Differentiation:

Digital learning technologies can adapt to individual learner needs, preferences, and abilities, providing personalized learning experiences tailored to each learner's strengths and weaknesses.

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Adaptive learning algorithms, personalized recommendations, and targeted interventions help learners progress at their own pace and address their unique learning challenges.

3) Interactivity:

Digital learning environments offer a wide range of interactive multimedia resources, simulations, and gamified learning experiences that engage learners and promote active participation. Collaborative tools, discussion forums, and social learning platforms facilitate peer interaction, knowledge sharing, and collaborative learning experiences.

4) Learning Resources:

Digital learning provides access to a wealth of educational resources, including online courses, e-books, digital libraries, educational videos, interactive simulations, and virtual labs.

Learners can access up-to-date information, diverse perspectives, and expert insights from around the world, enhancing the depth and breadth of their learning experiences.

5) Lifelong Learning and Continuous Skill Development:

Digital learning encourages lifelong learning and continuous skill development by providing opportunities for learners to acquire new knowledge, skills, and competencies throughout their lives. Online courses, microlearning modules, and digital credentials enable learners to stay relevant in a rapidly changing job market and adapt to evolving professional requirements.

6) Cost

Digital learning can be more cost-effective than traditional educational models, as it reduces the need for physical infrastructure, textbooks, and other resources.

Online courses and resources can be easily scaled to reach a larger audience, allowing educational institutions to serve diverse learner populations without significant overhead costs.

Conclusion:

Digital learning is a transformative provess in education, to offering new opportunities for access, flexibility, and innovation. The dynamic landscape of digital learning, is that this mode of education holds promise for enhancing learning outcomesand preparing learners for success.



JOB SATISFACTION OF IT SECTOR EMPLOYEES AND IT'S IMPACT ON WORKLIFE

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Introduction:

Job satisfaction has impact on the performance and quality of work. The overall efficiency of every person is depend on the job satisfaction level. The satisfaction level is depend on the material and nonmaterial facts. The material aspects like high salary, other remuneration, promotion, performance appraisal from seniors, promotion in work, other financial securities are needed for making the employees satisfied. There are other facilities also needed by the employees such as happy work environment, social securities, health insurance and other perks which gives mental satisfaction to the employees. Here, the researcher tried to understand the level of satisfaction among the IT sector employees through this research work.

The entrepreneur must take all possible efforts to make the humans satisfied through assignment of duties. Another important factor in job satisfaction is employees' proper orientation in relation to the satisfaction. Thirst and greed for satisfaction will not end; employee should be wise enough to define their satisfaction and to develop their satisfied nature within them. Success of the business is ultimately depends upon human resource contribution and only satisfied human resource can give object oriented performance. So, job satisfaction to employees should be recognized as important aspect for the accomplishment of all desired results.

Objectives of Study:

- 1. To know about the job satisfaction levels of IT sector employees.
- 2. To understand the factors which influence the job satisfaction of IT sector employees.
- 3. To identify the impact of job satisfaction on their performance.
- 4. To identify the factors which improves the satisfaction level of senior college teachers

Research Methodology:

This research has tried to collect most of the related information with tools like Primary and secondary collection of data. Primary data is original, collected by researcher through structured questionnaire for the first time for any investigation and used for statistical analysis.

- a) The primary data collection is made through Google Form questionnaire from IT sector employees working in a Pune City.
- b) Collection of secondary data is a purposive gathering of information relevant to the subject matter of the study from the units under investigation. Secondary data are means data collected by other persons. It is mostly published in newspapers, periodicals Journals and authentic websites etc. Secondary data has been collected from the websites, annual reports.

Scope of Study:

The Scope of the study is restricted to the Pune City only. In this study researcher has evaluated the job satisfaction level among the IT sector employees in Pune City and tried to understand the impact on their job satisfaction level. The findings of the study and conclusions are drawn on the basis of information collected by using Google form questionnaire from 100 respondents.

Limitation of the Study

- 1. The present study is limited to Pune city only and has reflected the thinking of respondents of the said area and which may be different from the thinking of the other city.
- 2. Response from only IT sector employees has been taken which may vary from the other sector employees.



- 3. Duration of last 10 years has been decided for secondary data collection; therefore change in time period may vary the findings.
- 4. Convenience sampling method has been followed for primary data collection; if complete survey method is adopted for the study and findings may vary.
- 5. The data collected through Google Forms due to limitation of time.

Sr. No.	Age	Number of Respondents	Percentage
2	21- 40	52	52%
3	41-60	43	43%
4	Above - 60	5	5%
То	tal	100	100%

Table / Graph No.1: Age wise profile of the respondents

Data Analysis of the research work:

The primary data was collected from IT sector 100 employees from Pune City through Google Form.

Table No. 01 shows the information about age group of the respondents from the Pune city IT sector employees. The total 100 respondents were collected and so, from the above table we can say that 52 respondents are belongs to age group between 21-40, 43 respondents belongs to age group between 41-60 and remaining 5 respondents are above age group 60.

Sr. No.	Gender	Number of Respondents	Percentage
1	Male	64	64%
2	Female	36	36%
Tota	ıl	100	100%

Table / Graph No.2: Gender wise profile the respondents

Table No. 02 shows that out of 100 respondents 64 are Male respondents and 36 are Female respondents.





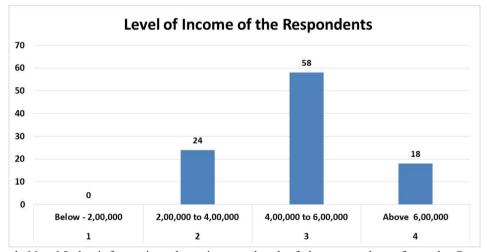
The above Graph No.3 shows that out of 100 respondents 44 are married and 56 are unmarried respondents. The gender and marital status of the respondents affects the Job satisfaction level. The Gender defines the type of need which affects the satisfaction level. For Example; the female need good and secured work culture as compared to need of salary whereas the male demands higher salary as compared to need of any other factors. So, here researcher tried to know their Gender and Marital status.

Table / Graph No.4: Profile of Respondents Having Child

Table No. 04 shows that out of 100 respondents 24 are having child, 20 respondents don't have child whereas 56 respondents doesn't belong to these Category because they are not married yet.

Sr. No.	Having Child	Number of Respondents	Percentage
1	Yes	24	24%
2	No	20	20%
3	NA	56	56%
Total		100	100%

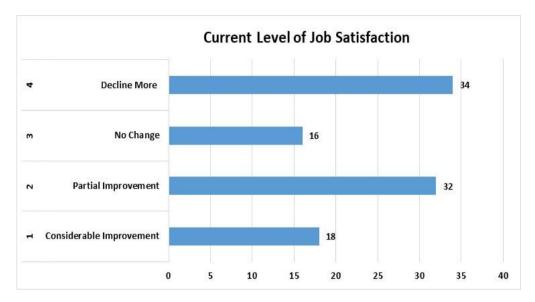
Table / Graph No.5: level of Income of the respondents



The above Graph No. 05 the information about income level of the respondents from the Pune city IT sector employees. The total 100 respondents were collected and so, from the above table we can say that none of the respondents belongs to the level of income below 2 lakh. 24 respondents having income between 2 lakh to 4 lakh, 58 respondents having income between 4 lakh to 6 lakh and 18 respondents having income above 6 lakh.



Table / Graph No.6: Current level of Job Satisfaction of the respondents



Graph No.6 shows the information about the current level of job satisfaction of the respondents. Out of the total 100 respondents, 34 respondents were answered that the level of satisfaction decline more, 16 respondents were answered with the option as no change in level of job satisfaction, 32 respondents were answered that there is partial improvement is level of job satisfaction and only 18 respondents were replied that there is considerable improvement in their level of job satisfaction.

Table / Graph No.7: Senior Authority Take Sincere Attempts to Reduce Dissatisfaction

Sr. No.	Particulars	Response	Percentage
1	Yes	27	27%
2	No	73	73%
	Total	100	100%

Table No.7 shows the information about the sincere attempts of the senior authority to reduce dissatisfaction. Out of the total 100 respondents, 27 respondents were answered yes as senior authority takes sincere attempts to reduce dissatisfaction of junior colleagues, 73 respondents were replied that their senior authority doesn't takes sincere attempts to reduce dissatisfaction of junior colleagues.



Table / Graph No.8:

Your Company encourage you to Improve Work Quality

Sr. No.	Your Company Encourage you to Improve Work Quality	Number of Respondents
1	Always	6
2	Sometime	22
3	Few time	38
4	Never	34
Total		100

Table No. 08 shows the information about the encouragement made by company which helps to improve work quality of the respondents. Out of the total 100 respondents, only 06 respondents were answered that their company always encourage them to improve their quality of work. 22 respondents were answered that their company sometimes encourage them to improve their quality of work, 38 respondents were answered that their company few time encourage them to improve their quality of work and 34 respondents were answered that their company never encourage them to improve their quality of work.

Table / Graph No.9: Factors Affecting Job Satisfaction

Sr. No.	Factors	Number of Respondents
1	Remuneration	39
2	Job Security	26
3	Promotion	13
4	Work Environment	15
5	Others	7
	Total	100

Table No. 09 shows the information about the factors affecting job satisfaction of the respondents. Out of the total 100 respondents, 39 respondents (39%) were answered that remuneration is the factor gives more affect on job satisfaction, 26 respondents (26%) were replied that job security also affect job satisfaction, 13 respondents (13%) were answered that the promotion scheme also affect on job satisfaction level, 15 respondents (15%) were answered that the work environment affect on job satisfaction and 07 respondents (7%) were answered that any other factors like employee welfare scheme, infrastructure facility etc. affect on job satisfaction.



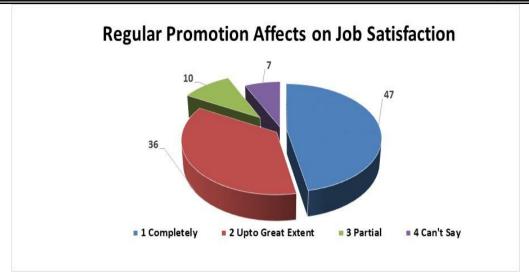


Table / Graph No.10: Regular Promotion affects on Job Satisfaction

Table No. 10 shows the information about regular promotion affects on job satisfaction. A promotion is an intrinsic motivation which helps to improve the performance of employee. Hence to get this information about promotion scheme some questions were being asked to the respondents. Out of which following responses have been received. 47 respondents (47%) answered that regular promotion scheme affects completely on job satisfaction, 36 respondents (36%) answered that it affects up to great extent on job satisfaction, 10 respondents (10%) answered it affects partially on job satisfaction and only 07 respondents (07%) cannot say about this.

Findings:

- 1) The Gender defines the type of need which affects the satisfaction level.
- 2) The level of income affects the job satisfaction level.
- 3) Out of the total 100 respondents, 34% respondents level of satisfaction is decline more, 16 % respondents having no change in level of job satisfaction.
- 4) The factors like Remuneration, job security, promotion, work environment affects the job satisfaction level.
- 5) Stressful interpersonal relation with colleague disturbs job satisfaction.
- 6) Performance of the teachers is depending upon job satisfaction.
- 7) Nature of job gives great impact on work efficiency.

Conclusion of the study:

This study mainly focused on the satisfaction level of IT sector employees. From this study it has been found that high salary paid IT sector employees are satisfied than any other employees. The factors like Remuneration, job security, promotion, work environment affects the job satisfaction level.

Job satisfaction among teachers is ultimately impacting on quality of work because a satisfied employees can provide productive output to the company. This study concludes that there is need of satisfied workforce. Therefore, job satisfaction of employees from time to time. Significantly, job satisfaction and performance is very important to the continuing progress of company

Suggestions of the study:

- 1. Proper efforts should be taken by the companies and they should provide increment in the salary from time to time.
- Many companies are already launched certain quality improvement programme for their employees but it is necessary to add on certain things which are necessary to add on certain things which are necessary for development.



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- 3. There should be a provision for better medical facilities for the health care of teachers with their family members. Provision for accommodation facility, health care must be provided so that teachers will be more satisfied with the job.
- 4. Recognition of work, proper delegation of authorities and motivation are the essential management functions. Therefore, efficient employees should be recognized and motivated for further development.
- 5. The unwanted stress level among the teacher should have to be reduced. If the college authorities are creating positive environment among the teachers in a friendly manner then the unwanted stress will be managed.

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SUSTAINABLE RURAL DEVELOPMENT: AS A CORE AREA

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Meaning:-

Sustainable rural development stands as a vital pillar in the quest for a balanced and equitable global future. With over 40% of the world's population living in rural areas, the well-being of these communities directly influences economic stability, environmental health, and social inclusivity. The importance of sustainable rural development cannot be overstated; it connects issues of poverty alleviation, food security, and environmental stewardship into a coherent framework capable of nurturing both people and the planet.

Sustainable rural development refers to the process of improving the quality of life in rural areas while ensuring the conservation of natural resources and ecosystems. It encompasses a multidisciplinary approach where economic, social, and environmental dimensions are intertwined. In practical terms, this means promoting agricultural practices that are economically viable, socially just, and environmentally sound, alongside creating robust infrastructures, education systems, and health services.

Objectives of Sustainable Rural Development

Sustainable rural development is a comprehensive approach aimed at improving the socio-economic conditions of rural communities while ensuring the preservation of natural resources and the environment. Here, we explore some of the key objectives that define sustainable rural development.

1. Poverty Alleviation:-

One of the primary objectives of sustainable rural development is to combat poverty. Rural areas often exhibit higher rates of poverty compared to urban regions, driven by factors such as limited access to markets, healthcare, education, and employment opportunities. Development strategies focus on creating jobs, improving agricultural productivity, and enhancing access to resources, which can lift communities out of poverty.

2. Enhancing Food Security:-

Food security is a critical concern for rural populations, many of whom depend on agriculture for their livelihoods. Sustainable rural development aims to increase food production in a way that is environmentally sustainable. This includes promoting agricultural practices that preserve soil health, conserve water, and reduce reliance on chemical inputs. By fostering diverse farming systems and supporting local food production, rural communities can achieve greater food security.

3. Empowerment of Rural Communities:-

Sustainable rural development seeks to empower rural communities through participatory governance and inclusive decision-making processes. This involves recognizing the voices and needs of community members, particularly marginalized groups such as women and indigenous peoples. By fostering community participation, development initiatives can better address local challenges and enhance social cohesion.

4. Promoting Economic Diversification:-

Relying solely on agriculture makes rural economies vulnerable to market fluctuations and climate change. One objective of sustainable rural development is to promote economic diversification, encouraging communities to explore diverse income-generating activities like agro-tourism, handicrafts, and renewable energy production. This approach helps stabilize incomes, creates jobs, and fosters resilient rural economies.



5. Preservation of Natural Resources:-

The preservation of natural resources is fundamental to sustainable rural development. Rural areas are often rich in biodiversity, and their ecosystems provide essential services such as clean water, air, and soil fertility. Development objectives include implementing sustainable land management practices, conserving biodiversity, and protecting natural habitats. This ensures that resources are available for future generations while supporting the livelihoods of current residents.

6. Improvement of Infrastructure and Basic Services:-

Access to basic services such as healthcare, education, and sanitation is crucial for improving the quality of life in rural areas. Sustainable rural development aims to enhance infrastructure, ensuring that rural communities have access to essential services. This may involve building roads, providing electricity, and ensuring clean drinking water, all of which contribute to better health outcomes and improved educational opportunities.

Multidisciplinary Approach of Rural Development:-

1. Economic Viability:-

At its core, sustainable rural development hinges on creating diverse and resilient economies within rural areas. With globalization and urbanization steadily reshaping economic landscapes, rural areas often find themselves at a disadvantage. However, tapping into local resources and potential can drive innovation and create employment opportunities.

Promoting local enterprises, supporting sustainable agriculture, and integrating technology into rural economies can foster economic viability. For instance, promoting organic farming not only enhances food quality but also taps into growing consumer demand for healthier, sustainably produced goods. Moreover, investment in local infrastructure — such as roads, markets, and clean water systems — lays the groundwork for economic activities and ensures that rural communities can thrive.

2. Social Equity:-

Social equity remains a crucial dimension of sustainable rural development. Ensuring that all community members, including marginalized groups such as women, youth, and indigenous populations, have access to resources, opportunities, and decision-making processes is fundamental. Empowering these groups can lead to more inclusive and balanced growth.

Educational initiatives aimed at enhancing skills and promoting awareness about sustainable practices are essential. These programs should focus not just on traditional education but also on vocational training that aligns with local economic needs. Additionally, ensuring access to healthcare, technology, and financial services can substantially improve the quality of life in rural communities.

3. Environmental Sustainability:-

Given the close ties between rural communities and their surrounding environments, sustainable rural development places significant importance on environmental health. Agriculture, the primary economic activity in rural areas, can often lead to depletion of resources if not managed sustainably. Therefore, adopting practices such as agro ecology, crop rotation, and integrated pest management can help maintain soil health, conserve water, and reduce dependency on chemical inputs.

Furthermore, investing in renewable energy solutions, like solar or wind power, can minimize the ecological footprint of rural areas while providing much-needed energy access. Initiatives aimed at preserving biodiversity and protecting ecosystems through sustainable land use and conservation practices are also imperative for long-term sustainability.



Challenges and Opportunities Sustainable Rural Development

Sustainable rural development is a critical component of global efforts to create resilient communities, preserve natural resources, and promote economic prosperity. While rural areas often possess rich cultural heritage, diverse ecosystems, and untapped economic potential, they face a unique set of challenges that hinder their development. However, these challenges also present significant opportunities for innovation and collaboration. This article explores the multifaceted issues impacting sustainable rural development and the potential pathways forward.

Challenges in Sustainable Rural Development

1. Limited Access to Resources:-

Rural populations often experience limited access to essential resources such as quality education, healthcare, and financial services. The lack of infrastructure, including roads, reliable electricity, and internet connectivity, exacerbates these challenges. Without access to education, residents may be less equipped to participate in the workforce or innovate their farming practices, leading to stagnation.

2. Economic Vulnerability:-

Many rural areas rely heavily on agriculture, which is especially susceptible to climate change, market fluctuations, and global competition. Patterns of economic dependency on a single industry can lead to instability and limit diversification. When crop yields fail due to environmental factors or when prices fall, entire communities can suffer economically.

3. Youth Exodus:-

The allure of urban life often leads young people to abandon their rural homes in search of better job opportunities and lifestyles. This exodus results in an aging population and a depletion of human capital, making it challenging for rural communities to innovate and sustain economic growth.

4. Environmental Degradation:-

Despite being stewards of vast natural resources, rural areas face environmental challenges that threaten sustainability, including deforestation, soil erosion, and water scarcity. Unsustainable agricultural practices can deplete soil fertility and reduce biodiversity, ultimately jeopardizing the region's health and viability.

5. Policy Gaps:-

In many countries, policy frameworks around rural development are fragmented and inconsistent. Insufficient government support and inadequate representation in policy-making processes can leave rural communities without the necessary tools and resources to thrive.

Opportunities for Sustainable Rural Development

1. Leveraging Technology:-

Advancements in technology present an unprecedented opportunity for rural development. Innovations such as precision agriculture, mobile banking, and remote education platforms can enhance productivity and provide access to essential services. By adopting digital solutions, rural communities can overcome geographical barriers and improve their market access.

2. Promoting Sustainable Agriculture:-

Emphasizing sustainable farming practices can enhance food security and resilience against climate change. Methods such as agro ecology, and organic farming not only decrease ecological footprints but also create healthier food systems. Additionally, directly connecting producers with consumers through farmers' markets and local food networks can strengthen local economies.

3. Community Engagement and Empowerment:-

Empowering rural communities to take charge of their development initiatives is essential. By fostering participatory approaches that involve local populations in decision-making processes, stakeholders can ensure that development efforts align with the community's needs and values. Such engagement enhances social cohesion and accountability.



4. Diversification of Income Sources:-

Encouraging diversification within rural economies can mitigate risks associated with over-reliance on traditional industries. This could include promoting tourism, artisanal crafts, or renewable energy initiatives. Sustainable tourism, for example, allows communities to capitalize on their natural beauty and cultural heritage while generating income and creating jobs.

5. Investing in Infrastructure

Investment in rural infrastructure is crucial for sustainable development. Expanding access to roads, electricity, and internet connectivity can help integrate rural areas into broader economic networks. Improved infrastructure not only facilitates the movement of goods but also enhances access to healthcare and education.

6. Strengthening Policy Frameworks

Advocating for cohesive policies that prioritize sustainable rural development can lead to better resource allocation and funding for rural initiatives. Policymakers should engage with rural communities to understand their unique challenges and tailor solutions that foster resilience and sustainability.

Conclusion:-

As we forge ahead into an uncertain future, sustainable rural development must be positioned as a core area of focus within global and national agendas. Prioritizing the economic viability, social equity, and environmental sustainability of rural communities not only uplifts these regions but also contributes to the overarching goals of a sustainable planet.

By embracing a holistic and inclusive approach, we can harness the rich potential of rural areas, transforming them into thriving hubs of innovation and sustainability. Through commitment, collaboration, and action, a brighter, more sustainable future for rural communities is not just possible it is within our reach.

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"ARTIFICIAL INTELLIGENCE AND THE SUSTAINABLE DEVELOPMENT GOALS: A PATHWAY TO A SUSTAINABLE FUTURE"

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Abstract

Artificial Intelligence (AI) is increasingly recognized as a transformative technology with the potential to address global challenges and drive progress toward achieving the United Nations' Sustainable Development Goals (SDGs). This paper explores the intersections between AI and the SDGs, highlighting how AI can be harnessed to promote sustainability across various domains, including health, education, environmental protection, and economic growth. It also examines the challenges and risks associated with AI deployment, such as ethical considerations, biases, and the digital divide, and proposes strategies for ensuring that AI contributes positively to sustainable development.

This research paper provides an overview of the potential of AI in advancing the SDGs, while also addressing the challenges and risks associated with its deployment. It underscores the importance of ethical considerations, equitable access, and robust governance in ensuring that AI contributes to a sustainable and inclusive future.

Introduction

The United Nations' 2030 Agenda for Sustainable Development, adopted in 2015, outlines 17 Sustainable Development Goals (SDGs) aimed at ending poverty, protecting the planet, and ensuring prosperity for all. These goals are interconnected and represent a global call to action to address pressing social, economic, and environmental challenges. Artificial Intelligence (AI), with its ability to process vast amounts of data, recognize patterns, and make autonomous decisions, offers innovative solutions to accelerate progress toward these goals.

This paper examines the potential of AI to contribute to the achievement of the SDGs, focusing on the opportunities it presents as well as the challenges and risks that must be managed.

Overview of Artificial Intelligence And Its Relevance To Sustainable Development Goals (Sdgs)

The integration of Artificial Intelligence (AI) into various sectors presents a unique opportunity to advance the Sustainable Development Goals (SDGs). AI technologies can enhance efficiency, accuracy, and decision-making processes in critical areas, including healthcare, finance, and infrastructure, aligning with several SDGs. For instance, research highlighted in (Maryam Ramezani et al.) illustrates a significant uptick in AI-related studies addressing health-focused SDGs between 2015 and 2022, showcasing the technologys potential in improving public health outcomes. Moreover, AIs role in automating financial activities not only streamlines operations but also contributes to economic growth, directly impacting SDG 8 (Decent Work and Economic Growth), as underscored by insights in (Yixuan Peng et al.). By providing real-time analysis and fostering innovation, AI empowers stakeholders to make informed, sustainable decisions that align with SDG 9 (Industry, Innovation, and Infrastructure) and promote strong institutions per SDG 16. Therefore, embracing AI can catalyze progress toward achieving the SDGs through transformative solutions.

Research Methodology

Research methodology is a way to systematically show the research problem. It may be understood as a science of studying how research is done scientifically. It is necessary for the researcher to know not only the research methods but also the methodology.

This Section includes the methodology which includes. The research design, objectives of study, scope of study along with research methodology and limitations of study etc.



Secondary Data

This paper is totally based on secondary data, the secondary data are those which have already been collected by someone else, and which have already been passes through statistical processes. Those data's are collectedly printed reports, journals, personnel reports, organizational data's, letters, diaries, bibliography, autobiography, newspapers, internet, articles etc.

- Textbooks
- Journals
- Newspapers
- Internet/websites
- Ouestionnaire method
- Personal interview technique.

Objectives Of Research

- 1. To investigate how AI can contribute to the achievement of the United Nations' Sustainable Development Goals (SDGs) by addressing various global challenges, such as poverty, hunger, health, education, and climate change.
- 2. To identify specific AI technologies and applications that can be utilized to drive progress towards each of the 17 SDGs, providing practical examples and case studies.
- 3. To assess both the opportunities and potential risks associated with deploying AI in the context of sustainable development, including ethical considerations, data privacy, and the digital divide.
- 4. To promote collaboration between AI experts, policymakers, industry leaders, and social scientists to ensure that AI is developed and deployed in ways that are aligned with the principles of sustainability.
- 5. To develop policy recommendations and frameworks that encourage the responsible use of AI in advancing sustainable development, ensuring that AI technologies benefit all segments of society, particularly marginalized communities.
- 6. To inspire innovation in AI-driven solutions that specifically target sustainable development challenges, encouraging investment in research and development in this area.
- 7. To evaluate the current and potential future impact of AI on sustainable development, providing a roadmap for future research, development, and implementation of AI technologies in support of the SDGs.

The Role Of Ai In Achieving The Sustainable Development Goals

AI In Poverty (SDG 1: No Poverty)

AI can analyze data to identify poverty patterns and target interventions more effectively. It helps in optimizing resource allocation and predicting areas in need of aid. Identifying and predicting poverty hotspots for focused interventions. Providing access to credit and banking services through AI-driven platforms. Enhancing crop yields and reducing waste with precision agriculture and optimized supply chains. Offering personalized learning and skill development to improve employability. Enabling remote healthcare and disease prevention in impoverished areas. Improving early warning systems and resource allocation during crises. Connecting individuals with job opportunities and supporting small businesses.

AI in Agriculture (SDG 2: Zero Hunger)

AI-driven technologies, such as precision agriculture, can help achieve SDG 2 by increasing agricultural productivity and reducing food waste. AI can optimize irrigation, monitor crop health, and predict yields, enabling farmers to make data-driven decisions that improve efficiency and sustainability. Additionally, AI can support the development of resilient crops and farming practices that can withstand climate change.



AI for Health and Well-being (SDG 3)

AI has the potential to revolutionize healthcare by improving diagnostics, predicting disease outbreaks, and personalizing treatment plans. Machine learning algorithms can analyze medical images to detect conditions such as cancer at an early stage, while AI-powered predictive models can anticipate disease outbreaks, enabling timely interventions. Furthermore, AI can support telemedicine initiatives, making healthcare more accessible in remote and underserved areas.

AI for Quality Education (SDG 4)

AI can enhance educational outcomes by providing personalized learning experiences, automating administrative tasks, and offering real-time feedback. Adaptive learning platforms powered by AI can tailor educational content to individual learning styles and needs, helping students achieve better outcomes. AI can also support teachers by automating grading and administrative tasks, allowing them to focus on instruction and student engagement.

AI in Gender Equality (SDG 5: Gender Equality)

Identifying and mitigating gender bias in hiring practices, financial services, and media representation, promoting fairness and equality. Providing women with access to educational resources, financial services, and job opportunities through AI-driven platforms, especially in underserved regions. Analyzing data to detect and prevent gender-based violence, including online harassment, by monitoring social media and communication platforms. Assisting in the evaluation of gender-related policies by analyzing their impact and effectiveness, helping to shape better interventions. Enhancing advocacy efforts for gender equality through targeted AI-driven campaigns that reach and engage diverse audiences.

AI in Clean Water and Sanitation SDG 6: Clean Water and Sanitation

Using AI to analyze data from sensors and satellite imagery to detect water contamination and pollution in realtime. Optimizing water distribution and usage in agriculture, industry, and households through AI-driven models, reducing waste and ensuring sustainable use. Identifying and predicting leaks in water infrastructure with AI, preventing water loss and improving maintenance efficiency. Forecasting the need for repairs and upgrades in water treatment and sanitation systems, ensuring continuous and safe water supply.

AI in SDG 7: Affordable and Clean Energy

Optimizing energy use in buildings, industries, and transportation through AI-driven systems that reduce waste and enhance efficiency. Supporting the integration of renewable energy sources like solar and wind into the grid by predicting energy production and demand, ensuring stability. Managing electricity distribution in real-time through AI-powered smart grids, balancing supply and demand, and reducing outages. Identifying and prioritizing areas lacking energy access, guiding the development of affordable and clean energy solutions in underserved regions. Forecasting maintenance needs for energy infrastructure, minimizing downtime, and extending the lifespan of equipment.

AI for Economic Growth and Decent Work (SDG 8)

AI has the potential to drive economic growth by increasing productivity, fostering innovation, and creating new jobs. In industries such as manufacturing, AI-powered robots can perform repetitive tasks with greater efficiency and precision, leading to cost savings and increased output. Moreover, AI can enable the creation of new products and services, leading to the emergence of new industries and job opportunities. However, the deployment of AI also raises concerns about job displacement, requiring policies that promote reskilling and upskilling to ensure inclusive growth.

AI in SDG 9: Industry, Innovation, and Infrastructure

Enhancing production processes through AI-driven automation, predictive maintenance, and quality control, leading to more efficient and innovative industries. Optimizing the design, construction, and maintenance of infrastructure, such as roads, bridges, and utilities, using AI to improve durability and reduce costs. Driving

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research and development by analyzing vast datasets, identifying trends, and fostering the creation of new technologies and products. Streamlining supply chains with AI to improve efficiency, reduce waste, and enhance the resilience of industries. Promoting the use of eco-friendly materials and practices in industry and infrastructure projects through AI-powered analysis and recommendations.

AI in SDG 10: Reduced Inequality

Expanding access to banking, loans, and insurance for underserved populations through AI-driven credit assessments and personalized financial products. Providing tailored educational resources and opportunities to marginalized communities, improving access to quality education and skills development. Identifying and mitigating biases in hiring, lending, and social services to ensure fair treatment and opportunities for all individuals, regardless of background. Optimizing the allocation of social benefits and resources to those most in need through AI-driven analysis, ensuring more equitable support. Enhancing healthcare delivery in underserved areas by using AI to predict health needs, optimize resource allocation, and support remote diagnosis and treatment.

AI in SDG 11: Sustainable Cities and Communities

Analyzing data on traffic, population growth, and resource use to design more efficient, sustainable cities with optimized transportation and infrastructure. Supporting the development of smart transportation systems, including AI-driven public transit, ride-sharing, and traffic management, reducing congestion and emissions. Enhancing energy management in buildings and urban areas through AI, reducing waste and promoting the use of renewable energy sources. Predicting natural disasters and managing emergency responses through AI, helping cities prepare for and recover from events like floods, earthquakes, and storms. Optimizing waste collection, recycling, and disposal processes with AI, reducing environmental impact and promoting cleaner communities.

AI in SDG 12: Responsible Consumption and Production

Analyzing production processes to minimize waste and optimize the use of resources, reducing environmental impact and increasing efficiency. Enhancing traceability and accountability in supply chains through AI, ensuring sustainable practices and reducing the risk of unethical sourcing. Facilitating recycling and upcycling by using AI to sort and process waste materials, promoting a circular economy and reducing landfill waste. Guiding the development of eco-friendly products by analyzing lifecycle data and suggesting materials and processes that minimize environmental impact. patterns in consumer behavior to promote sustainable purchasing decisions and reduce overconsumption through targeted education and incentives.

AI for Climate Action (SDG 13)

Climate change is one of the most pressing global challenges, and AI can play a crucial role in addressing it. AI can be used to model climate patterns, optimize energy use, and monitor environmental changes. For instance, AI algorithms can analyze satellite data to monitor deforestation, track wildlife populations, and assess the impact of natural disasters. Additionally, AI can optimize energy grids, reduce waste, and support the transition to renewable energy sources.

AI in SDG 14: Life Below Water

Analyzing satellite images and sensor data to track ocean health, monitor pollution, and detect illegal fishing. Identifying and protecting endangered marine species through AI-driven pattern recognition and tracking. Forecasting ocean conditions, such as temperature changes and acidification, to guide conservation efforts. Optimizing sustainable fishing practices by analyzing fish populations and migration patterns. Detecting and managing marine pollution, including plastics, through AI-powered sensors and data analysis.

AI in SDG 15: Life on Land

Using AI to analyze satellite imagery and camera trap data, enabling the tracking of wildlife populations, habitats, and biodiversity hotspots. Identifying and monitoring deforestation and land degradation in real-time, allowing for timely intervention and conservation efforts. Supporting the protection of endangered species through AI-driven



tracking and predictive models to prevent poaching and habitat loss. Optimizing land use and promoting sustainable agriculture by analyzing soil health, crop growth, and environmental impact.

AI in SDG 16: Peace, Justice, and Strong Institutions

Analyzing data to predict and prevent criminal activities, improving public safety. Identifying patterns of corruption and fraud in financial transactions, contracts, and public spending. Enhancing legal services through AI-driven platforms that provide legal information, aid, and case management to underserved populations. Monitoring and analyzing government activities and public policies to promote transparency and accountability.

AI in SDG 17: Partnerships for the Goals

Facilitating the collection, analysis, and sharing of data across sectors, enabling better collaboration among governments, NGOs, and private entities. Optimizing the allocation of resources and funding for global development projects by analyzing needs and impact. Enhancing communication and coordination among partners worldwide through AI-driven platforms, fostering stronger and more effective partnerships.



Challenges And Risks Of Ai In Sustainable Development

Ethical Considerations and Bias

AI systems are only as good as the data they are trained on. If the data is biased, AI can perpetuate and even exacerbate existing inequalities. For example, biased algorithms in hiring or lending can lead to unfair treatment of certain groups. Ensuring that AI is used ethically and that its deployment does not reinforce existing biases is critical for achieving the SDGs.

The Digital Divide

While AI has the potential to drive sustainable development, there is a risk that it could widen the digital divide between those who have access to AI technologies and those who do not. Many developing countries lack the infrastructure, skills, and resources needed to fully leverage AI. Bridging this divide requires investments in education, infrastructure, and capacity-building to ensure that the benefits of AI are shared equitably.

Governance and Regulation

The rapid pace of AI development poses challenges for governance and regulation. Effective policies are needed to ensure that AI is developed and deployed in a manner that is aligned with the principles of sustainability and the



public good. This includes addressing issues such as data privacy, accountability, and transparency in AI decision-making processes.

Strategies for Leveraging AI for Sustainable Development

Promoting Ethical AI Development

To ensure that AI contributes positively to sustainable development, it is essential to promote ethical AI development. This includes developing guidelines and standards for AI ethics, ensuring transparency in AI decision-making, and involving diverse stakeholders in the AI development process. Additionally, efforts should be made to mitigate biases in AI systems and ensure that AI is used to promote inclusivity and equity.

Bridging the Digital Divide

To ensure that AI benefits all, it is crucial to bridge the digital divide by investing in digital infrastructure, education, and capacity-building. This includes providing access to technology in underserved regions, promoting digital literacy, and fostering partnerships between governments, the private sector, and civil society to ensure that AI is accessible and beneficial to all.

Strengthening Governance and Regulation

Governments and international organizations must work together to develop robust governance frameworks for AI that promote accountability, transparency, and ethical use. This includes creating regulations that protect data privacy, ensure fairness in AI decision-making, and promote the responsible use of AI in line with the SDGs.

The future of AI in promoting sustainable development and the importance of ethical considerations

As the integration of artificial intelligence (AI) into various sectors continues to evolve, its potential to advance sustainable development becomes increasingly evident. Innovations such as predictive analytics can optimize resource allocation in agriculture, enhancing food security while minimizing environmental degradation. Moreover, AI-driven solutions in energy management can facilitate the transition to renewable sources, supporting global efforts to combat climate change. However, the enthusiasm surrounding these technological advancements must be tempered with rigorous ethical considerations. Ensuring equitable access to AI technologies is paramount to prevent exacerbating existing social inequalities, particularly in developing nations. Furthermore, transparent algorithms are essential for fostering trust and accountability, mitigating biases that could lead to discriminatory outcomes. To harness AI responsibly in pursuit of sustainable development goals (SDGs), stakeholders must engage in multidisciplinary collaboration, prioritizing inclusive practices that align technological progress with ethical imperatives. This balanced approach will not only maximize the benefits of AI but also ensure that its deployment contributes meaningfully to a more sustainable and just future for all.

Recommendations

Promoting Ethical AI Development

To ensure that AI contributes positively to the SDGs, it is essential to promote ethical AI development. This includes establishing clear guidelines for data privacy, reducing bias in AI models, and ensuring transparency and accountability in AI decision-making processes. Governments and organizations should work together to create regulatory frameworks that address these ethical concerns.

Bridging the Digital Divide

Addressing the digital divide is critical for ensuring that AI benefits all populations. Investment in digital infrastructure, education, and capacity-building in developing countries is necessary to enable equitable access to AI technologies. International collaboration and knowledge sharing can help bridge the gap between developed and developing nations.



Advancing Sustainable AI

Efforts should be made to reduce the environmental impact of AI technologies. This includes developing energy-efficient AI models, using renewable energy sources for data centers, and promoting research into sustainable AI practices. By minimizing the environmental footprint of AI, we can ensure that it contributes to, rather than detracts from, global sustainability efforts.

Conclusion

Artificial Intelligence holds immense potential to drive progress toward the Sustainable Development Goals, offering innovative solutions to some of the world's most pressing challenges. However, realizing this potential requires careful consideration of the ethical, social, and economic implications of AI. By promoting ethical AI development, bridging the digital divide, and strengthening governance and regulation, we can harness the power of AI to create a more sustainable, inclusive, and equitable future for all.

The integration of artificial intelligence (AI) into sustainable development strategies represents a pivotal advancement in the quest to achieve the Sustainable Development Goals (SDGs). This research underscores AIs transformative potential across various sectors, such as healthcare, education, and environmental management, thereby addressing some of the most pressing global challenges (Bongs Lainjo). Furthermore, the intersection of AI with the Internet of Things (IoT), forming the concept of AIoT, enhances the capabilities of interconnected systems, enabling more efficient resource management and data-driven decision-making crucial for sustainability (Georgios Lampropoulos et al.). As we navigate the complexities of implementing these technologies, it is imperative to prioritize ethical considerations and the establishment of governance frameworks that mitigate associated risks, such as algorithmic bias and privacy concerns. Ultimately, fostering interdisciplinary collaboration and enhancing public AI literacy will be essential steps toward harnessing AIs full potential in promoting a more sustainable and equitable future.

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"A COMPARATIVE STUDY OF NATIONAL EDUCATION POLICY 1968, NATIONAL EDUCATION POLICY 1986 AND NEW NATIONAL EDUCATION POLICY 2020"

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Abstract:

The National Education Policy (NEP) 2020 introduced a transformative vision for the education system in India. This paper provides a comparative analysis of old policy1968, 1986 or new policy 2020. How is a major educational policy transformation to be implemented by the government after independence? The education system plays a vital role in influencing a nation's future by promotion the intellectual and socio-economic development of its citizens.

Keywords: Old Education Policy, New Education Policy, NEP 2020, Comparative Study, history of Education in India, India.

Introduction:-

Contextual

India's education system has progressed over time to meet the needs of a growing population and a progressively globalized world. The Post-Independence India has had two Major National Education Policies in 1968 and 1986 (modified in 1992) respectively. implemented in National Policy on Education 1968, National Policy on Education 1986, to laid the foundation for educational development in the country. However, recognizing the need for comprehensive reforms, the Indian government introduced the new Education Policy in 2020. To aims of this policy is transform the education system by focusing on inclusivity, flexibility, and the holistic (All-Inclusive) development of learners. This paper provides an in-depth comparative analysis of National Policy on Education 1968, National Policy on Education 1986 and new Education Policies, examining their key features, objectives, strengths, limitations, and potential implications.

India's old education policies primarily refer to the education systems and policies before the introduction of the New Education Policy (NEP) in 2020. Here's a summary of the key developments and features of the old education policies in India:

a) Vedic Period in India:

The Vedic education system is one of the oldest educational traditions in the world, originating in ancient India during the Vedic period (around 1500 to 500 BCE). It was primarily based on the teachings of the Vedas, which are ancient Hindu scriptures. Here is a summary of the Vedic education system. The Vedas have laid the foundation upon which the entire Hindu culture and civilization has been building up through the ages. Veda means knowledge. During this period education was divided into two kinds of knowledge-this worldly and other worldly.

The Vedic education system aimed at the all-around development of an individual—spiritually, morally, intellectually, and physically. Education was imparted in Gurukuls, which were residential schools where students lived with their teacher (Guru). This system emphasized a close bond between the teacher and the students. Alongside religious teachings, students also learned practical skills such as agriculture, warfare, medicine, and mathematics. he curriculum included the study of the four Vedas, Vedangas (auxiliary disciplines), Upanishads, Itihasas (epics), Puranas (mythology), and various subjects like grammar, astronomy, logic, and arts. The teaching was oral, with students memorizing the texts. Learning was achieved through repetition, chanting, and discussion (Samvada).



1. The Pre-Independence Period:

Before British colonization, education in India was mostly informal, community-based, and focused on traditional subjects like philosophy, grammar, and religious texts. The British introduced a formal education system, primarily aimed at creating a class of people who could serve as intermediaries between the British and Indians. The English language became a medium of instruction, and Western-style schools were established.

2. Macaulay's Minute (1835):

Thomas Babington Macaulay's Minute on Indian Education in 1835 led to the promotion of English as the medium of instruction in schools, sidelining traditional Indian languages and educational systems. The emphasis was on Western literature, science, and moral education, with little regard for indigenous knowledge and languages.

3. The Hunter Commission (1882):

The Hunter Commission emphasized the need for primary education for the masses and recommended the establishment of more schools, especially in rural areas. The commission also advocated for the promotion of female education, although progress was slow.

4. The Hartog Committee Report (1929):

The Hartog Committee emphasized improving the quality of education rather than merely increasing the number of schools and colleges. The report suggested the introduction of vocational and technical education to meet the needs of the economy.

5. The Sargent Plan (1944):

The Sargent Plan was a comprehensive proposal for educational reconstruction in India, which included universal primary education, adult education, and the establishment of universities and vocational institutes. It proposed compulsory and free education for all children up to the age of 14, though this was not fully implemented at the time.

6. Post-Independence Education Policies:

Radhakrishnan Commission (1948-49): This commission, led by Dr. S. Radhakrishnan, focused on higher education and recommended the establishment of universities with an emphasis on research and academic freedom.

Mudaliar Commission (1952-53): Also known as the Secondary Education Commission, it recommended reforms in secondary education, including diversified curricula and improved teacher training.

Kothari Commission (1964-66): The most significant pre-NEP commission, the Kothari Commission, recommended a common school system, the adoption of a 10+2+3 structure (10 years of primary and secondary education, 2 years of higher secondary, and 3 years of tertiary education), and the promotion of science and technology. It laid the groundwork for many policies that followed.

National Policy on Education (1968): This policy, based on the recommendations of the Kothari Commission, called for the nationalization of education, with a focus on providing free and compulsory education, promoting the regional languages, and emphasizing the role of science and technology.

National Policy on Education (1986): This policy aimed at modernization and equal access to education. It introduced the concept of "Operation Blackboard" to improve the infrastructure of primary schools, established the Navodaya Vidyalayas (schools for rural students), and promoted the use of technology in education.

Programme of Action (1992): This was an update to the 1986 policy and focused on addressing the disparities in education, particularly for marginalized communities. It emphasized adult education, early childhood care, and vocational education.



Research Methodology

This research paper employs a qualitative research methodology. It involves a comprehensive literature review of scholarly articles, government reports, policy documents, and relevant educational literature. The study also incorporates a comparative analysis of the old and new Education Policies based on their key features, objectives, strengths, limitations, and potential impact. Data will be collected through content analysis and thematic synthesis. The findings will be presented using descriptive and analytical approaches.

Objectives Of Study

- To know the new education policy
- To analyze the key features and objectives of the old and new Education Policies in India.
- To assess the potential impact and outcomes of the new Education Policy on the Indian education landscape.
- To provide recommendations for improvement and future directions for research.

I-NEP 1968

Overview and Historical Context

The old education policy implementation in 1968 th aimed to fulfilling compulsory education for all children up to the age of 14,Symbolizing education and learning, signify the national scope of the policy, One in traditional Indian attire, one in modern dress, and one in a school uniform to show the blend of tradition and modernization in education, Displaying key points like "Equalization of Educational Opportunity," "Focus on Science and Technology," and "Three-Language Formula.", symbolize the formal educational environment.

NEP 1968 is Based on the report and recommendations of the Kothari Commission (1964–1966), which called for a "radical restructuring" and proposed equal educational opportunities in order to achieve national integration and greater cultural and economic development.

Strengths and Limitations

A bright, glowing light bulb to symbolize enlightenment and progress. Icons like graduation caps, books, and science symbols to represent the policy's focus on science, technology, and equal educational opportunities. A diverse group of students in different attire to represent inclusivity and the three-language formula.

Clouds or shadows to indicate challenges or drawbacks. Broken chains or hurdles to symbolize issues like inequality, lack of implementation, and regional disparities. A fading book or chalkboard to show limitations in reaching all segments of society.

Impact and Outcomes

The roots of the tree emerging from the open book symbolize the foundation laid by the policy. the trunk represents the structure and growth of education in India.

Branches and Leaves:

- Healthy, green leaves on one side to symbolize positive outcomes, such as increased literacy, advancements in science and technology, and the spread of formal education.
- Withered leaves or bare branches on the other side to indicate areas where the policy fell short, like persistent regional disparities, underfunded schools, and ongoing challenges in implementation.

On the healthy branches, fruits can represent successful outcomes like "Increased Literacy Rate," "Expansion of Educational Institutions," and "Improved Access to Higher Education."The withered branches could have empty spaces or underdeveloped fruits to show ongoing challenges like "Unequal Access," "Regional Disparities," and "Unresolved Language Issues."



II-NEP 1986

Overview and Historical Context

The old Education Policy, implemented in 1986, aimed to provide equal educational opportunities, promote national integration, and foster a secular and democratic society. It focused on expansion, access, and quality improvement in education across all levels.

Key Features and Objectives

The key features of the old Education Policy included a focus on universal elementary education, vocationalization of secondary education, and strengthening higher education institutions. Its objectives encompassed promoting social justice, equity, and access to education, as well as ensuring relevance, efficiency, and quality in the education system.

Strengths and Limitations

The old Education Policy contributed significantly to the expansion of education in India, improving access and reducing gender and social disparities. It established a strong foundation for higher education institutions and emphasized the development of research and innovation. However, limitations included inadequate attention to early childhood education, a rote learning culture, and limited flexibility in curricula and assessments.

Impact and Outcomes

The old Education Policy led to increased enrollment rates, the establishment of educational institutions, and a more inclusive education system. It played a crucial role in fostering intellectual development and producing skilled professionals. However, challenges such as low learning outcomes, regional disparities, and limited employability remained.

III-NEP 2020

Preamble

The Indian government introduced the new Education Policy in 2020. To aims of this policy is transform the education system by focusing on inclusivity, flexibility, and the holistic (All-Inclusive) development of learners, foundational literacy and numeracy, multidisciplinary learning, and promoting critical thinking and creativity. It aims to transform the education landscape to meet the needs of the 21st century.

Key Features and Objectives

The structures of the new Education Policy include the introduction of a 5+3+3+4 curricular structure, emphasis on experiential learning, integration of technology, and a flexible approach to education. The objectives include universalization of early childhood education, strengthening of foundational learning, promotion of multidisciplinary education, and fostering research and innovation.

Significance and Innovations

Holistic Development: The NEP focuses on holistic development by emphasizing not only academic excellence but also physical fitness, mental well-being, and character building. It aims to produce well-rounded individuals.

Quality Enhancement: It places a strong emphasis on improving the quality of education at all levels, including higher education. Quality enhancement is essential for producing skilled and employable graduates.

Flexibility and Choice: NEP 2020 promotes flexibility in curriculum design, subject choices, and interdisciplinary learning. It allows to multiple entry's and multiple exits It allows students to choose subjects and courses based on their interests and career aspirations.

Multilingualism: The policy recognizes the importance of multilingualism and encourages the use of the mother tongue as a medium of instruction at the primary level. This can enhance understanding and retention of knowledge.



Inclusivity: NEP 2020 aims to make education more inclusive by addressing issues related to gender, socioeconomic disparities, and special needs education. It strives to ensure equal educational opportunities for all.

Research and Innovation: The policy emphasizes the importance of research and innovation in higher education, with provisions for increased funding and incentives for research activities.

Global Integration: By aligning with international education standards and practices, NEP 2020 aims to make Indian education more globally competitive and attractive for international students.

Teacher Development: The policy recognizes the critical role of teachers and provides for their professional development, which can lead to improved teaching quality.

Regulatory Reforms: It proposes significant reforms in regulatory bodies, streamlining accreditation processes, and reducing bureaucratic hurdles in educational institutions.

Sr.No.	NEP 1986	NEP 2020	NEP 1968
1.	The role of education is the all-round development of students.	Objective is to provide Multidisciplinary & interdisciplinary liberal education.	To all students a respective a cast creed and sex would haw access to education of a comparable.
2.	Common education structure of 10 (5+3+2)+2+3+2 is followed.	Common education structure of 5+3+3+4+4+1 is suggested.	Common education structure of 10+2+3 is followed.
3.	The first preliminary education starts at 6th year of a child as Primary school level.	The first preliminary education starts at 3rd year of a child as a Foundation stage.	The first preliminary education starts at 6th year of a child as Primary school level.
4.	Separately, two years of higher secondary level and two years of pre university level were considered and each had board examinations.	Two years higher secondary level and two years pre-university stages are designated by clubbing Four years Secondary education tier. Exams are proposed at school level, with the exception of Board level exams at 10th and 12th levels.	Separately, two years of higher secondary level and two years of pre university level were considered and each had board examinations.
5.	Students select specialisation fields and subjects such as scientific subjects or commercial topics or arts subjects for two years of higher secondary level.	The secondary education process includes typical topics and elective topics for four years. The alternative focuses on liberal education policies.	Students are prefeerd are gating science and math on priority
6.	Both undergraduate and postgraduate admissions are based on the entrance test conducted at the college or state level, except for NITs & Medical Schools.	All public HEI undergraduate and postgraduate admissions are based on National Testing Agency (NTA) scores performed at the national level.	Undergraduate and postgraduate admissions are not based on the entrance test conducted at the college or state level, except for NITs & Medical Schools.
7.	Undergraduate programmes are for three to four years.	Undergraduate programmes are of four years with a provision to exit after one year with a diploma, after	Undergraduate programmes are for three



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		two years with an advanced diploma, after three years with a pass degree, and after four years with project based degree.	to four years.
8.	Postgraduate education is of two years with specialization focus.	Postgraduate education is of one to two years with more specialization & research focus.	This policy also known as national school system that having up to under graduation.
9.	Many HEI colleges are affiliated to state universities and have no curriculum and testing autonomy.	Both HEIs, like schools, are independent and in determining the curriculum there will be no affiliated colleges of state universities and autonomy and evaluation.	Many HEI colleges are affiliated to state universities and have no curriculum and testing autonomy.
10	Pass as a necessary qualification in NET/SLET along with the respective Masters degrees to become an assistant professor in any three types of HEIs.	Ph.D. degree is mandatory as well as passing NET/SLET as a necessary certification in all three forms of HEIs to become an assistant professor.	Pass as a necessary qualification the respective Masters degrees to become an assistant professor in any three types of HEIs.
11	The support of research funds through UGC or any other agencies is mainly for Universities than Colleges.	The support of research funds through the National Research Foundation and any other agencies will be equally distributed to all three types of HEIs based on a fair evaluation of the research proposal.	The support of research funds through State government or any other agencies is mainly for Universities than Colleges.
12.	The test is separate from teaching. Both tests and evaluations are regulated by associated universities. The role of teaching faculty members in directly assessing students is limited.	The test is separate from teaching. Both tests and evaluations are regulated by associated universities. The role of teaching faculty members in directly assessing students is limited.	The test is separate from teaching. Both tests and evaluations are regulated by associated universities. The role of teaching faculty members in directly assessing students is limited.
13.	The graded accreditation model is followed.	There would be a binary accreditation model that is yes or no framework instead of multiple entity classes.	The graded accreditation model is followed.
14.	Faculty performance & accountability is linked to promotion but not linked to compensation.	Faculty performance & accountability is linked to promotion and compensation.	Faculty performance & accountability is linked to promotion but not linked to compensation.
15.	Choice based credit system.	Liberal education based on STEAM & Competency based credit system.	No choice based System
16	Only approved and authorised universities can provide online distance learning. (ODL) education.	All three forms of HEIs accredited to offer ODL are required to offer ODL.	Only traditional method of teaching are provide no provide online or distance

			0 0
			learning education system
17	As part of the programme, social participation is optional for any pupil.	For each undergraduate, social participation is mandatory and should be equivalent to at least one full semester over the entire length of the programme	As part of the programme, social participation is optional for any pupil.
18	Four years of Bachelor degree holders are not eligible for direct admission to Ph.D. programme unless they acquire Master's degree.	Four years of Bachelor degree holders with proven research performance during the fourth year can directly admit to Ph.D. programme without Master's degree in both types of HEIs.	Four years of Bachelor degree holders are not eligible for direct admission to Ph.D. programme unless they acquire Master's degree.
19.	The expected student-faculty ratio in the higher education sector is 20:1.	The expected student faculty ratio in the higher education sector is 30:1.	The expected student-faculty ratio in the higher education sector is 20:1.
20.	Currently, preparation for teachers requires two years of B.Ed. Program after graduation. So teachers in high school have to devote 5 years following their secondary school graduation. to teach at higher the secondary level.	The recommended education for teachers requires four years of blended B.Ed. This degree is a required prerequisite in School Education Stages to become a faculty.	Currently, preparation for teachers requires two years of B.Ed. Program after graduation.
21.	Suggestion for improving physical library facility including books & journals	Suggestion for improving online library memberships including online books & online journals.	Suggestion for improving physical library facility including books & journals
22	No systematic and authentic university and college science support agencies	The National Research Foundation (NRF) will be founded to finance competitive imaginative and research projects of all sorts and across all disciplines.	No systematic and authentic university and college science support agencies

Recommendations And Future Outlook

Areas of Improvement

To enhance the effectiveness of the new Education Policy, attention should be given to early childhood education, teacher training, and capacity building. Strengthening infrastructure, ensuring equitable access, and monitoring the quality of education are also crucial part of it.

Implementation and Monitoring:

The successful implementation of NEP 2020 requires a robust monitoring mechanism. Regular assessment and evaluation should be conducted to track the progress of policy implementation at all levels, from national to grassroots. It is crucial to establish a dedicated agency to oversee the effective execution of the policy.

Infrastructure Development:

Adequate infrastructure is vital for the successful implementation of NEP 2020. The government should invest in the development of schools, colleges, and universities to ensure that they have the necessary facilities and resources. This includes providing technology-enabled classrooms, libraries, laboratories, and sports facilities.



Teacher Training and Professional Development:

NEP 2020 emphasizes the importance of teacher training and professional development. Continuous training programs should be conducted to enhance the pedagogical skills of teachers. This includes providing them with training in innovative teaching methods, ICT integration, and assessment techniques.

Technology Integration:

The policy recognizes the significance of technology in education. To leverage its potential, adequate measures should be taken to integrate technology in classrooms, including the provision of digital devices, high-speed internet connectivity, and access to quality digital content. Special training should be provided to teachers to effectively utilize technology for teaching and learning.

Vocational Education and Skill Development:

NEP 2020 emphasizes the integration of vocational education and skill development into the mainstream curriculum. Efforts should be made to establish robust vocational training centers and create partnerships with industries to provide practical training and internships to students. This will help bridge the gap between education and employment.

Inclusion and Equity:

NEP 2020 promotes inclusive education and aims to provide equal opportunities to all students. Special attention should be given to marginalized communities, children with disabilities, and those from economically disadvantaged backgrounds. Measures should be taken to ensure their access to quality education and address any barriers they may face. Research and Innovation: The policy emphasizes the promotion of research and innovation in education. Funding and support should be provided to encourage research activities in educational institutions. Collaboration between academia, industry, and research organizations should be fostered to drive innovation and solve real-world educational challenges.

Global Collaboration:

NEP 2020 encourages international collaboration and exchange programs to expose students and teachers to global perspectives. Partnerships with renowned educational institutions and organizations worldwide should be established to facilitate knowledge sharing, faculty exchange, and collaborative research. The future outlook for NEP 2020 is promising. With its learner-centric approach, focus on holistic development, and integration of technology and skill development, the policy has the potential to revolutionize the education system in India. However, its successful implementation requires dedicated efforts, collaboration among stakeholders, and continuous evaluation to ensure the desired outcomes are achieved.

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A STUDY ON THE IMPACT OF PROMOTIONAL STRATEGIES ON EMPLOYEES IN CO-OPERATIVE BANK

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Abstract:-

The promotion concept is used for employees when company or organization promotes them so that they could work with more enthusiasm. Employee promotion is the process of hiring a current employee in a more senior role and advancing their career with greater responsibility, higher levels of status or tile, and an increase in pay or other benefits. The purpose of promotion is to increase willingness of work in employees because forcing them to work is different from making them to work with happiness. The main object of the research work is to know the effect of promotional strategies on employee's performance. This study is focused on employees who work in bank on different basis. Through this study the efforts are taken to find out what is the actual impact of promoting employees on their performance and indirectly on the productivity of organization.

Keywords: - productivity, performance appraisal, Strategies of promotion, Motivation tool.

Introduction

Human resource is the actual backbone of any kind of organization. No one can imagine running business without human resource but when it comes to giving them promotion most of the institute don't give that much importance which is necessary to be given to the employees used in the organization. Harman resource plays very prominent role in organization that is why duty of the head person to keep their employees satisfied. The success of organization is depend of the human resource they have promotions is powerful strategy for motivating employees.

Employee promotion serves as a crucial milestone, symbolizing growth, recognition, and new opportunities. It is a moment when hard work and dedication are acknowledged, and individuals are entrusted with increased responsibilities. But promotion is not just a mere change in job title; it carries significant implications for both employees and organizations alike. Employee promotion refers to the advancement of an employee to a higher position within an organization. It is a process by which an individual is given increased responsibilities, authority, and possibly a higher salary or benefits package. Employee promotions are typically based on merit, performance, skills, experience, and potential. Promotions can occur at the same job level. Here, an employee takes on additional responsibilities and becomes a senior member of their current team. They can also involve moving to a higher job level, like being promoted from a junior position to a managerial role.

As per the study success of any organization is based on proper human resource management and development. Banks are also not exception for this rule. Banking system is totally depending on person to person contact/conversation i.e. between bank employees & customer. Working of banks is depending on their employees. Banking employees face directly to their customers every day. Thus, more part of success and failure of the banks are depending on how much the employees are satisfied? Are they happy with their work life? Etc. Properly trained, qualified efficient and satisfied staff is required for banking services.

Employee productivity in general parlance refers to the assessment of efficiency of an employee or group of employees. Employee productivity has been an area of high significance, particularly, in a service industry like banking where inputs could be ascertained to a greater extent but quantification of output is difficult. The research paper is based on one of these motivational tools which is promotion. A promotion, understood as an advancement of employee's position within an organization, evaluated positively by the promoted, constitutes an important motivation factor.



Key Concept / Definition

- "A promotion is the transfer of an employee to a job which pays more money or one that carries some preferred status." —Scott and Clothier
- The formation and working of the Co-operative Societies in India is governed by the Co-operative Societies Act, 1912, a Central Act. Section 4 of the Act defines Co- operative Society as "a society which has in its objectives the promotion of economic interest of its members in accordance with Co-operative principles". This Act facilitates the formation of Co-operative Societies for the promotion of thrift and self-help among agriculturists, artisans and persons of limited means.
- Accor according to Dale Yoder, Promotion is "A movement to a position in which responsibilities and presumably, prestige are increased"
- Arun Monappa & Mirza S. Saiyadain, The upward assignment of an individual in an organization's hierarchy, accompanied by increased responsibilities, enhances status and usually with increased income though not always so.

Literature review

Mohan – The labour productivity of the top four banks in India (which includes one de novo private bank) and the four state-owned Chinese banks indicates that except the private bank, the top three public sector banks in India recorded much lower employee productivity.

Kumar and M. -The inefficiency is the main factor contributing to the high cost of banking services in India. The study of the employee productivity and employee cost ratios between the traditional banks and modern banks from 1997 to 2008 concludes that the performance of the modern banks (foreign and new private sector banks) was much superior to the traditional banks (public sector and old private sector banks). However, the gap between the performance of modern and traditional banks had shown a decreasing trend.

Mrs. C. Sumitha & Dr. R.Padmaja (July 2017) – Work condition at bank and promotion in bank. Job satisfaction was analysed threadbare with respect to designation, work experience and educational qualification of respondents. The insights gained by this differential analysis have brought out areas of improvement and has given a clear path to personnel managers to improve Job satisfaction among Indian Bank employees

According to Dale Yoder- Promotion is "A movement to a position in which responsibilities and presumably, prestige are increased"

Arun Monappa & Mirza S. Saiyadain – The upward assignment of an individual in an organization's hierarchy, accompanied by increased responsibilities, enhances status and usually with increased income though not always so.

Nichole Gunn (2018): in the article titled "Encouraging Employee Motivation Through Internal Promotion" explains the relationship between responsibility and motivation. The author states that giving employees extra responsibility can motivate them which is done through promotion. Job security and stability can improve employee's response towards the organisation. When employees are promoted the "potato chip effect" can kick in which is – once you've tasted one, you cannot stop. Along with benefits for employees, promotion is helpful for companies as it improves the Company's culture and working environment. It also reduces time and expenses incurred training new onboard employees. When an employee feels stuck and senses no feeling of advancement, they tend to grow a feeling of resentment towards the job and hence promotion helps organisations to avoid such a feeling in the minds of the employees.

Research Scope

This study is conducted to understand the impact of Promotional strategies and the methods—used to give them promotion in the bank. Private and public sectors banks are covered to study what kind of impact the employees got because they of these strategies in promotion. How performance appraisal system make employees feel satisfied. All employees will be studied to do proper analysis of impact of promoting them. Promoting employees is another important part of any organisation but to know the impact of implementation about promotion system in



employees this study is conducted and obtained the happiness and satisfaction level of employees towards strategies used in banks to upgrade them.

HRM policy basically focus on employees and the promotion of employees is essence of soul of HRM policy but the life of business organisation can be smooth if the employees of that organisation is happy towards their job performance and the reward they get. Only Financial reward cannot make them happy. The non-financial reward is also important. Through this study we will understand the methods which are generally getting used are having good impact on their performance or not. This study will help the banks to know about the impact promotion strategies and others to understand the methods used to promote employees.

Objective of the research

- 1. To know impact of strategies used to promote employees.
- 2. To study the Impact of Promotion on the productivity of organization
- 3. To understand impact of promotional Strategies on employees performance
- 4. To get information about satisfaction level of employees after getting promotion.

Research Methodology:-

The information obtained from private and public sector bank's employees situated in Latur district and surrounding areas. Population of research is bank employees work on permanent and contractual basis with the number of employees as many as 50 employees. This sampling uses simple random method.

To accomplish this study data is collected by primary and secondary data source .A structured questionnaire is used to collect the responses from the employees of the bank in the city.

Primary Data -Filled up questionnaire from 50 respondents.

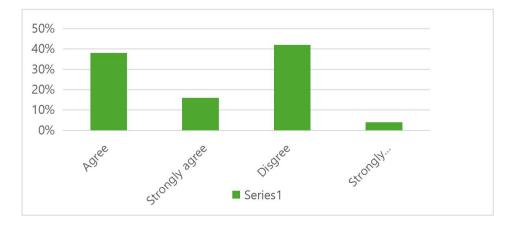
Secondary data –Research papers, internet based data of working people, books and thoughts of thinkers in HRM, Newspaper article are used.

Hypothesis of the study:-

- Promotional strategies in the bank are suitable for employees. (H0)
 According to only 12% respondents the state of happiness is very good therefore the hypothesis is rejected
- Promotional strategies have negative impact on performance of employees.(H1)
 % respondents have stated that their productivity is affected by promotional strategies hence this hypothesis is accepted

Data Analysis and Interpretation

Graph 1:- Opinion about the strategies used to promote them are according to their performances





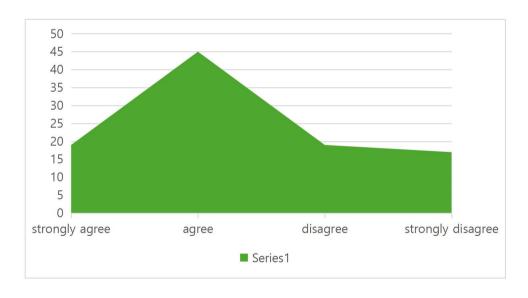
Only 42% of the respondents have stated that they disagree with the statement and 16% of the respondents have stated that strategies used are not according to their skill, at the same time 38% of them say they are agree but 4% of the total are strongly disagree.

Graph 2:- How is the activeness among employees after implementing the promotional strategies?



Only 12% of the employees working in banks have stated that the activeness in the bank is very good at the same time 32% of them have straight way mentioned that the strategies of their promotion is average in nature and 52% of the employees say it's good but 4% of them say it's poor.

Graph -3 Performance get affected because of promotion.



19 % of the employees working in banks have strongly agreed that their performance get affected due to promotion. According to 45% of employees are agree that promotion affects their performance whereas only 19% respondents have disagreed but 17% of them reactive in negative mode.



Table 1:-	Standard of li	iving of employees	get affected by	promotional strategies.

Sr. No	Particulars	No of Respondents (in %)
1	Strongly Agree	20
2	Agree	40
3	Disagree	20
4	Strongly Disagree	30
5	Total	100

Table-2 Promotional Methods are used in appropriate way.

Sr. No	Particulars	No of Respondents (in %)
1	Strongly Agree	25
2	Agree	45
3	Disagree	15
4	Strongly Disagree	15
5	Total	100

Finding & Concussions

- Promotional Strategies affected on the performance of employees.
- The employees are taken the promotion which is not suitable or not appropriate according to their skill.
- Promoting employees directly affect productivity of organisation.
- After implementing promotional strategies it has showed that it has negatively impacted on the performance of employees.
- There is direct link between promotional strategies and performance of employees

Suggestions

Training to human resource should be encouraged in banks. Methods should be suitable for employees to increase enthusiasm. Banks should promote award based activities so that employees will do hard work and at the end they could be able to achieve promotion jobs for employees to attract fresher. Higher authority should consider them on managerial level. Provide good working conditions and facilities according to promotions. Higher authority must check on circumstances of promotionperformance should be evaluated appropriately and regularly without being biased. Employer should be aware about performance so that they could focus on real performance. Training must be provided immediately after performance check to make employees ready for next promotion based activity.

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WOMEN EMPOWERMENT: A PATHWAY TO GENDER EQUALITY AND SUSTAINABLE DEVELOPMENT

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Abstract

Women empowerment is a critical component for achieving gender equality and sustainable development in contemporary society. It encompasses a wide range of issues including social, economic, political, and cultural dimensions. This paper explores the various facets of women empowerment, the barriers women face, and the strategies that can be implemented to foster empowerment at community, national, and global levels. By emphasizing the positive impacts of empowering women on society as a whole, this paper asserts that women's empowerment is not merely a women's issue but a vital societal issue.

Introduction

The term "women empowerment" has gained significant traction over the past few decades, reflecting a global recognition of the need to advance women's rights and opportunities. The 2030 Agenda for Sustainable Development explicitly recognizes gender equality and the empowerment of women and girls as critical to achieving sustainable development. Despite progress, women continue to face systemic barriers that impede their ability to thrive and contribute fully to society. This paper examines the importance of women empowerment in various realms, including education, health, economic participation, and political representation.

The Significance of Women Empowerment

1. Economic Development

Empowering women significantly contributes to economic development. According to the McKinsey Global Institute, closing gender gaps in labor force participation could add \$12 trillion to global GDP by 2025. Women who are empowered economically are better positioned to invest in their families and communities, leading to a ripple effect of improved living standards.

2. Social Well-Being

Women empowerment has a profound impact on social issues such as health and education. Educated women are more likely to ensure that their children receive an education, which paves the way for generational change. Additionally, women who have control over their reproductive health and access to healthcare services experience better health outcomes for themselves and their families.

3. Political Representation

Women's participation in political processes is vital for democracy and governance. When women are included in decision-making, policies tend to be more inclusive and reflective of the needs of the entire population. Women leaders, in particular, have been shown to prioritize social issues, which can lead to enhanced community welfare.

Barriers to Women Empowerment

Despite the recognized benefits, women around the world face numerous barriers to empowerment:

1. Socio-Cultural Norms

In many societies, traditional roles and expectations constrain women's opportunities and limit their mobility. Gender stereotypes perpetuate the idea that women should prioritize home and family over careers or education.



2. Access to Education

Educational disparities continue to exist, with millions of girls worldwide unable to complete primary and secondary education due to poverty, early marriage, or cultural practices that prioritize boys' education.

3. Economic Inequality

Women are often overrepresented in low-wage jobs and underrepresented in leadership positions. The gender pay gap persists across all sectors, further entrenching economic inequalities.

4. Political Underrepresentation

Globally, women's representation in political offices remains disproportionately low. Barriers include discrimination, cultural norms, and a lack of access to resources that facilitate political engagement.

Strategies for Empowerment

To overcome the barriers to empowerment, a multifaceted approach is essential:

1. Education and Skill Development

Investing in education is paramount. Programs that support girls in completing their education, including scholarships and mentorship opportunities, can create pathways to empowerment. Vocational training can also equip women with skills to enter the workforce or start their own businesses.

2. Economic Initiatives

Microfinance programs and entrepreneurship training can help women gain financial independence. Governments and organizations should also implement policies that promote equal pay and support women's participation in higher-paying sectors.

3. Advocacy and Legal Frameworks

Strengthening legal protections against discrimination and violence is critical. Advocacy efforts to raise awareness about women's rights and to challenge harmful cultural norms should be prioritized.

4. Political Participation

Encouraging women's political participation through quotas, training programs, and support networks can help increase women's representation in decision-making roles. Engaging men as allies in the fight for gender equality is also vital.

Conclusion

Women empowerment is an essential component of achieving gender equality and sustainable development. By addressing the barriers that prevent women from realizing their full potential, societies can unlock a wealth of talent and innovation for the benefit of all. The collective effort of governments, communities, and individuals is necessary to create an environment where women are empowered to lead, participate, and thrive. Investing in women is not just a moral imperative, but a strategic one that promises to foster resilient economies and just societies.

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A STUDY ON CONSUMER BUYING BEHAVIOR TOWARDS GOLD ORNAMENTS PURCHASE WITH SPECIAL REFERENCE TO LATUR DISTRICT

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Abstract

The purpose of this study is to look at the shopping habits of the residents of Latur City in terms of gold jewelry. Information was collected using survey method and questionnaire with 120 respondents. Simple percentage analysis and Likert scale analysis were used in this project. According to the findings of the study, consumers are willing to buy gold jewelry. Most of the customers are interested in gold loans. Customers only expect discounts on plans. These are some of the study findings. As a result, the study reveals that consumers are satisfied with their gold jewelery buying habits.

Keywords: Consumers Behavior, Gold Jewelery, Latur District

Introduction

In India, gold is mainly promoted for physical buying and selling as well as for use as decoration. It has value as a savings and investment vehicle and is a popular investment in India. Jewelry is not only for appreciation, but also for security in times of trouble. It is usually expensive and can be sold on any occasion when money is needed. Women in India are given jewelery at many stages of their lives, including birth, puberty, marriage and motherhood. When a product is expensive, bought only once, and is particularly self-expressive, consumers can be easily distracted. It is a learning process for buyers to form product beliefs, attitudes and make informed purchase decisions. Indian marketers should be heavily involved in customer information gathering and evaluation activities; They should make it easy for customers to know the product-category qualities and their importance.

Reviwe Of Literature

Consumers considered how they are interested in jewelery manufacture, according to A. Joseph Xavier and G. Kamalam (2015). The business outcome is positive, and consumers are interested in purchasing a product. Jewelery is a decorative object made of precious metals such as gold, silver, and gemstones. Estimate the typical Indian jeweler's investment from 1980 to 1990. Early on, an 18 carat gold jewel was manufactured, but it was not popular, therefore it was best to abandon the endeavour. Tanishq, Oyzterbay, Gili, and Carbon, among others, have opened stores across the country. Only their family were trusted by customers. Jewelers are attempting to shift people's attitudes through appealing designs and reasonable prices. In both local and branded jewellers, there is a lot of competition. Finally, gold is significant in everyone's life.

Organize plays to attract consumers to enhance sales, according to Shikha Pareek Joshi and Dr. Harsh Dwivedi (2016). During special occasions such as weddings and birthdays, sales will increase. Companies select the appropriate brand. The purchasing power of the Lower, Middle, and Upper classes will be explained. The fashion wear segment will see an increase in income and promotion. Customer behaviour will be consumed in three ways: variety, quality, and price. MMTC and SBI will enable gold imports, and foreign banks will supply billions to India. NIFT, IIGJ Pearl academy defines the range of designs. Different types of markets exist in every jewelery store.

NIFT, IIGJ Pearl academy defines the range of designs. Every jewelery store has a unique marketing strategy to capture the tastes and preferences of its clients.

Consumer behaviour in the buying of gold jewelery is demonstrated by C. Gomathy and N. Yesodha Devi. In India, the gold market buys and sells gold in the form of jewelery. Women consumers wore gold for a variety of purposes. India is the gold jewelery' fastest-growing market. Can people increase their investments by using gold? Deposits and mutual funds held by a bank or other financial institution. Consumer behaviour has evolved



dramatically during the last few years.

As a gold market maker, I am unable to comprehend the quality and preferences of my customers. Understanding the consumer and what is going on in their heads is a difficult undertaking. It is a culture to dress up, especially for ladies. The consumer is willing to purchase gold jewelery since it will assist them in an emergency situation, either now or in the future.

Statement Of The Problem

Gold is a highly prized and coveted metal. Jewelery isn't just for show; it's also for security in times of need. It's often pricey, and it may be sold on any occasion when cash is needed. Branding can be found in jewelery as well. Buyers' income level has a significant impact on the type of jewelery they purchase. The market was undergoing a rapid shift from viewing jewelery as a means of saving to viewing it as aesthetically appealing adornment. The emphasis has shifted away from substance and toward style. A few companies have even capitalised on Indian traditions to sell and build their brands. The current generation was interested in attractive up-to-date jewelery while avoiding classic gold jewelery. As a result, it's critical to examine people's regular purchasing habits in the United States and accept modifications in accordance with current fashion demands.

Objectives Of The Study

- To study the consumer behavior
- To analyze the factors influencing to purchase gold jewelry.
- To analyze whether a gold price hike influence their purchasing decisions

Research Methodology

Research design is a "blueprint" for research that addresses issues such as which topics to investigate, which data are relevant, what data to collect, and how to analyse the results.

• Sampling Technique

The respondents' data was collected using a convenience sample technique.

• Sampling Size

The trial is limited to 120 participants.

• Primary Data

Primary data was gathered through the use of questionnaires.

Secondary Data

Secondary data from books, periodicals, journals, and numerous websites.

Limitation Of Study

- This study is limited up to Latur District only
- There is no comparison between Male and Female buyers.

Findings

- The majority of the respondents (58 percent) are female.
- The majority of the respondents (51%) are between the ages of 21 and 30.
- Graduates make up the majority of the respondents (63 percent).



- The majority of the respondents (55 percent) are students.
- The majority of respondents (67.5%) have a monthly salary of up to Rs. 25,000.
- The majority of responders (47%) have fewer than three family members.
- The majority of respondents (67%) choose to purchase in the form of an ornament.
- The majority of respondents (50%) want to buy Only When Required
- The majority of the respondents (30%)
- The majority of respondents (50%) want to buy Only When Required.
- The majority of responders (30%) purchase gold based on its design.

Suggestions

Introducing more appealing cash discount Programmes to customers may increase sales. Gold jewelry has a resale value, which is a significant benefit and asset for the buyer.

The majority of respondents anticipate excellent customer service from jewelery stores.

Adding extra sales promotion measures in response to evolving customer taste preferences.

More emphasis could be placed on gold quality, incentives, and discounts in order to attract more customers.

Conclusion

The current study looked into the buying habits of Latur residents when it came to gold jewelery. Today's market is consumer-driven, and customers are prioritised. Consumer preferences are always shifting in response to their requirements, wishes, choices, and fashion. Consumers have higher expectations when purchasing jewelery. As a result, the jewelery should enhance its quality, designs, waste and manufacturing costs, as well as customer service. Nowadays, jewelery items are experiencing an uptrend, so jewelery should take these factors into account and maintain its values of trust, authenticity, reliability, and objectivity of the respondents in order to better serve them. Gold jewelery is a symbol of achievement, power, and riches in many cultures, thus purchasing it is quite important. Based on the foregoing, client behaviour and approach to jewelery purchases in Latur City have played an important role.

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LEARNING DEEP FEATURES FOR SCENE RECOGNITION USING PLACES DATABASE

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Abstract

This paper provides an in-depth review of the evolution of machine learning techniques in image recognition, tracing the development from classical methods to cutting-edge technologies. Despite these advancements, the paper addresses ongoing challenges such as data quality issues, high computational demands, and ethical concerns related to bias and privacy.

The key findings emphasize the transformative impact of deep learning on image recognition, highlighting substantial improvements in model performance and versatility. The paper concludes by discussing emerging trends and future research directions, advocating for continuous innovation and interdisciplinary efforts to overcome existing challenges and fully exploit the potential of machine learning in image recognition.

Introduction

Understanding Image Recognition

Image recognition, a crucial subset of computer vision, involves the capability of a system to identify and interpret objects, patterns, and features within digital images. This process typically involves several steps: image acquisition, preprocessing, feature extraction, and classification..

Applications of Image Recognition

a. Healthcare

- Medical Imaging: Image recognition has dramatically enhanced the analysis of medical images, such as X-rays, MRIs, and CT scans. By applying machine learning algorithms to these images, healthcare professionals can detect anomalies like tumors, fractures, and lesions with greater precision and speed. For instance, deep learning models can identify cancerous cells in pathology slides or assist in diagnosing diseases through radiological images.
- **Disease Diagnosis and Monitoring**: Algorithms can track changes in imaging data, helping clinicians make informed decisions about treatment and intervention.
- Remote Consultation: Image recognition enables telemedicine applications where medical images are analyzed remotely, facilitating consultations and diagnostics without the need for physical presence.

b. Autonomous Vehicles

- Object Detection and Classification: In autonomous vehicles, image recognition systems are crucial for detecting and classifying objects on the road, such as pedestrians, other vehicles, traffic signs, and lane markings.
- Navigation and Path Planning: Image recognition helps in understanding and mapping the driving environment.
- **Driver Assistance Systems**: Advanced Driver Assistance Systems (ADAS) utilize image recognition to provide features such as lane-keeping assistance, adaptive cruise control, and automatic emergency braking.



c. Security

- Surveillance and Monitoring: Systems can analyze video feeds to detect suspicious activities, recognize faces, and identify potential security threats in real-time. This application is widely used in public safety, airports, and private security systems.
- **Facial Recognition**: It is employed in various contexts, including unlocking smartphones, securing access to buildings, and verifying identities in financial transactions.
- Forensic Analysis: Image recognition aids forensic investigations by analyzing video footage and images from crime scenes.

Importance of Machine Learning Machine learning has revolutionized image recognition by shifting from manual feature extraction to automated, deep learning approaches. Here's how:

- Automatic Feature Learning:
- Enhanced Accuracy
- Scalability and Adaptability
- Real-Time Processing
- Improved Robustness

Machine Learning Techniques for Image Recognition

Classical Machine Learning Approaches:

Support Vector Machines (SVMs): Support Vector Machines (SVMs) are a type of supervised machine learning algorithm used for classification and regression tasks. They are particularly well-suited for binary classification problems but can also be extended to multi-class classification. Here's an overview of the basic concepts of SVMs and their application in image classification:

Decision Trees and Random Forests: Decision Trees

Definition:

• A decision tree is a flowchart-like structure used for classification and regression tasks. It models decisions and their possible consequences in a tree-like format, with nodes representing decisions or tests, branches representing the outcome of those tests, and leaf nodes representing the final decision or prediction.

Random Forests

Definition:

A random forest is an ensemble learning method that combines multiple decision trees to improve predictive
performance. It aggregates the predictions of several decision trees to produce a more robust and accurate
model.

Case Studies

Healthcare: Image recognition technology has transformative potential in healthcare, offering advancements in diagnostics, treatment planning, and patient monitoring. Here are some notable case studies highlighting its applications:

Detection of Diabetic Retinopathy

Overview: Diabetic retinopathy is a complication of diabetes that affects the eyes and can lead to blindness if not detected early.



Technology Used:

• Convolutional Neural Networks (CNNs): CNNs are employed to analyze retinal images for signs of diabetic retinopathy, such as microaneurysms, hemorrhages, and exudates.

Case Study:

• **IDx-DR**: The IDx-DR system is an FDA-approved AI tool that uses CNNs to analyze retinal images and detect diabetic retinopathy.

Cancer Detection and Diagnosis

Technology Used:

• **Deep Learning Models**: Advanced deep learning models, including CNNs and transfer learning, are used to enhance the accuracy of cancer detection and diagnosis.

Case Study:

• Google Health's Mammogram Analysis: Google Health developed a deep learning model to analyze mammograms for breast cancer detection.

Pathology Image Analysis

Overview: Automated image recognition systems are used to analyze pathology slides, helping pathologists in diagnosing diseases and planning treatments.

Technology Used:

• Image Segmentation and Classification: Techniques such as image segmentation and classification are used to identify and quantify different tissue types and anomalies in pathology slides.

Case Study:

• PathAI: PathAI is an AI-driven platform that uses machine learning algorithms to assist pathologists in analyzing pathology images.

Radiology Image Analysis

Overview: Image recognition technologies are applied to various types of radiological images, including X-rays, CT scans, and MRIs, to assist in diagnosing and monitoring diseases.

Technology Used:

• **Deep Learning and AI Algorithms**: Algorithms analyze radiological images to detect abnormalities such as tumors, fractures, and lesions.

Case Sudy:

Zebra Medical Vision: Zebra Medical Vision develops AI algorithms for analyzing medical imaging data.
 Their algorithms can detect a range of conditions, including lung diseases, cardiovascular issues, and more, from various imaging modalities.

Skin Disease Detection

Overview: Automated image recognition systems are used to analyze skin lesions and detect skin diseases, including melanoma and other forms of skin cancer.



Technology Used:

• CNNs and Transfer Learning: CNNs and transfer learning techniques are used to analyze dermatological images and classify skin conditions based on lesion features.

Case Study:

 Dermatologist AI by IBM Watson: IBM Watson developed an AI system to analyze dermatology images for skin cancer detection. The system uses deep learning to classify skin lesions and assist dermatologists in diagnosing conditions.

Wavmo

Company Background: Waymo's self-driving technology is widely recognized for its innovation and contributions to advancing autonomous driving.

Technologies Used

- 1. Image Recognition:
 - Cameras:
 - Deep Learning Models:
- 2. Sensor Fusion:
 - LiDAR
 - Radar

Case Study: CCTNS (Crime and Criminal Tracking Network & Systems)

Overview: The CCTNS initiative is a national project aimed at modernizing and integrating the Indian police force's crime and criminal tracking capabilities.

Technologies Used

- 1. Image and Video Surveillance:
 - Cameras: High-resolution CCTV cameras are installed in various public spaces, including cities, towns, and transportation hubs.
 - **Image Recognition Algorithms**: The footage is analyzed using image recognition algorithms to detect and identify individuals, vehicles, and suspicious activities.

2. Facial Recognition:

- Facial Recognition Systems: These systems are integrated with CCTNS to identify individuals based on facial features.
- **Integration with Databases**: Facial recognition data is compared with existing criminal databases and records to identify suspects and track criminal activities.

Summary of Key Findings

- 1. **Deep Learning Algorithms**: Models like ResNet, BERT, and GPT-3 have set new benchmarks in image classification, text generation, and multimodal understanding.
- 2. **Reinforcement Learning**: These advancements are pivotal in robotics and real-time decision-making applications.

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- 3. **Multimodal Integration**: This integration has enhanced user interactions, improved automation, and enabled new possibilities in virtual and augmented experiences.
- 4. **Healthcare Applications**: In healthcare, the fusion of image recognition with diagnostic and treatment systems has improved the accuracy of medical imaging analysis and personalized treatment plans. These advancements support more effective and timely healthcare solutions.

Conclusion

In conclusion, the advancements in machine learning algorithms and their integration with image recognition have significantly impacted diverse fields, from enhancing user experiences in AR/VR to improving diagnostic capabilities in healthcare. As these technologies continue to evolve, they promise to drive further innovation and transform the way we interact with and understand the world. By addressing the associated challenges and focusing on responsible implementation, we can harness the full potential of these advancements to create meaningful and beneficial applications across various domains.

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THE IMPACT OF INDIA'S DEMOGRAPHIC DIVIDEND ON ECONOMIC GROWTH

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Abstract:

India, characterized by its predominantly young demographic, is composed to experience a demographic dividend, which occurs when the working-age population (generally defined as individuals aged 15-64) surpasses the non-working-age population. This situation presents the nation with an opportunity for enhanced economic productivity and growth. The emergence of this dividend is attributed to a reduction in the total fertility rate, resulting in a decrease in youth dependents and an expansion of the labor force. This paper examines various factors that underscore the importance of this demographic dividend for India. In conclusion, while the demographic dividend presents India with a distinctive opportunity for economic progress, its actualization depends on the country's capacity to enact effective policies and make necessary infrastructural improvements. If managed effectively, India could harness its youthful population to enter a phase of sustained economic growth and prosperity. This paper examines the impact of India's demographic dividend on its economic growth. With a significant portion of the population in the working-age group, India has a potential advantage in boosting its economic development. This paper explores how the demographic dividend influences economic growth through various channels such as labor market dynamics, productivity, and consumption. It also discusses the challenges and policy recommendations to effectively harness this potential.

Keywords: Demographic dividend, distinctive opportunity and economic growth.

Introduction:

The demographic dividend pertains to the economic expansion that occurs due to alterations in the age composition of a nation's population. This phenomenon is generally triggered by reductions in both fertility and mortality rates. The demographic dividend refers to the economic expansion that occurs due to alterations in the age composition of a nation's population, often stemming from declines in fertility and mortality rates. These demographic changes generally result in enhanced productivity among the working-age population, thereby increasing per capita income. The initial phase of a demographic dividend may extend for 50 years or more, while the subsequent phase can persist indefinitely as an aging populace engages in diverse investment opportunities. Demographic dividends can manifest through savings, labor supply, human capital, and overall economic growth.

India currently has 62.5% of its population within the age range of 15 to 59 years, a figure that is steadily increasing and is projected to reach its highest point around 2036, when it is expected to be approximately 65%. These demographic characteristics suggest the presence of a demographic dividend in India, which commenced in 2005-06 and is anticipated to continue until 2055-56. As per the Economic Survey of 2018-19, India's demographic dividend is expected to peak around 2041, at which time the proportion of the working-age population, defined as those aged 20 to 59 years, is projected to reach 59%.

Demographic dividends arise in nations that experience reductions in both fertility and mortality rates. When a country has low birth rates alongside low death rates, it benefits economically from the enhanced productivity of its workforce. As the number of births decreases, the proportion of young dependents diminishes in relation to the working-age population. This shift allows for a greater allocation of resources, as there are fewer dependents to support, enabling investments in various sectors that can drive economic growth and improve the future well-being of its citizens.

To attain a demographic dividend, a nation must undergo a demographic transition, moving from a predominantly rural agrarian economy with high fertility and mortality rates to an urban industrial society marked by lower fertility and mortality rates. During the early phases of this transition, a decline in fertility rates results in a labor

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force that expands more rapidly than the dependent population. Consequently, per capita income tends to increase at a faster rate during this period. This economic advantage represents the initial dividend for a country that has successfully navigated the demographic transition.

According to United Nations Population Fund (UNFPA), demographic dividend means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)".

Review Of Literature:

The global landscape is marked by a diverse array of demographic regimes. Historical shifts in demographics provide insight into the contemporary trends and structures observed today. The demographic transition theory elucidates the evolution of population dynamics over time, originating from the research of Warren Thompson, who outlined a demographic history in the 1920s. The phrase "demographic transition" was introduced by Frank W. Notestein. This theory posits that each nation progresses through several stages influenced by fertility and mortality rates, which subsequently affect population growth rates.

Demographic transition encompasses three primary phases. The initial phase is characterized by high birth and death rates, resulting in a low population growth rate. In the second phase, while the birth rate remains elevated, a significant decline in the death rate occurs, often attributed to enhancements in food supply or public health measures that reduce child mortality. The third phase witnesses a decrease in birth rates, driven by improvements in literacy, increased returns on investment in children, and greater access to contraceptive methods. Some scholars propose two additional stages: the fourth stage, where birth and death rates stabilize, and the fifth stage, where fertility rates drop below the replacement level. It has been suggested by certain authors that in this fifth stage, fertility rates may experience an uptick.

The term "window" can also be characterized as the period in which the number of producers exceeds that of consumers (Cutler, Poterba, Sheiner, and Summers, 1990). This alternative definition of the demographic window is based on the economic support ratio, which represents the proportion of producers to consumers. In this context, consumers are identified as the non-productive segments of the population, specifically children aged 0-14 years and the elderly aged 65 years and older. The length of the demographic window is crucial in determining the potential demographic dividend, which refers to the net contribution to economic growth resulting from an increased proportion of individuals in the working-age category. Bloom and Williamson (1998) describe the demographic dividend as the disparity between the growth rates of the working-age population and the total population.

The interplay between population growth and economic development carries significant consequences for policymakers aiming to maximize the efficiency of limited resources. Literature identifies three primary perspectives regarding the influence of population changes on economic factors (Bloom et al., 2003): population pessimism, which posits that population growth adversely impacts economic growth; population optimism, which argues that population growth fosters economic growth; and population neutralism, which suggests that there is no correlation between economic growth and population growth. Notably, these perspectives predominantly concentrate on general population growth and economic growth, overlooking the effects of age structure.

Objectives Of The Study:

- 1. To understand the impact of India's demographic dividend on economic growth.
- 2. To study the challenges associated with India's Demographic dividend and Economic Growth.

Research Methodology:

Research Methodology is a systematic process to solve research problems. The objective of research is to find out the solution regarding research problems by using scientific and systematic technique. Data collection for this research study is collected through both the sources i.e. primary and secondary.



Impact of India's demographic dividend on Economic Growth:

India possesses one of the youngest demographics in a world that is increasingly aging. By the year 2020, the median age in India is projected to be merely 28 years, in contrast to 37 years in both China and the United States, 45 years in Western Europe, and 49 years in Japan. Since 2018, the population of working-age individuals in India, defined as those aged between 15 and 64, has surpassed that of dependents, which includes children aged 14 and younger as well as individuals aged 65 and older. This significant increase in the working-age population is expected to persist until 2055, marking a span of 37 years from its onset. This demographic shift is primarily attributed to a decline in the total fertility rate (TFR), which measures the number of births per woman, following a stabilization in life expectancy. A report on India's demographic dividend by the United Nations Population Fund (UNFPA) reveals two noteworthy insights. The opportunity for demographic dividend in India is projected to last for five decades, from 2005-06 to 2055-56, which is longer than that of any other nation globally. Furthermore, this demographic dividend is accessible at varying times across different states due to the diverse behaviors of population parameters.

- Enhanced economic growth is driven by increased economic activities resulting from a larger working-age population and a reduced dependent population. This growth will manifest in several ways: An expanded labor force that boosts the economy's productivity.
- A greater fiscal capacity generated by the demographic dividend, allowing for a reallocation of resources from child-related expenditures to investments in both physical and human infrastructure.
- An increase in female workforce participation, which typically follows a decline in fertility rates, serving as a potential new avenue for economic growth.
- A rise in the savings rate, as individuals in the working age group are typically in their prime saving years.
- A significant transition towards a middle-class society, characterized by the emergence of an aspirational class.
- Historically, the demographic dividend has accounted for up to 15% of overall growth in developed economies.
- Accelerated industrialization and urbanization have occurred due to a larger population seeking employment, which in turn stimulates higher economic activity.
- With over 65% of its population in the working age bracket, India is poised to emerge as an economic superpower, potentially providing more than half of Asia's workforce in the coming decades.
- Effective policymaking that incorporates population dynamics into the planning and execution of programs is likely to produce significant socio-economic benefits and greater advantages for the populace.

Challenges associated with demographic dividend:

- 1. **Asymmetric demographics:** The increase in the working-age population ratio is expected to be primarily observed in some of India's most impoverished states. The potential demographic dividend can only be fully harnessed if India successfully generates meaningful employment opportunities for this segment of the population.
- 2. **Skills deficit:** A significant portion of future job creation will demand advanced skills, and the inadequacy of skills within the Indian workforce presents a substantial obstacle. Without addressing this skills gap, India may struggle to capitalize on emerging opportunities, given its limited human capital.
- 3. **Insufficient human development indicators:** India is positioned at 130 out of 189 nations in the UNDP's Human Development Index, a situation that is concerning. It is imperative to enhance health and education metrics significantly to develop a more efficient and skilled workforce in India.
- 4. **The informal economy** in India poses an additional challenge to fully benefiting from the demographic transition occurring in the country.
- 5. **Jobless growth:** There is increasing apprehension that future economic growth may not translate into job creation, influenced by factors such as de-industrialization, de-globalization, the fourth industrial revolution, and advancements in technology. According to the NSSO Periodic Labour Force Survey 2017-18, the labor force participation rate for individuals aged 15-59 years in India is approximately 53%, indicating that nearly half of the working-age population remains unemployed.



Conclusions:

The demographic dividend in India represents a remarkable opportunity, characterized by substantial young, working-age population poised to drive economic growth, foster innovation, and enhance global competitiveness. This unique phase in India's demographic evolution, marked by a low dependency ratio and a median age that ranks among the youngest globally, holds the promise of significant economic and social advancements.

The analysis of India's demographic dividend reveals significant implications for economic growth. The youthful population presents opportunities for increased productivity and innovation, potentially driving economic expansion. However, realizing this potential requires strategic investments in education, healthcare, and job creation to harness the capabilities of the workforce effectively. Without addressing these critical areas, the demographic advantage may not translate into sustainable economic benefits. India's demographic dividend offers an exceptional economic opportunity that, with appropriate policies and investments, could lead to a sustained period of growth and prosperity. However, a balanced approach that addresses immediate needs while preparing for future demographic changes is essential.

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"SANITY OF STRESS MANAGEMENT OF COLLEGE FACULTIES IN LATUR CITY"

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Abstract:

Stress Management can be a real challenge in human life. We know that many people are affected by stress. There are different types of stress in the general life of humans. The general meaning of stress encompasses both its psychological and physiological aspects. The psychological stress refers to the mental and emotional strain or pressure that arises from perceived challenges, demands or threats. It often involves feelings of anxiety, worry or tension in response to various situations such as work pressure, relationship issues or life changes. While physiological stress describes the body's automatic response to challenges or demand. It triggers a series of physical reactions, such as the release of stress hormones, increased heart rate, muscle tension and changes in breathing pattern. These reactions are part of the body's fight or flight response. Effective management and Good lifestyle for human beings are the best ways to prevent stress. This paper highlights stress and its various concepts and how a person can live stress-free in daily life.

Keywords: Stress, Management, Human Life, Faculties.

Introduction:

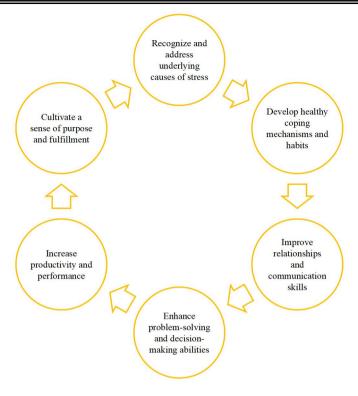
Stress has become a part and parcel of today's busy and mostly unhealthy lifestyle. On the face of it, it's not likely to happen at all, but there's certainly a lot we can do to minimize it. To begin with, you first need to figure out what is causing you stress. Is it your job, family matter or something else? As a preliminary step to managing it, identify the cause. The mantras of effective stress management are three-fold – controlling the 'situation', building emotional strength and adopting a positive attitude. Stress management refers to the intentional efforts made to reduce, mitigate, or tolerate stressors that impact an individual's mental, emotional, and physical well-being. It involves a combination of strategies, techniques, and practices aimed at enhancing resilience, promoting relaxation, and improving overall quality of life.

Stress management is a vital aspect of maintaining overall well-being in today's fast-paced and often overwhelming world. It involves the intentional effort to reduce, mitigate, or tolerate stressors that impact an individual's mental, emotional, and physical health. Effective stress management enables individuals to navigate life's challenges with greater ease, resilience, and adaptability. By understanding the complexities of stress and its far-reaching consequences, individuals can take proactive steps to develop coping strategies, cultivate emotional intelligence, and foster a supportive environment. This comprehensive approach empowers individuals to regain control, boost their mood, and enhance their quality of life. Below are the main types of stress:

Acute stress: This is short-term stress that goes away quickly. You feel it when you slam on the brakes, have a fight with your partner, or ski down a steep slope. It helps you manage dangerous situations. It also occurs when you do something new or exciting. All people have acute stress at one time or another.

Chronic stress: This is stress that lasts for a longer period of time. You may have chronic stress if you have money problems, an unhappy marriage, or trouble at work. Any type of stress that goes on for weeks or months is chronic stress. You can become so used to chronic stress that you don't realize it is a problem. If you don't find ways to manage stress, it may lead to health problems.





Review of literature:

Henry. D. Mason (2017) concluded in journal of students affairs in Africa about the academic stress, coping, meaning, psychological stress and qualitative research and found that the types of stressors, coping strategies and outcome of coping efforts

Dr. Bhanin. U. Pandya, Ms. Revathi. C. Deshpande and Ms. Anushree Karani (2007) stated in the journal of Arts Science and Commerce to understand the impact of academic stress upon performance and mental health of MBA Students. And found that the stress on academic institutions can have both positive and negative consequences if not well managed and academic institution have different work settings comparing to non-academic and therefore one would expect the different in symptoms, cause and consequences of stress.

Trivedi (2018) in International Journal of management and social science. To Study the symptoms of stress among youth, to measure the level of stress among youth and to know the strategies to cope up with stressor by the youth and found out that the setting of personal and professional objective keep them organized and planned helps to maintain time management and be upto date in the course work, get in involved with various activities, maintain communication with family, share view and problems with someone and have a positive thinking.

Quadir Bukhsh, abid Shahzad and Muzammil Nisa (2011) in procedia social and behavioral science. To find the common system of stress in University students, to find out causes stress in University students, to find out stress management techniques used by students and to recommend strategies to cop the stress.

Dr. A. Jayakumar and K.Sumathi (2014) in the journal International Journal of recent advances in organisation behaviour and decision science. To estimate the level of stress in higher secondary students studying in Salem District and to identify various Strategies for reducing stress to evaluate the effectiveness of stress management program and to determine the change of attitude after the stress management program to evaluate the efficiency of advocating stress management program. They have found that the students community in Higher Secondary School follow some and healthy ways to cope with stress by selecting negative strategies to avoid failure aiming to low for scheduling daily life etc



Research Design:

Objective-

- 1. To identify the most common sources of stress among the study population.
- 2. To determine the effectiveness of stress management techniques in reducing stress levels.
- 3. To explore the relationship between stress management and overall well-being.
- 4. To develop a stress management plan that can be implemented in a real-world setting.

Data Analysis and Interpretation

The research methodology is the main part of the research. Research methodology is the systematic approach used to conduct research and gather information. The present study is based on the primary as well as secondary data. The data Collected directly through interview of teachers working in latur city as well as from the various platforms likes books, journal and websites etc.

Table 1. Age of Respondent

Categories	Percentage
21-30	27
30-45	55
45 & Above	18



From the above table it is clear that major Contributor to our research is age group of 30-45 and it is 55%, secondly 21-30 age group having 27%.



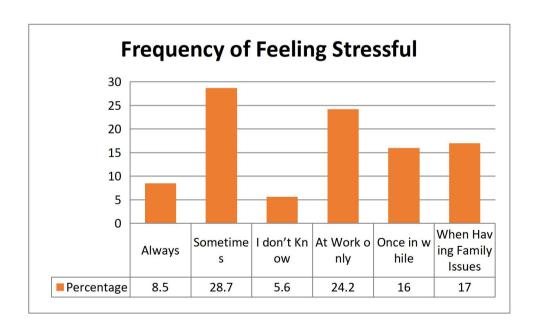
Table 2. Gender wise respondent

Categories	Percentage
Male	48
Female	52

From above table we can see the gender vise respondent of research, and the male respondent are 48% and Female respondent are 52%.

Table 3 Frequency of Feeling Stressful

Time of frequency	Percentage
Always	8.5
Sometimes	28.7
I don't Know	5.6
At Work only	24.2
Once in while	16
When Having Family Issues	17



Above table shows the frequency of respondent for stress level: 8.5% respondent said they feel stressed always while 24.2% respondent said that they feel stressed only at work place, 28.7% respondent said they sometimes in some situation feel stressful. 5.6% respondent said they don't know when they get stressed and 16% have said they feel stressed so rarely as once in a while. And 17% said they feel very stressed even at workplace if they are having some family issues.



From our study we have drawn following strategies to cope of with stress and suggested these among college faculties of Latur City.

Effective stress management encompasses:

- 1. Self-awareness: Recognizing personal stress triggers and responses.
- 2. Coping skills: Developing healthy habits and techniques to navigate stress.
- 3. Emotional regulation: Managing emotions to maintain a balanced state.
- 4. Lifestyle modifications: Making intentional choices to support well-being.
- 5. Social connections: Building and maintaining supportive relationships.
- 6. Personal growth: Engaging in activities that foster purpose and fulfillment.

By proactively managing stress, individuals can:

- 1. Enhance their ability to cope with adversity.
- 2. Improve their mental and physical health.
- 3. Increase productivity and performance.
- 4. Strengthen relationships and social connections.
- 5. Cultivate a sense of purpose and fulfillment.

Ultimately, stress management empowers individuals to take control of their well-being, navigate life's challenges with greater ease, and live a more balanced, resilient life.

Tactics of Stress Management for Faculties of Latur city

Be proactive

Physical activity can put you in the right frame of mind to identify the causes of your stress and find solutions. Exercise will not only make your stress disappear in a snap, but it will definitely reduce emotional intensity, clear your thoughts and help you deal with your problems more calmly.

• Take control of the situation

There is always a solution to every problem. If you continue to passively think that there is nothing you can do about my problem, you will only increase your stress. Take control of the situation. This will empower you and is an important part of finding solutions.

Connect with people

'A problem shared is a problem halved' - this adage is very apt for de-stressing situations. A good support network of colleagues, friends and family can ease your stress at work and help you see things differently. Being with friends and having a good laugh sometimes proves to be an excellent stress reliever.

Avoid unhealthy habits

Dependence on alcohol, smoking and caffeine are among the worst soothing agents for suffering. These unhealthy practices will never solve problems but create new ones. It may provide temporary relief but the effect will be short-lived and harmful to health.



Get involved in some volunteer work

People who help others become more resilient. Helping others in a worse situation than you can help you see your problem from a new perspective. Do one good deed every day. It can be as small as helping someone cross the street.

• Work smart, not hard

Good time management and efficient work prioritization leads to quality work. Slogging for long hours will make the work dull. Try to concentrate and complete the work within the stipulated time. A sense of accomplishment will automatically lead to sadness.

• Play with a positive attitude

Look at the positive things in life and the things you are happy and grateful for. Make a conscious effort to be more positive in life. Believe in the "If no one else can do it, I will do it" attitude.

• Accept the things you cannot change

It is not always possible to change the situation from above. Recognize and accept things as they are. Focus on what you can do best in such a situation

Finding & Conclusion:

Research on stress management has revealed that a multifaceted approach is most effective in mitigating stress. Studies have shown that regular exercise, mindfulness practices, and social support can significantly reduce stress levels. Additionally, setting realistic goals, prioritizing tasks, and taking regular breaks can help manage stress. Furthermore, practicing gratitude, self-compassion, and relaxation techniques such as deep breathing and progressive muscle relaxation can also help alleviate stress. Interestingly, research has also found that individuals who engage in hobbies and creative activities tend to experience lower levels of stress. Overall, a comprehensive stress management plan that incorporates physical, emotional, and social support strategies can lead to improved overall well-being and resilience. As to manage stress among the faculties, colleges should organize such programs for maintain employees heath being which help in stress management.

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"A STUDY OF PERCEPTION OF UG & PG STUDENTS TOWARDS SKILL DEVELOPMENT WITH REFERENCE TO LATUR CITY"

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Abstract

This research paper explores the perceptions of undergraduate (UG) and postgraduate (PG) students towards skill development initiatives in Latur City. As skill development becomes increasingly vital for enhancing employability, this study examines how these students view the relevance, effectiveness, and impact of such programs. Utilizing a mixed-methods approach that includes structured questionnaires and semi-structured interviews, the research captures a comprehensive range of opinions and experiences from students across various disciplines.

The findings reveal that while both UG and PG students recognize the importance of skill development, their perceptions differ significantly. UG students often regard skill development programs as supplementary, preferring more integrated and curriculum-based approaches. In contrast, PG students value these programs highly for their professional advancement and actively engage with specialized training opportunities.

The study also identifies discrepancies in the availability and quality of skill development resources, with PG students generally accessing more advanced and targeted programs compared to UG students. This disparity underscores the need for educational institutions to implement more inclusive and effective skill development frameworks.

Recommendations include enhancing curriculum integration of skill development, fostering stronger industry-academia collaborations, and tailoring programs to meet the diverse needs of students at various educational levels. The insights provided are intended to inform educators, policymakers, and industry stakeholders in refining skill development strategies to better support student career readiness.

Keywords: Skill Development, Employability, Educational Programs, Curriculum Integration, Industry Collaboration

Introduction:

In the contemporary job market, skill development is crucial for enhancing employability and career advancement. As industries undergo rapid transformation and technological innovations redefine job roles, there is an increasing need for educational systems to produce graduates who are not only academically proficient but also equipped with practical skills relevant to the workforce. This necessity for a robust skill development framework has gained significant attention in recent years, highlighting the gap between theoretical knowledge acquired through formal education and the practical skills required in professional environments.

Skill development programs are designed to enhance various competencies, including technical skills, soft skills, and industry-specific knowledge. They are intended to complement academic education and ensure that students are ready to meet the demands of the workforce. However, the effectiveness of these programs can vary significantly based on their implementation, the resources available, and the perceptions of the students they are meant to benefit. In Latur City, there is a crucial need to assess whether the existing skill development initiatives align with the needs and expectations of UG and PG students.

Understanding students' perceptions of skill development programs is essential for evaluating their relevance and effectiveness. If students do not view these programs as valuable or accessible, their potential impact on career readiness is significantly diminished. Moreover, evaluating the availability and quality of skill development resources can reveal any disparities or barriers that may impede students from fully engaging with these programs. By identifying these gaps, stakeholders can work towards enhancing the integration and effectiveness of skill development initiatives.

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By investigating these aspects, the study seeks to fill the existing research gap and provide valuable insights for educators, policymakers, and industry stakeholders. The findings will help in understanding whether current skill development programs meet the expectations of students and how they can be improved to better align with industry demands. Ultimately, this research aims to contribute to enhancing students' career preparedness and fostering a more skilled and capable workforce in Latur City.

Contextual Landscape

Latur City, a prominent educational hub in Maharashtra, India, has experienced significant growth in its academic institutions over the past few decades. With a burgeoning number of colleges and universities, particularly in the commerce field, the city has become a focal point for students pursuing undergraduate (UG) and postgraduate (PG) education. However, despite this growth, there remains an ongoing challenge in aligning educational outcomes with the practical skills demanded by today's dynamic job market.

Skill development has increasingly been recognized as a key component in enhancing employability and career advancement. The rapid evolution of industries and the advent of new technologies have transformed job roles, necessitating a shift from traditional academic learning to a more practical, skills-oriented approach. This transformation has emphasized the importance of integrating skill development programs into the educational framework to better prepare students for the demands of the workforce.

Evolution of Skill Development Programs

Historically, educational institutions have primarily focused on imparting theoretical knowledge. However, with the changing landscape of the job market, there has been a growing emphasis on the need for practical skills. Skill development programs have emerged as a vital supplement to academic education, aimed at equipping students with essential competencies such as technical expertise, soft skills, and industry-specific knowledge. These programs are designed to bridge the gap between academic learning and practical application, thereby enhancing students' career readiness.

In recent years, various initiatives have been undertaken at the national and local levels to promote skill development. Government schemes, private sector partnerships, and institutional programs have been introduced to provide students with the necessary tools and resources to succeed in their careers. Despite these efforts, the effectiveness of these programs can vary widely, and there is often a disparity between the resources available and the actual needs of students.

Relevance to Latur City

In the context of Latur City, while the expansion of educational institutions has been notable, there is a lack of comprehensive research on the effectiveness and perception of skill development programs. The city's educational institutions have introduced various programs aimed at enhancing students' skills, but the alignment of these programs with industry requirements and students' expectations remains uncertain.

Reviews of Literature

(Gandhi, M, 2015), as per global statistics, out of the total working population, India has a 2% skilled workforce. Social development through skill development initiatives can help to build learners. Skilled youth will be an asset to the country as it will make them self-dependent and reliant. Enhancing the sustainable growth and development of the economy

(Venkateshwarlu et al., 2016), Skills are required to do tasks. Various skill-specific programmes are launched to upgrade the skills of the students. Skills can be enhanced through conferences and workshops. Distance learning universities can also help to build the various competencies of the students. One needs to engage in activities to groom the skills and stay updated.

(Kahlon 2017), In a study, the author found that the majority of Punjab people focus on hereditary skill training and do not go for formal training. They do not prefer formal training. The reason for less emphasis on formal

training was the number of trainers who can provide skill-based education. Awareness among the students about skill development programmes and the training of the trainers will help to build a formal training environment.

Statement of the Problem

In Latur City, the effectiveness of skill development programs in enhancing students' employability and career prospects remains inadequately explored. Despite the growing emphasis on skill-based training to meet industry demands, there is limited research on how undergraduate (UG) and postgraduate (PG) students perceive these programs. There is a need to understand whether students find these programs relevant, accessible, and of high quality, and how these perceptions vary between different educational levels. Additionally, the current skill development resources may not be uniformly available or effective across various institutions, potentially impacting students' career readiness. This study seeks to fill these gaps by investigating the perceptions of UG and PG students towards skill development initiatives, evaluating the current state of skill development resources in Latur City, and offering recommendations to enhance the integration and effectiveness of these programs. This research will provide valuable insights for educators, policymakers, and industry stakeholders to better align skill development efforts with the needs of students and the demands of the job market.

Objectives of the Study

Following objectives have been set by the research for present research study.

- 1. To study perception of UG & PG students towards skill development
- 2. To Evaluate the availability, accessibility, and quality of skill development resources for students.
- 3. To provide suggestions on the basis of research study

Need and Significance of the Study

The need for this study arises from the increasing emphasis on skill development as a critical component of career preparedness and employability. Understanding how undergraduate (UG) and postgraduate (PG) students in Latur City perceive these programs is essential for evaluating their effectiveness and relevance. The study addresses the gap in knowledge regarding students' views on the quality, accessibility, and impact of skill development resources, which is crucial for ensuring that these programs meet their needs and expectations. By assessing the current state of skill development initiatives, the research can identify gaps and disparities in resource allocation, providing insights into how these programs can be improved to better serve students at various educational levels.

Scope of the Study

The scope of this study is defined by several key parameters that focus on the investigation of skill development programs and their perceptions among students in Latur City. The scope encompasses the geographical, educational, and methodological boundaries within which the study will be conducted.

1. Geographical Scope

The study is geographically limited to Latur City, Maharashtra, India. This specific focus allows for a detailed analysis of skill development programs within this distinct regional context. By concentrating on Latur City, the research aims to capture localized insights into the effectiveness and perception of these programs, providing valuable information relevant to the city's unique educational and professional landscape.

2. Operational Scope

The study focuses exclusively on undergraduate (UG) and postgraduate (PG) students enrolled in commerce colleges in Latur City. This educational scope is chosen to target a specific group of students who are likely to engage with skill development programs as part of their academic and career preparation. By narrowing the focus to commerce students, the study aims to provide a deeper understanding of how skill development programs are perceived within this particular academic discipline.



Periodical scope:

The study has been carried out for the period of 2023-24 i.e. for one academic year. Data has been collected and interpreted for given period only.

Limitations of the Study

The present study is having following limitations:-

The present study is having following limitations:-

- 1. The study limited to geographical boundaries of Latur city.
- 2. Only students learning in commerce colleges of Latur City are considered for the study.
- 3. Conclusions drawn are based on responses from sample respondents only.
- 4. No comparative study has been done between with other factors other than skill

Data Collection

The data collection for this study involves gathering both primary and secondary data to comprehensively understand the perceptions of undergraduate (UG) and postgraduate (PG) students towards skill development programs in Latur City.

A. Primary Data Collection

Primary data is collected directly from original sources and provides first-hand insights into students' perceptions and experiences. Questionnaires have been distributed electronically and preferably in person to ensure a diverse representation of student experiences.

B. Secondary Data:

Secondary data is collected from existing sources and provides context and background information relevant to the study

Secondary data for this research study has been gathered from a variety of published sources, including library books, academic journals, college websites, magazines, printed books, e-books, government reports, annual reports, and existing surveys.

Research Method

In The study **descriptive survey approach** is used. A structured questionnaire is developed and administered to collect data on students' perceptions of skill development programs. Data is analyzed using statistical methods to identify trends and patterns, and findings are compiled into a report with recommendations.

Sample Design

Stratified random sampling is used to select 100 students from commerce colleges in Latur City, with an equal number of undergraduate (UG) and postgraduate (PG) students. This ensures representation of both groups. Data collection involves a pre-tested questionnaire, and ethical considerations, including consent and confidentiality, are adhered to.

Findings:

- 1. Most students believe skill development programs are crucial for their career prospects, with 75% expressing this view.
- 2. Approximately 60% of students report limited access to skill development resources.
- 3. About 50% of students are dissatisfied with the quality of current skill development programs.
- 4. Around 55% of students find the range of available skill development programs insufficiently diverse.

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- 5. Only 40% of students feel their institutions adequately support skill development efforts.
- 6. Positive impacts from skill development programs are reported by 70% of undergraduate students and 65% of postgraduate students.
- 7. About 50% of students are unaware of the skill development opportunities available to them.
- 8. Approximately 45% of students feel that skill development programs are poorly integrated into their academic curricula.
- 9. Only 30% of students believe there is an effective feedback mechanism in place for improving these programs.
- 10. A significant 65% of students suggest that skill development programs should be more industry-oriented and practical to better meet job market demands.

Suggestions:

- 1. Increase program accessibility by offering more locations and online options for students.
- 2. Improve program quality by incorporating student and industry feedback.
- 3. Boost awareness through targeted campaigns within educational institutions.
- 4. Integrate skill development programs into academic curricula for practical experience.
- 5. Design industry-oriented programs with real-world applications to enhance job market readiness.

Conclusion:

The study underscores the importance of skill development programs for enhancing students' career prospects but identifies key challenges including limited access, variable quality, and low awareness. To address these issues, it is essential to expand access by offering more locations and online options, improve program quality through regular updates and feedback, and increase awareness via targeted campaigns. Additionally, integrating skill development into academic curriculum and designing programs that closely align with industry needs will better prepare students for the job market. Implementing these recommendations can significantly enhance the effectiveness of skill development initiatives and better support students in achieving their career goals.

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THE STARTUP INDIA INITIATIVE: PROMOTING ENTREPRENEURSHIP AND INNOVATION WITHIN THE INDIAN ECOSYSTEM

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Abstract

The Start-Up India program is a flagship program to promote entrepreneurship, innovation, and economic growth in the year 2016. The objective of this study is to provide a comprehensive analysis of the Start-Up India program, the Indian government's flagship initiative to promote entrepreneurship and innovation. By exploring the successes and challenges faced by entrepreneurs through the program, it aims to provide valuable insights to policymakers, aspiring entrepreneurs, and stakeholders involved in driving business growth in emerging markets. The study also explores the impact of the Start-Up India program on job creation and the emergence of unicorn companies in India. The findings suggest that the program has contributed to the creation of employment opportunities, especially among youth and skilled professionals, and contributed to India emerging as the third largest startup ecosystem in the world. The study explores the long-term economic and social impacts of the Startup India program, focusing on its contribution to fostering innovation, promoting sustainable development, and transforming India into a country of job creators rather than jobseekers. The findings of this study provide valuable insights for policymakers, aspiring entrepreneurs, and stakeholders involved in the entrepreneurial ecosystem. The study provides a comprehensive understanding of the Startup India program and its role in shaping Indian entrepreneurship and can serve as a reference for other emerging countries seeking to emulate similar initiatives to foster innovation and economic growth.

Keywords: economic growth, business, entrepreneurship, start-up, employment opportunities

Introduction:

In recent years, entrepreneurship has emerged as a key driver of economic growth, job creation, and innovation across the world. Governments have recognized the central role of entrepreneurship and have introduced policies and programs to foster it. India, a country with a growing population and a dynamic economy, has been particularly proactive in this regard. In 2016, the Indian government launched the Start-Up India program, an innovative initiative to build a thriving startup ecosystem. This study examines the key objectives of the Start-Up India program, its implementation strategy, and its significant impact on promoting entrepreneurship in India. The Startup India initiative was launched by the Government of India in January 2016 with the aim of promoting entrepreneurship, innovation and economic growth by building an ecosystem for startups.

The Startup India initiative, introduced by the Government of India in 2016, serves as a premier program designed to stimulate the startup environment and foster a robust, inclusive entrepreneurial ecosystem within the nation. The primary goals of this initiative are to enable startups to thrive through innovation and design, thereby transforming India into a hub of job creators instead of job seekers. The Startup India initiative has enacted various measures to assist entrepreneurs, including:

- 1. Simplification and Handholding
 - Simple Compliance Regime for startups based on Self-certification
 - Launch of Mobile app and Portal for compliance and information exchange
 - Startup India Hub to handhold startups during various phases of their development
 - Legal support and fast-tracking patent examination at reduced costs
 - Relaxed norms of public procurement for startups
 - Faster exit for startups
- 2. Funding support and Incentives
 - Providing funding support through a Fund of Funds with a corpus of Rupees 10,000 crore
 - Credit guarantee fund for startups



- Tax exemption on capital gains invested in Fund of Funds
- Tax exemption to startups for 3 years
- 3. Industry-Academia Partnership and Incubation
 - Organizing Startup Fests to showcase innovations and providing collaboration platforms
 - Launch of Atal Innovation Mission (AIM) with Self –Employment and Talent Utilization (SETU) Program of NITI Aayog
 - Harnessing private sector expertise for setting up incubators
 - Launching of innovation focused programs for students.
 - Annual Incubator Grand Challenge to promote good practices among incubators.

4. Credit Guarantee Fund

- The initiative provides for creating a credit guarantee fund for startups through Small Industries Development Bank of India (SIDBI) with a Corpus of Rs.500 crore per year for the next four years.
- With this Action Plan the Government intends to accelerate spreading of the startup movement:
- From digital/technology sector to a wide array of sectors including agriculture, manufacturing, social sector, healthcare, education, etc.; and
- From existing tier 1 cities to tier 2 and tier 3 cities including semi-urban and rural areas.

The Startup India initiative has been instrumental in promoting entrepreneurship and innovation across the country. It has successfully drawn substantial private equity and venture capital investments, facilitated the establishment of more than 50,000 recognized startups, and has been a key factor in generating approximately 600,000 jobs over the past four years.

Review of Literature:

A research paper titled "A Study on Emerging Trends in Startups in India" by Pragati Gupta and Dr. Anvita Raghuvanshi (March-April 2024) has focused on start ups in India. Innovation and technology have played a crucial role in developing emerging markets, and strengthening ecosystems worldwide, especially in India. India has a vibrant startup ecosystem with supporting infrastructure, incubators, angel investors, venture capitalists, mentors and a conductive policy environment. This research paper aims to study the rise of startups in India, that has been fueled by young and talented workforce, government support & funding options provided by the investors. This paper is an attempt to find out the dynamic changes that Startup India campaign has brought to the country. Further, it aims to discover opportunities, gaps & challenges that Startups face during their stages of operation. Since its inception, the journey of startup India campaign has successfully nurtured a large number of startup firms in the country, and has enabled thousands of youth to be employed & fulfill their dreams of building a startup. Focusing on this notion, the paper tries to find out the opportunities and challenges that startups are facing in the present scenario.

Another research paper title "An inside view in the Indian Start Ups" by Tripda Rawal (2018) has given a scenario related to India's start-ups. Start-ups are making the vary way of living from challenging to comforting, from complicated to uncomplicated. This research paper is an attempt to understand the reasons and motivation behind the inorganic growth of start-ups in India and also to try to understand the varieties of challenge they face. More importantly this article would be helpful to underline the major contributions of start-ups in economics like India. This research paper will furnish variety of recommendations to improve the overall scenario of stat ups in India and help in making India the world's start-up capital.

Research Objectives

- 1. To investigate the primary goals, essential elements of the Startup India initiative introduced by the Government of India to promote entrepreneurship and innovation.
- 2. To evaluate the effects of the Startup India initiative on the expansion and advancement of the Indian startup ecosystem.



Objectives of the start-up India Scheme:

The aim of the Startup India Scheme is to establish a robust ecosystem that fosters innovation and supports startups within the nation. Additionally, this initiative is designed to stimulate sustainable economic development, generate significant employment opportunities, and alleviate the regulatory challenges faced by startups, enabling them to concentrate on their primary business activities while minimizing compliance expenses.

Role of start-ups in the growth of the Economy in India

A startup fundamentally refers to any initiative aimed at promoting the development, commercialization, and launch of innovative products, services, or technologies, frequently based on intellectual property or cutting-edge technology. In recent decades, the startup ecosystem in India has witnessed an extraordinary growth, supported by a broad spectrum of encouragement. These startups are not standalone entities; they are essential elements of a broader business landscape focused on delivering impactful solutions, thereby acting as catalysts for socioeconomic advancement and change.

To cultivate a vibrant startup culture and strengthen the Indian economy, the Government of India has launched various initiatives. A notable example is the "Standup India" campaign, introduced by Prime Minister Narendra Modi in August 2015, which aims to improve access to bank financing for emerging businesses, inspire entrepreneurial spirit among the youth, create supportive frameworks for startup development, and establish the country as a leading center for technological enterprises. This highlights the essential role that startups play in advancing India's economic landscape. Ultimately, the growth of startups in India signifies a significant shift in entrepreneurial dynamics, characterized by a steadfast dedication to innovation, flexibility, and responsiveness.

Interpretation:

- 1. The Startup India initiative has played a crucial role in establishing a favorable atmosphere for startups to flourish by offering vital support, financial resources, and incentives.
- The focus on streamlining compliance, enhancing funding prospects, and promoting collaborations between industry and academia has significantly contributed to the cultivation of innovation and entrepreneurship within India.
- 3. Furthermore, the initiative's commitment to job creation, economic development, and the promotion of a dynamic startup ecosystem is in line with the overarching objective of positioning India as a center for innovation and entrepreneurship.
- 4. Evidence indicates that the Startup India initiative has had a beneficial effect on the Indian economy by stimulating entrepreneurial activities, attracting investments, and generating job opportunities.

Conclusion:

The results of this research highlight the crucial impact of the Startup India initiative in fostering an environment conducive to the success of startups. By prioritizing the simplification of compliance procedures, offering financial assistance and incentives, promoting collaborations between industry and academia, and establishing incubators and innovation centers, the initiative has played a vital role in cultivating a dynamic entrepreneurial landscape in India. A particularly significant outcome of the Startup India initiative is its contribution to job creation and economic development. The research indicates that startups have become essential players in generating employment, especially for the youth and skilled professionals, with the initiative facilitating the creation of approximately 600,000 jobs over the past four years. Furthermore, the initiative's effectiveness in attracting substantial private equity and venture capital investments, along with its support for the establishment of over 50,000 recognized startups, emphasizes its critical role in shaping the Indian startup ecosystem. The study also examines the disparities in startup performance and growth across various states and union territories in India under the Startup India program. This analysis offers important insights into the influence of state-level policies and support systems in encouraging entrepreneurial endeavors and highlights the necessity for a more balanced and inclusive strategy to promote startups nationwide.



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INDIA'S POPULATION CONTRIBUTION TO SUSTAINABLE DEVELOPMENT BY 2047 - A POLITICAL APPROACH

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Introduction

As India approaches 2047, marking a century of independence, the relationship between its population dynamics and sustainable development takes center stage. With a projected population exceeding 1.7 billion, India stands at a critical juncture where the interplay of demographic trends and sustainable practices will significantly shape its socio-economic landscape.

The demographic profile of India is characterized by a large and youthful population, which offers immense potential for economic growth and innovation. However, realizing this potential requires strategic investments in education, healthcare, and job creation. The success of these investments is crucial not only for enhancing individual well-being but also for ensuring sustainable development that benefits all segments of society.

Moreover, India faces substantial challenges related to resource management, environmental sustainability, and social equity. Rapid urbanization, increasing consumption patterns, and climate change further complicate the path toward sustainable development. Addressing these challenges necessitates a comprehensive political approach that integrates demographic insights into policy-making.

This analysis will explore the potential contributions of India's population to sustainable development by 2047. It will examine the political frameworks and strategies needed to harness demographic advantages while mitigating environmental impacts. By focusing on education, gender equality, and community engagement, this study aims to highlight pathways for a sustainable and equitable future for all citizens. As India embarks on this journey, understanding the critical role of its population in achieving sustainable development will be essential for crafting effective policies that lead to a thriving, resilient nation.

Review of Literature

The literature on India's population dynamics and its implications for sustainable development highlights several key themes, illustrating the complex interconnections between demographic trends, economic growth, and environmental sustainability. This review synthesizes critical findings from various studies, providing a foundation for understanding the political approach needed to leverage India's population for sustainable development by 2047.

1. Demographic Dividend and Economic Growth

The concept of the demographic dividend suggests that a large working-age population can drive economic growth if harnessed effectively. Bloom et al. (2001) emphasize that investments in health, education, and job creation are essential to realize this potential. Klasen and Kuhnt (2019) further argue that gender equality and women's participation in the workforce are critical components of capitalizing on this demographic advantage, as they significantly contribute to economic productivity.

2. Urbanization and Sustainability

India's rapid urbanization is a double-edged sword. On one hand, urban centers can foster innovation and economic activity; on the other hand, they exacerbate challenges related to resource consumption and environmental degradation. **Kumar (2018)** discusses the need for sustainable urban planning that integrates infrastructure development with environmental sustainability to manage the pressures of urban growth effectively.



3. Environmental Impact and Resource Management

The relationship between population growth and environmental sustainability is well-documented. **Dasgupta** (1995) highlights the strain on natural resources due to increasing consumption patterns. Sustainable resource management practices are essential to mitigate the impact of population growth on the environment, ensuring that development does not compromise ecological integrity.

4. Social Inequality and Inclusion

Social inequality poses significant challenges to sustainable development in India. Research by **Desai (2010)** indicates that disparities in access to education and healthcare undermine the potential benefits of demographic growth. Ensuring that marginalized communities, particularly women and lower-income groups, have equal access to resources and opportunities is crucial for fostering inclusive development.

5. Governance and Policy Frameworks

Effective governance plays a vital role in shaping policies that address the intersections of population and sustainability. **Ghosh (2016)** argues that decentralized governance can enhance policy responsiveness and local engagement.

6. Future Projections and Strategic Directions

Looking toward 2047, various studies emphasize the urgency of implementing integrated policies that align demographic trends with sustainable development goals. The UNDP (2020) stresses the importance of holistic approaches that promote economic growth while ensuring environmental sustainability and social equity.

Research Methodology

This study employs a mixed-methods approach to analyze the contributions of India's population to sustainable development by 2047. The methodology integrates both quantitative and qualitative data, providing a comprehensive understanding of the political, social, and economic factors at play.

1. Research Design

The research follows a descriptive and analytical design, enabling an exploration of historical trends, current policies, and future projections related to population dynamics and sustainability in India. This approach facilitates the identification of key themes and relationships that will inform policy recommendations.

2. Data Collection

a. Primary Data:

- Interviews: Semi-structured interviews will be conducted with a range of stakeholders, including policymakers, academics, and representatives from non-governmental organizations (NGOs). These interviews aim to gather insights on the challenges and opportunities related to population and sustainable development policies.
- Focus Groups: Focus groups will be organized with community leaders and residents to understand grassroots perspectives on population growth and sustainability initiatives. This qualitative data will provide context to the challenges faced at the local level.

b. Secondary Data:

- **Literature Review**: A thorough review of existing literature, including academic articles, government reports, and policy documents, will establish a theoretical framework and historical context.
- Statistical Data: Demographic and socio-economic data from reputable sources such as the Census of India, World Bank, and United Nations will be analyzed to identify trends and correlations between population growth and sustainability metrics.



3. Data Analysis

- **a. Qualitative Analysis:** Thematic analysis will be applied to qualitative data gathered from interviews and focus groups. This involves coding responses to identify recurring themes and patterns that illustrate the relationship between demographic factors and sustainable development.
- b. Quantitative Analysis: Statistical tools will be utilized to analyze quantitative data. Key methods include:
 - Descriptive Statistics: To summarize demographic trends and relevant economic indicators.
 - Correlation and Regression Analysis: To examine relationships between population variables and sustainability indicators, such as resource use, environmental impact, and economic growth.

4. Case Studies

The research will include case studies of specific states or regions in India that demonstrate different approaches to managing population growth and promoting sustainable development. These case studies will highlight successful strategies and challenges faced in various contexts, providing practical examples of policy implementation.

5. Ethical Considerations

The study will adhere to ethical research practices, ensuring informed consent from all participants and maintaining confidentiality. Sensitive topics related to population policies and individual rights will be approached with care, prioritizing the dignity and privacy of respondents.

India's Population Contribution to Sustainable Development by 2047 - A Political Approach

India's population is projected to reach nearly 1.7 billion by 2047, which will mark the centenary of its independence. By then, the country's demographic dynamics will have profound implications for its sustainable development. From a political standpoint, India's approach to managing this large population can significantly contribute to achieving sustainable development goals (SDGs).

1. Population Growth and Governance

Decentralization of Governance: India's diverse regions face distinct challenges in population management, resource distribution, and local infrastructure. By promoting decentralization and empowering local governance bodies (Panchayats, Municipal Corporations), political leaders can ensure tailored solutions for different demographic and environmental contexts.

Urbanization Policies: Rapid urbanization is inevitable with such population growth. Politically, there will be a need for sustainable urban planning, affordable housing, and the creation of smart cities to reduce pressure on resources and manage environmental impacts.

Political Focus on Human Capital: A youthful population can be an advantage if managed politically through investments in education, skill development, and health care.

2. Health and Education as Political Priorities

Health Infrastructure: Politicians will need to address the challenge of healthcare access, especially in rural areas. Public health campaigns, improvements in maternal and child healthcare, and sanitation initiatives are essential for achieving SDG 3 (Good Health and Well-being).

Education and Skill Development: With a large working-age population, the government needs to invest in quality education and skill development programs to harness the "demographic dividend."

3. Environmental Sustainability

Climate Change and Resource Management: India's population growth will put significant pressure on its natural resources water, land, and energy.

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Water and Food Security: By 2047, with the population growing, India must address issues like water scarcity and food security.

Energy Transition: By pushing policies that foster renewable energy sources like solar and wind, India can not only meet its growing energy needs but also reduce its carbon footprint.

4. Economic Growth and Employment

Green Jobs and Economic Inclusion: Political strategies must focus on creating green jobs and industries that contribute to a low-carbon economy. Encouraging sectors like renewable energy, sustainable agriculture, and ecofriendly technologies can absorb the labor force and simultaneously support SDG 8 (Decent Work and Economic Growth).

Public-Private Partnerships (PPPs): The government can also push for more PPPs to drive innovation in sustainable infrastructure development, creating jobs and promoting long-term sustainable economic growth.

5. Political Inclusion and Social Equity

Gender Equity and Women's Participation: Politically, the country must ensure that women's participation in economic and political life is strengthened. Gender-sensitive policies, affirmative action, and legal reforms can enable women to contribute significantly to sustainable development.

Reducing Inequality: By 2047, the political discourse should focus on reducing inequality, particularly in terms of access to resources, employment, and education.

6. Global Leadership in Sustainability

India's Role in Global Sustainable Development: As one of the largest populations and a growing economic power, India can position itself as a leader in global climate initiatives and sustainable development dialogues. Politically, India's engagement in forums like the G20, BRICS, and the UN can be critical for global sustainable development, particularly in terms of advocating for the Global South.

Findings and Suggestions

1. Demographic Dividend Potential

- **Youthful Population**: With a significant portion of the population under the age of 35, India stands to benefit from a demographic dividend. However, this requires substantial investments in education, skills training, and health services to transform the population into a productive workforce.
- **Aging Population Challenge**: By 2047, a considerable segment of India's population will be elderly. Without adequate social security and healthcare infrastructure, this could strain public resources.

2. Urbanization and Infrastructure

- Rapid Urbanization: Increasing urban migration necessitates massive investments in sustainable urban infrastructure. Unchecked urban sprawl can lead to environmental degradation, strain on water resources, and rising inequality.
- Smart Cities and Urban Governance: Urban planning that incorporates sustainable practices (energy-efficient buildings, waste management systems) and digital governance (smart cities) will be essential.

3. Environmental Sustainability

• **Resource Scarcity**: India faces acute pressure on natural resources, especially water and arable land. Population growth will exacerbate challenges related to resource management.



- Climate Change: The effects of climate change—rising temperatures, irregular monsoons, and frequent natural disasters—require strong political action on mitigation and adaptation.
- **Energy Needs**: The growing population will need access to affordable, sustainable energy. India's progress in renewable energy (solar, wind) is notable, but expansion and political commitment are critical.

4. Economic Development and Employment

- **Job Creation for a Growing Workforce**: India's workforce will continue to expand, necessitating millions of new jobs annually. A focus on green jobs, digital economy, and service sectors can help mitigate unemployment.
- Green Economy Transition: There's growing potential for India to become a leader in green technology and sustainable industry, but this requires political and policy incentives to encourage investment in these sectors.

5. Social Inclusion and Equity

- Reducing Inequality: India's population growth, if not matched with equitable resource distribution, could deepen socio-economic inequalities. Marginalized groups (e.g., women, rural populations, minorities) need focused political interventions to ensure their inclusion in development gains.
- **Gender Equity**: Women's participation in the workforce, politics, and education is essential for driving sustainable development. The political empowerment of women will be key to addressing gender inequality by 2047.

6. Education and Health as Pillars

- **Investments in Human Capital**: Political will is necessary to improve the quality of education and access to healthcare. These sectors will determine whether India's large population becomes an asset or a liability.
- **Public Health Challenges**: The COVID-19 pandemic exposed weaknesses in India's public health infrastructure. Stronger health systems and preventive care will be required to manage the demands of a large and growing population.

7. Global Leadership

- India as a Global Leader: By 2047, India can play a leading role in the global sustainable development agenda, particularly in climate action and renewable energy. Its large population positions it as a key voice in international forums like the UN, G20, and BRICS.
- South-South Cooperation: India's experience with population management, poverty alleviation, and
 climate resilience can serve as a model for other developing countries, enhancing its soft power and
 leadership on sustainability issues.

Suggestions for Political Action by 2047

1. Human Capital Investment

- **Strengthen Education Systems**: Politicians should prioritize education reforms that emphasize skill development, STEM education, and vocational training to align with future job markets.
- **Healthcare Infrastructure**: Develop comprehensive public health systems, focusing on universal health coverage, preventive care, and nutrition, particularly for rural and underserved populations.



2. Promote Sustainable Urbanization

- **Smart City Initiatives**: Foster smart, sustainable urban centers that incorporate energy-efficient buildings, waste management, and green spaces.
- **Affordable Housing**: Political leadership should focus on providing affordable housing and basic services for all, particularly in rapidly growing urban areas.

3. Environmental and Climate Action

- Adopt Strong Climate Policies: Politically commit to ambitious climate goals, including large-scale adoption of renewable energy, reforestation, and sustainable agricultural practices.
- Water and Land Management: Encourage efficient water management systems and ensure policies that prevent land degradation while promoting sustainable farming practices.

4. Inclusive Economic Growth

- **Job Creation**: Political leaders must focus on policies that encourage job creation in emerging sectors like technology, green industries, and services, ensuring that these jobs are inclusive and sustainable.
- **Green Economy**: Create financial incentives (subsidies, tax benefits) for industries to adopt sustainable practices and shift toward green technologies.

5. Gender and Social Equity

- Empower Women: Political leaders should implement policies that support women's education, healthcare, and workforce participation, as well as promote their representation in political decisionmaking.
- Reduce Inequality: Implement affirmative policies that focus on reducing income inequality and ensuring equal access to opportunities for marginalized communities.

6. Strengthen Governance and Decentralization

- **Decentralized Decision-Making**: Strengthen local governance systems to empower state and local authorities to implement region-specific sustainable development strategies.
- **Public Participation**: Encourage public participation in decision-making processes, particularly on issues related to land use, resource allocation, and urban planning.

7. Global Leadership and Collaboration

- **International Collaboration**: Promote South-South cooperation, sharing India's expertise in population management, poverty alleviation, and climate action with other developing nations.
- Global Climate Leadership: India should position itself as a global leader in climate diplomacy, advocating for equitable resource sharing and global sustainability initiatives.

Conclusion

By 2047, India's population, projected to be nearly 1.7 billion, presents both significant opportunities and challenges for sustainable development. The political approach to managing this population will be critical in determining whether it becomes a driver of sustainable progress or a strain on resources.

India's political leadership must focus on maximizing the potential of its youthful demographic by investing heavily in human capital, especially in education, health, and skill development. These sectors will equip India's workforce to contribute meaningfully to economic growth and innovation, particularly in green industries and the digital economy.

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Environmental sustainability must be at the forefront of political strategies. With climate change already impacting the country, India needs strong political action on renewable energy expansion, sustainable agriculture, water conservation, and urban planning. Smart, sustainable cities and resilient rural areas will require governance frameworks that prioritize environmental stewardship while accommodating population growth.

India also has a unique opportunity to position itself as a global leader in sustainable development.

In conclusion, India's path to 2047 must be defined by a political approach that integrates human development, environmental sustainability, economic inclusion, and global leadership. If India harnesses its demographic strengths through strategic political action, it can make a significant contribution to global sustainable development while ensuring prosperity and equity for its own people.

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POPULATION AND A SUSTAINABLE FUTURE - SHAPING INDIA'S POLITICAL POLICIES FOR 2047

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Introduction

By 2047, the centenary of India's independence, the country will be home to nearly 1.7 billion people, making it the most populous nation on Earth. This demographic reality presents both a unique set of opportunities and critical challenges. A large population can be a powerful driver of economic growth, innovation, and global influence, but only if managed with sustainable and inclusive political policies. Unchecked, population growth can strain resources, widen inequalities, and exacerbate environmental degradation.

In this context, India's political policies must be strategically aligned to harness the potential of its population while mitigating risks associated with environmental and social sustainability. Effective governance that emphasizes human capital development, inclusive economic growth, and environmental stewardship will be central to ensuring a prosperous and sustainable future. As India moves towards 2047, the focus of political leadership will need to shift toward integrating population dynamics with Sustainable Development Goals (SDGs), addressing climate change, and ensuring equitable access to resources for all citizens.

This paper explores the role of population in shaping India's sustainable future and outlines key political strategies that can lead the country toward a balanced and prosperous development trajectory by 2047. Through targeted investments in education, healthcare, and renewable energy, and by fostering inclusive governance, India can transform its demographic challenges into opportunities for long-term sustainability.

Review of Literature

The relationship between population growth and sustainable development has been extensively researched in the global and Indian contexts. The following review highlights the key scholarly contributions and policy discussions that inform the shaping of India's political policies for 2047, focusing on demographic trends, sustainability challenges, and political responses.

1. Demographic Dividend and Population Dynamics

- United Nations Population Fund (UNFPA, 2019) emphasizes that India's demographic dividend could be
 a key driver of economic growth if properly leveraged through investments in education, skill development,
 and healthcare.
- **Bloom, David E. (2011)** in *Population Dynamics and Economic Growth* discusses how the demographic dividend presents a limited window of opportunity. For India, failure to create sufficient jobs and upgrade its educational infrastructure could result in underemployment and an economic drag, underscoring the need for robust political intervention.

2. Sustainable Development and Environmental Pressures

- NITI Aayog's SDG India Index (2021) tracks India's progress toward the Sustainable Development Goals (SDGs), noting areas where population growth intersects with environmental challenges such as climate change, water scarcity, and resource degradation.
- Meadows, Donella H., et al. (1972) in *The Limits to Growth* provides a foundational understanding of how
 unchecked population growth can strain natural resources. While focusing on global scenarios, the findings
 are applicable to India's context, particularly in areas like food security, energy needs, and land use, which
 are increasingly under pressure due to rapid population growth.

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• Mohan, Rakesh (2006) in *Urbanization in India: Patterns and Emerging Policy Issues* highlights how urban population growth is contributing to environmental degradation in cities through pollution, inadequate waste management, and the depletion of natural resources like water.

3. Climate Change and Sustainable Development Policies

- Ministry of Environment, Forest and Climate Change (2021) in its National Action Plan on Climate Change (NAPCC) outlines India's policy response to the challenges of climate change. It emphasizes renewable energy, energy efficiency, and sustainable agriculture as critical areas for intervention in the face of a growing population.
- Roy, Joyashree (2000) in Sustainable Development in India: Challenges and Opportunities argues that while India has made strides in policy formulation, gaps remain in the implementation of sustainable practices, particularly at the state and local levels.

4. Economic Growth, Inequality, and Social Inclusion

- World Bank (2018) in *India Development Report* emphasizes the interplay between population growth, economic development, and poverty alleviation. The report notes that while India's economy has grown, disparities in income, access to education, healthcare, and employment remain stark, particularly in rural areas.
- Dreze, Jean & Sen, Amartya (2013) in An Uncertain Glory: India and its Contradictions critique the disparities in economic development, particularly in terms of healthcare and education.
- International Labour Organization (ILO, 2021) discusses the need for creating sustainable, decent jobs as a growing population enters the labor force.

5. Gender Equity and Political Empowerment

- UN Women (2020) highlights the role of gender equity in sustainable development. The report notes that India's female labor force participation rate remains low and suggests that political empowerment and the inclusion of women in the workforce are critical for sustainable development.
- **Bhat**, **Mari P.** (2002) in *Population Policies in India* discusses the challenges of implementing effective population control and health policies, particularly in rural areas.

6. Urbanization and Sustainable Infrastructure

- McKinsey Global Institute (2010) in *India's Urban Awakening* discusses the importance of planned urbanization to manage the demands of a rapidly growing population. The report suggests that without substantial political efforts in building infrastructure, Indian cities will face worsening congestion, pollution, and resource scarcity.
- Chandrasekhar, S. (2016) in *Urbanization in India and its Implications for Sustainable Development* emphasizes the critical role of political decision-making in managing India's urbanization trends.

7. Global Leadership and International Cooperation

• Chaudhuri, Sumantra (2020) in *India's Role in Global Climate Governance* discusses how India's growing population places it at the center of global discussions on sustainability and climate change. The study outlines how political leadership in India must balance domestic sustainability with global climate commitments, advocating for India's active role in international forums like the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.

Research Methodology

The research methodology for this study aims to explore and analyze how India's population dynamics can influence and shape political policies toward a sustainable future by 2047.



1. Research Design

This research employs a **mixed-method approach**, integrating qualitative insights from political documents and reports with quantitative analysis of population data and sustainability indicators. The study is both **descriptive** and **exploratory**, focusing on understanding how population trends influence political decisions and sustainable development outcomes.

- **Descriptive Approach**: The study documents current population trends, environmental challenges, and sustainable development policies in India.
- Exploratory Approach: It explores the political pathways that could be adopted to manage these demographic and environmental pressures, identifying gaps in current policies and suggesting innovative solutions for 2047.

2. Data Collection Methods

The study utilizes both primary and secondary data sources to gather information.

a) Secondary Data

- Government Reports and Policy Documents: Key reports from the Government of India, such as the *National Population Policy*, *National Action Plan on Climate Change (NAPCC)*, and various state-level policies on sustainability, are analyzed to assess political responses to population growth.
- International Reports: Documents from global organizations such as the United Nations (UN), World Bank, International Labour Organization (ILO), and International Energy Agency (IEA) provide global benchmarks and perspectives on sustainable development and demographic management.
- Academic Literature: A thorough review of existing academic studies on population growth, sustainable
 development, and political policies (as discussed in the Review of Literature) informs the study's theoretical
 framework.
- Data Sets: Population data from the Census of India, the World Population Prospects (UN), and sustainability indices (e.g., NITI Aayog's SDG Index, Environmental Performance Index) are analyzed to track India's demographic and sustainability trends.

b) Primary Data

- Expert Interviews: In-depth interviews with policymakers, demographers, urban planners, environmentalists, and sustainability experts are conducted to gain qualitative insights into how political policies can align with sustainable development goals.
- Surveys and Questionnaires: Surveys targeting policymakers, researchers, and NGOs working in the fields of population management, sustainable development, and environmental governance are conducted.

3. Data Analysis Techniques

a) Quantitative Analysis

- Statistical Tools: Quantitative data on population growth, resource consumption, and sustainability indicators are analyzed using statistical software (e.g., SPSS, R) to identify trends, correlations, and projections for 2047.
 - > Trend Analysis: Population projections from the United Nations and Indian Census data are compared with sustainability metrics (e.g., carbon emissions, resource use) to model future scenarios.
 - Forecasting: Statistical forecasting methods are used to predict the potential impact of India's population growth on critical areas such as energy demand, water availability, food security, and employment by 2047.



b) Qualitative Analysis

- Thematic Analysis: Qualitative data from interviews, policy documents, and reports are analyzed using thematic analysis to identify recurring themes and patterns in political approaches to population management and sustainability.
 - Policy Analysis: The study critically evaluates current and proposed political strategies, identifying gaps and areas where policies may fall short in addressing India's future demographic and environmental needs.
 - > SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats): A SWOT analysis is conducted on India's political frameworks for sustainable development in the context of population dynamics.

4. Comparative Analysis

- Cross-Country Comparison: The research compares India's population and sustainability policies with
 those of other developing countries such as China, Brazil, and Indonesia, which face similar demographic
 and sustainability challenges.
- **Historical Comparisons**: The study examines historical trends in India's population policies, tracing changes in political approaches since independence to understand how they have evolved and what lessons can be applied to future policies.

5. Scenario Planning

The research also employs **scenario planning** to map out potential futures for India based on different policy decisions. By constructing scenarios for 2047 under various political, environmental, and demographic conditions, the study helps policymakers envision the consequences of different courses of action.

- Sustainability-Oriented Scenario: A scenario where India adopts aggressive policies focused on renewable energy, climate action, and resource conservation, demonstrating the positive outcomes of sustainable governance.
- **Business-as-Usual Scenario**: A projection based on current policies without significant changes, showing the potential risks of environmental degradation, resource scarcity, and social inequalities.
- **High Population Growth Scenario**: A projection that emphasizes the strain on infrastructure, resources, and political institutions if population growth outpaces sustainable development efforts.

6. Limitations of the Study

The study acknowledges certain limitations:

- **Data Reliability**: Some data sources, particularly projections and estimates, may carry inherent uncertainties, especially with regard to long-term population and environmental forecasts.
- Scope of Policy Analysis: While the study attempts to cover major political policies, it may not fully
 capture the nuances of state-level variations in India's vast federal system, where policies differ widely
 across states.
- **Rapidly Evolving Contexts**: Changes in technology, global climate agreements, and political leadership can rapidly alter the development landscape, making some findings contingent upon future political shifts.



Population and a Sustainable Future - Shaping India's Political Policies for 2047

Demographic Context

India's population is expected to surpass that of China, leading to a "demographic dividend." This phenomenon can be a significant economic advantage if managed effectively through robust educational, health, and employment policies.

Sustainable Development Goals

To navigate these challenges, India must align its policies with the United Nations Sustainable Development Goals (SDGs). Key areas of focus include:

- Education and Skill Development: Investing in human capital to enhance productivity and innovation.
- **Environmental Sustainability**: Addressing climate change through renewable energy initiatives and sustainable practices in agriculture and urban planning.
- Social Inclusion: Ensuring that marginalized communities have equitable access to resources and opportunities.

Current Policy Landscape

India has made strides in formulating policies aimed at sustainable development, such as the National Action Plan on Climate Change (NAPCC) and various state-level initiatives.

Recommendations for Political Action

- 1. **Integrated Policy Framework**: Develop a comprehensive policy framework that connects demographic trends with sustainability initiatives, ensuring a coordinated approach across sectors.
- 2. **Invest in Infrastructure**: Prioritize the development of sustainable urban infrastructure to accommodate growing populations and enhance resilience to climate impacts.
- 3. **Promote Green Jobs**: Focus on job creation in renewable energy, sustainable agriculture, and other green sectors to drive economic growth while protecting the environment.
- 4. **Empower Women and Marginalized Communities**: Implement policies that promote gender equity and support the economic empowerment of disadvantaged groups, which is essential for inclusive development.
- 5. **Strengthen Local Governance**: Enhance the role of local governments in implementing policies, allowing for tailored solutions that address specific regional challenges.

Findings and Suggestions

Findings

1. Demographic Trends:

- India's population is expected to reach approximately 1.7 billion by 2047, with a significant proportion in the working-age group.
- Rapid urbanization is projected, with over 50% of the population expected to live in urban areas, leading to increased demand for housing, infrastructure, and services.

2. Economic Opportunities:

• The demographic dividend presents a potential for increased economic growth, but this can only be realized through effective policies that invest in education and skill development.



 Sectors such as technology, renewable energy, and sustainable agriculture are poised for growth, requiring a workforce equipped with relevant skills.

3. Environmental Challenges:

- Increased population density in urban areas will exacerbate environmental issues such as air and water pollution, waste management, and resource depletion.
- Climate change poses significant risks, including extreme weather events, which could disproportionately affect vulnerable populations.

4. Social Inequality:

- Marginalized communities, particularly women and rural populations, face barriers to accessing education, healthcare, and economic opportunities.
- Inequalities in resource distribution and access to services could hinder overall progress towards sustainable development.

Suggestions for Political Action

1. Develop an Integrated Policy Framework:

• Create a comprehensive national policy that aligns population dynamics with sustainability goals. This framework should facilitate collaboration between ministries, local governments, and stakeholders.

2. Invest in Human Capital:

 Enhance investments in education, vocational training, and healthcare to equip the workforce with skills needed for the future economy. Focus on STEM (Science, Technology, Engineering, and Mathematics) education and digital literacy.

3. Promote Sustainable Urban Development:

• Implement smart city initiatives that prioritize sustainable infrastructure, efficient public transport, green spaces, and waste management systems to accommodate urban growth.

4. Foster Green Economy Initiatives:

• Encourage the development of green jobs through incentives for businesses that invest in renewable energy, sustainable agriculture, and conservation projects. Support small and medium enterprises (SMEs) in green sectors.

5. Enhance Gender Equity and Social Inclusion:

• Implement policies that empower women and marginalized groups, ensuring equitable access to education, healthcare, and economic opportunities.

6. Strengthen Local Governance:

• Empower local governments with the authority and resources to implement policies tailored to community needs. Promote participatory governance to involve citizens in decision-making processes.

7. Focus on Climate Resilience:

Integrate climate adaptation strategies into development plans, prioritizing vulnerable regions. Invest
in disaster risk reduction and early warning systems to enhance community resilience to climate
impacts.



Conclusion

As India approaches the pivotal year of 2047, the intersection of its burgeoning population and the urgent need for sustainable development presents both profound challenges and significant opportunities. With a projected population of nearly 1.7 billion, India stands at a crossroads where effective political policies can either harness the demographic dividend for economic growth or exacerbate existing social and environmental issues.

This study underscores the critical importance of integrated policy frameworks that align population dynamics with sustainability goals. By investing in human capital through education and skill development, promoting sustainable urbanization, and fostering green economic initiatives, India can position itself as a leader in sustainable development.

Ultimately, India's path toward a sustainable future hinges on the collaborative efforts of policymakers, civil society, and the private sector. By embracing a holistic approach to governance that prioritizes sustainability and inclusivity, India can navigate its demographic transitions and emerge as a resilient and prosperous nation by 2047.

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INDIA'S POPULATION STATISTICS AND SUSTAINABILITY - A POLITICAL STUDY TO 2047

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Introduction

India, projected to be the most populous country in the world by 2047, faces a critical juncture in its demographic trajectory. With a population expected to reach approximately 1.7 billion, the interplay between population growth and sustainable development has become a focal point of political discourse and policy-making. This demographic shift offers both tremendous opportunities for economic growth and significant challenges that must be addressed to ensure a sustainable future.

The rapid increase in population is accompanied by urbanization, rising consumption patterns, and heightened demands on natural resources. As cities expand and the rural population migrates to urban areas in search of better livelihoods, issues such as infrastructure strain, pollution, water scarcity, and housing shortages have emerged as pressing concerns. Furthermore, the need for effective governance to manage these challenges has become more urgent than ever.

This study aims to explore the relationship between India's population statistics and sustainability efforts within a political framework leading up to 2047. By examining current population trends, environmental impacts, and existing policies, this research seeks to identify key areas for political intervention that can facilitate a sustainable path for India's future.

Key themes of this study include:

- 1. **Demographic Trends**: Analyzing population growth rates, urbanization patterns, and age distribution to understand the implications for economic and social policies.
- 2. **Sustainability Challenges**: Investigating how population dynamics contribute to environmental degradation, resource depletion, and climate change, and the role of policies in mitigating these effects.
- 3. **Political Framework**: Evaluating the effectiveness of existing policies and governance structures in addressing the intersections of population and sustainability, identifying gaps and areas for improvement.
- 4. **Future Projections**: Utilizing demographic and environmental data to project future scenarios and inform policy recommendations that align with India's long-term sustainability goals.

By bridging the gap between population statistics and sustainability efforts, this study aims to provide actionable insights for policymakers, civil society, and stakeholders. Ultimately, the goal is to contribute to the development of comprehensive, integrated policies that will enable India to navigate its demographic transition while ensuring a sustainable and equitable future for all citizens by 2047.

Review of Literature

The interplay between population dynamics and sustainable development has been a subject of extensive research, reflecting the complexity of addressing these challenges within political frameworks. This literature review synthesizes key findings from various studies, reports, and policy documents that illuminate the critical aspects of India's population growth and its implications for sustainability.



1. Demographic Trends and Projections

Research highlights that India's population is expected to surpass 1.7 billion by 2047, driven by high fertility rates in certain regions and decreasing mortality rates. The **United Nations (2021)** projects that India will experience significant urbanization, with over 50% of its population living in urban areas by 2047. Studies such as those by **Census of India (2011)** and **NITI Aayog (2021)** emphasize the importance of understanding age distribution and migration patterns to address labor market demands and social services.

2. Sustainability Challenges

Several scholars have explored the environmental impacts of population growth. Chaudhuri (2020) discusses how increased population density exacerbates issues such as air and water pollution, waste management, and resource depletion. Research by the World Bank (2018) highlights the link between unsustainable practices and rising consumption levels, emphasizing the need for policies that promote sustainable resource management.

3. Political and Policy Frameworks

The effectiveness of India's existing policies in addressing the challenges posed by population growth is a recurring theme in the literature. Studies by **Dreze and Sen (2013)** critically analyze the **National Population Policy** and other initiatives, noting that while some progress has been made, gaps remain in implementation and integration across sectors. **Mohan (2006)** argues for a holistic approach that aligns population policies with environmental sustainability, advocating for better coordination among government agencies.

4. Gender and Social Equity

Research has increasingly focused on the importance of gender equity in achieving sustainable development. UN Women (2020) emphasizes that empowering women and ensuring their access to education and healthcare are crucial for managing population growth sustainably. Roy (2000) adds that addressing social inequalities is essential to enable marginalized communities to participate in and benefit from economic growth.

5. Urbanization and Infrastructure

Urbanization is a critical factor in the relationship between population and sustainability. McKinsey Global Institute (2010) highlights the need for sustainable urban planning to accommodate the influx of people into cities, recommending investments in infrastructure that prioritize environmental sustainability. Chandrasekhar (2016) discusses the challenges posed by urban sprawl, advocating for policies that promote compact, resource-efficient urban development.

6. Climate Change and Resilience

The literature emphasizes the necessity of integrating climate resilience into population policies. MoEFCC (2021) outlines India's commitments to climate action, and research by **Bloom** (2011) suggests that proactive measures are needed to mitigate the impacts of climate change on vulnerable populations. Scenario planning and risk assessment are highlighted as vital tools for policymakers to address these future challenges.

7. Comparative Perspectives

Several studies compare India's demographic and sustainability challenges with those of other developing countries. Research by McKinsey Global Institute (2010) and ILO (2021) illustrates that while India faces unique challenges, there are valuable lessons to be learned from the experiences of nations like Brazil and Indonesia in managing similar issues.

Research Methodology

The research methodology for this study aims to explore the intricate relationship between India's population dynamics and sustainable development through a political lens. By utilizing a mixed-methods approach, the study will integrate quantitative and qualitative data to provide a comprehensive analysis of current trends, challenges,



and policy recommendations. This section outlines the research design, data collection methods, and analysis techniques employed in the study.

1. Research Design

The study adopts a **mixed-methods approach**, combining quantitative analysis of demographic data with qualitative insights from policy documents, expert interviews, and case studies. This design enables a holistic understanding of the relationship between population statistics and sustainability.

• **Descriptive and Exploratory**: The research will document current population trends and explore potential future scenarios based on various policy interventions.

2. Data Collection Methods

a) Secondary Data

- Demographic Data: Population statistics will be sourced from the Census of India, United Nations Population Division, and other relevant governmental databases. Key indicators will include population growth rates, age distribution, and urbanization trends.
- Sustainability Indicators: Data on environmental factors such as resource consumption, pollution levels, and climate change metrics will be obtained from sources like the World Bank, MoEFCC, and the NITI Aayog.
- **Policy Documents**: A review of existing policies, including the **National Population Policy** and various state-level sustainability initiatives, will be conducted to assess their effectiveness and integration.

b) Primary Data

- Expert Interviews: Semi-structured interviews will be conducted with policymakers, demographers, environmentalists, and representatives from NGOs. These interviews will provide insights into current challenges and potential policy solutions.
- **Surveys**: Surveys targeting stakeholders involved in population and sustainability initiatives will be distributed to gather perspectives on existing policies and future needs.

3. Data Analysis Techniques

a) Quantitative Analysis

- Statistical Tools: Quantitative data will be analyzed using statistical software (e.g., SPSS, R) to identify trends and correlations. Key analyses will include:
 - > Descriptive Statistics: Summarizing demographic trends and sustainability indicators.
 - Regression Analysis: Assessing the relationship between population growth and environmental sustainability metrics.

b) Qualitative Analysis

- Thematic Analysis: Qualitative data from interviews and policy documents will be analyzed using thematic analysis to identify key themes, patterns, and insights regarding population and sustainability challenges.
- **Content Analysis**: A content analysis of policy documents will be conducted to evaluate the alignment between demographic trends and sustainability goals.



4. Case Studies

• Comparative Case Studies: Selected case studies from Indian states that have implemented successful population and sustainability policies will be analyzed. These case studies will provide practical examples of effective governance and policy integration.

5. Scenario Planning

• **Future Projections**: Utilizing demographic and environmental data, scenario planning will be employed to project various future outcomes based on different policy choices. This approach will help illustrate the potential impacts of various strategies on population and sustainability.

6. Limitations of the Study

- **Data Reliability**: Some demographic and environmental data may carry inherent uncertainties, particularly in long-term projections.
- Scope of Policy Analysis: The study may not capture all regional variations in India's diverse federal system, where state policies can differ significantly.
- Rapidly Evolving Contexts: Changes in technology, global climate agreements, and political leadership may affect the relevance of findings over time.

India's Population Statistics and Sustainability - A Political Study to 2047

As India approaches the centenary of its independence in 2047, it faces the monumental challenge of managing a population projected to reach approximately 1.7 billion. This demographic shift presents unique opportunities for economic growth and development but also poses significant challenges related to sustainability. The nexus between population dynamics and sustainable development is critical, as it will shape the country's political landscape and its ability to address pressing social and environmental issues.

Demographic Context

India's population is characterized by a young demographic, with a significant portion in the working-age group. This demographic dividend can drive economic growth if harnessed effectively. However, rapid urbanization, increasing consumption, and environmental degradation demand immediate attention from policymakers.

Sustainability Challenges

Population growth exacerbates challenges such as resource depletion, pollution, and climate change. Urban areas face infrastructure strain, inadequate housing, and increased demand for services, making sustainable urban planning essential. Addressing these challenges requires policies that promote sustainable resource management and equitable distribution of opportunities.

Political Framework

India's existing policies must be evaluated to determine their effectiveness in addressing the intersection of population growth and sustainability. While initiatives like the National Population Policy and various state-level programs have been implemented, gaps remain in their integration and execution. Effective governance is essential to create a cohesive strategy that links demographic trends with sustainability objectives.



Findings and Suggestions

Findings

1. Demographic Trends:

- India's population is projected to reach approximately 1.7 billion by 2047, with a significant proportion under the age of 30. This presents a potential demographic dividend if effectively harnessed through education and employment initiatives.
- Rapid urbanization is expected, with over 50% of the population residing in urban areas, leading to increased demand for housing, infrastructure, and services.

2. Environmental Impacts:

- Increased population density exacerbates challenges such as air and water pollution, waste management, and resource depletion. Cities face critical challenges related to energy consumption, transportation, and green space availability.
- Climate change poses significant risks, particularly to vulnerable populations, highlighting the need for policies that promote resilience and sustainability.

3. Social Inequality:

- Marginalized communities, including women and rural populations, face barriers to accessing education, healthcare, and economic opportunities. Inequities in resource distribution can hinder overall development and sustainability efforts.
- Gender disparities remain a significant challenge, affecting participation in the workforce and decision-making processes.

4. Policy Gaps:

- Existing policies often lack coherence and integration, resulting in fragmented approaches to managing population growth and sustainability.
- There is a need for better coordination among different levels of government and sectors to implement effective, comprehensive policies.

5. Public Awareness and Engagement:

 There is a lack of awareness and engagement among the public regarding sustainable practices and the implications of population growth. Educational initiatives are needed to promote sustainability at the community level.

Suggestions for Political Action

1. Develop an Integrated Policy Framework:

Formulate a comprehensive national strategy that connects population dynamics with sustainability
objectives. This framework should encourage collaboration between ministries, local governments,
and stakeholders to create cohesive policies.

2. Invest in Human Capital:

 Enhance investments in education and vocational training to equip the workforce with the skills needed for emerging sectors. Focus on STEM education and digital literacy to prepare for future job markets.



3. Promote Sustainable Urban Development:

 Implement smart city initiatives that prioritize sustainable infrastructure, efficient public transport, and green spaces. Foster policies that promote compact urban development to minimize resource consumption.

4. Foster Gender Equity and Social Inclusion:

Implement targeted policies that empower women and marginalized groups, ensuring equitable access
to education, healthcare, and economic opportunities. Promote women's leadership in sustainability
initiatives.

5. Strengthen Local Governance:

Empower local governments with the resources and authority needed to implement policies effectively.
 Encourage participatory governance to ensure that community needs and voices are integrated into decision-making.

Conclusion

As India approaches the landmark year of 2047, the interplay between its population dynamics and sustainable development presents both challenges and opportunities that are critical to the nation's future. With a projected population of approximately 1.7 billion, India stands at a crucial juncture where effective political strategies can harness its demographic potential while addressing pressing sustainability concerns.

This study underscores the urgent need for an integrated approach to governance that aligns population growth with sustainability objectives. Key findings highlight the importance of investing in human capital, promoting sustainable urbanization, and addressing social inequalities.

Furthermore, the environmental implications of population growth cannot be overlooked. With increasing urbanization and resource demands, there is a pressing need for policies that promote sustainable practices, enhance climate resilience, and ensure equitable resource distribution.

In conclusion, India's path toward a sustainable future by 2047 hinges on the collaborative efforts of policymakers, civil society, and the private sector. By embracing a holistic framework that integrates demographic considerations with sustainability goals, India can navigate its complex challenges and emerge as a leader in sustainable development.

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AI in Education

Patne M.V.

Abstract:

Artificial Intelligence (AI) has become a buzzword in many industries, and the field of education is no exception. With the advancements in technology, AI is being integrated into various aspects of education, from learning and teaching to administrative tasks. This paper aims to explore the current state of AI in education and its potential impact on the future of learning. The paper begins by providing a brief overview of AI and its applications in education. AI is the simulation of human intelligence processes by machines, including learning, problem-solving, and decision-making. In education, AI is being used to personalize learning, automate administrative tasks, and aid in teaching and assessment.

Next, the paper delves into the benefits of AI in education. One of the primary advantages of AI is its ability to personalize learning for students. With the help of AI algorithms, adaptive learning systems can customize the learning experience for each student based on their learning style, pace, and interests. This allows students to learn at their own pace and in a way that suits them best, leading to better learning outcomes. Additionally, AI can assist teachers in automating mundane administrative tasks, freeing up their time to focus on more critical tasks such as lesson planning and providing personalized support to students. crucial for social and emotional development. It is essential to address these concerns and ensure that AI is used ethically and in a way that benefits all students.

Furthermore, the paper explores the future of AI in education. As technology continues to advance, AI is expected to play a more significant role in education. It is predicted that AI will be able to assist teachers in providing more personalized and adaptive instruction, leading to improved learning outcomes. Moreover, AI is also expected to revolutionize the assessment process, with the potential to provide real-time feedback and adaptive testing.

Introduction:

Artificial Intelligence (AI) is rapidly transforming various industries and sectors, including education. AI has the potential to improve the traditional education system by providing personalized and adaptive learning experiences for students, automating administrative tasks for educators, and developing intelligent tutoring systems. With the advancement of AI technologies and the availability of vast amounts of data, the education sector has started to adopt AI to enhance teaching and learning processes. In this paper, we will discuss the role of AI in education, its algorithm, and a proposed model to integrate AI in the education system.

Objectives of AI in Education:

1. Enhance Personalized Learning

One of the main objectives of AI in education is to enhance personalized learning. AI technology has the ability to analyze students' learning patterns and adapt the teaching methods accordingly. This enables students to learn at their own pace and in a way that best suits their individual learning style. With the help of AI, teachers can create customized lesson plans and provide personalized feedback to students, leading to improved learning outcomes.

2. Improve Efficiency in Assessment and Grading

AI-powered systems can automate the process of assessment and grading, making it more efficient and accurate. This saves teachers' time and allows them to focus on other important aspects of teaching. AI-based assessment tools can also provide immediate feedback to students, allowing them to identify their mistakes and improve their understanding of the subject. This objective of AI in education can lead to a more efficient and fair evaluation of students' performance.



3. Enhance Student Engagement

AI technology has the ability to make learning more interactive and engaging for students. With the use of AI-powered chatbots, students can ask questions and receive immediate responses. This not only improves their understanding but also increases their engagement in the learning process. AI can also be used to create virtual learning environments that simulate real-life scenarios, making learning more fun and engaging for students.

4. Provide Personalized Guidance and Support

AI-powered systems can provide personalized guidance and support to students, especially those who struggle with certain subjects. These systems can identify the areas where a student needs help and provide them with additional resources and support. This objective of AI in education can help students overcome their learning difficulties and improve their overall academic performance.

5. Support Teachers in Lesson Planning

AI can support teachers in creating lesson plans and designing curriculum. With the help of AI, teachers can access a vast amount of educational resources and use them to create engaging and effective lesson plans. This objective of AI in education can save teachers' time and help them create a more dynamic and interactive learning experience for their students.

6. Promote Lifelong Learning

AI can also promote lifelong learning by providing students with access to a wide range of educational resources and tools. With the help of AI-powered platforms, students can continue to learn and improve their skills even outside of the traditional classroom setting. This objective of AI in education can help prepare students for the constantly evolving job market and promote a culture of continuous learning.

Role of AI in Education:

Artificial intelligence (AI) has been making its way into various industries, revolutionizing the way things are done. Education is no exception to this trend. In recent years, there has been a significant increase in the use of AI in education, and it has proven to be a game-changer. From personalized learning to student assessment, AI is transforming the education landscape, making it more efficient, effective, and accessible.

Firstly, AI has the potential to personalize the learning experience for students. Traditional education follows a one-size-fits-all approach, where all students are taught the same material at the same pace. However, this does not take into account the individual differences and learning styles of students. With AI, personalized learning is possible. AI-powered learning platforms use algorithms to analyze students' learning patterns, strengths, and weaknesses, and tailor the content and pace of learning accordingly. This not only makes learning more engaging and effective but also helps in identifying and addressing learning gaps.

Secondly, AI can assist teachers in their daily tasks, allowing them to focus on more important aspects of teaching. Grading assignments and tests is a time-consuming task for teachers, but with AI-powered grading systems, this process becomes faster and more accurate. AI can also assist teachers in creating lesson plans, generating quizzes and tests, and providing feedback to students. This not only saves time but also ensures that teachers have more time to focus on individual student needs.

Furthermore, AI can help in identifying at-risk students and providing them with the necessary support. By analyzing data such as attendance, grades, and behavior, AI can identify patterns that indicate a student may be struggling. This allows teachers to intervene early and provide targeted support to help the student improve their academic performance. AI can also predict the likelihood of a student dropping out, enabling teachers to take preventive measures.

In addition to personalized learning and teacher assistance, AI also has the potential to make education more accessible. With the rise of online learning, AI-powered virtual tutors and chatbots have been developed to assist students with their coursework, answer their questions, and provide additional support. This is particularly beneficial for students with learning disabilities or those who may not have access to traditional education due to geographical or financial constraints.



Opportunities of AI in Education:

1. Personalized Learning

One of the major opportunities of AI in education is the ability to personalize learning for students. AI algorithms can analyze vast amounts of data, including a student's learning style, performance, and interests, to create a personalized learning experience tailored to their individual needs. This can help students learn at their own pace and in a way that best suits them, improving their engagement and understanding of the material.

2. Intelligent Tutoring Systems

AI can also be utilized to create intelligent tutoring systems that provide students with immediate feedback and guidance. These systems can identify areas of weakness and provide targeted instruction and practice, allowing students to improve their understanding and mastery of subjects. This can be particularly beneficial for students who struggle with traditional teaching methods or have learning disabilities.

3. Automated Grading and Feedback

AI can also be used to automate the grading process, which can save teachers valuable time and allow them to focus on other aspects of their job. Additionally, AI can provide students with instant feedback on their assignments, allowing them to identify areas for improvement and make necessary revisions. This can help students learn from their mistakes and improve their performance.

4. Enhanced Curriculum and Content Creation

AI can assist in the creation of educational content and curriculum by analyzing data on student performance and learning patterns. This can help educators identify areas of weakness and adjust the curriculum to better meet the needs of their students. AI can also create interactive and engaging content, such as virtual simulations and games, to make learning more enjoyable and effective.

5. Accessibility and Inclusivity

AI has the potential to make education more accessible and inclusive for students with disabilities or learning differences. For example, AI-powered speech recognition technology can help students with dyslexia or other learning disabilities to better engage with written material, while AI-powered sign language translation can help deaf or hard of hearing students access lectures and presentations.

Challenges of AI in Education

1. Lack of Human Interaction

One of the main challenges of integrating AI into education is the potential loss of human interaction. Some argue that the personal touch of a human teacher cannot be replaced by AI, and that students may miss out on important social and emotional skills that can only be learned through human interaction. It is important to strike a balance between utilizing AI and maintaining a healthy level of human interaction in the classroom.

2. Bias and Unfairness

AI algorithms are only as unbiased as the data they are trained on. If the data used to train an AI system is biased, then the system will also exhibit bias. This can lead to unfairness and discrimination in the education system, potentially perpetuating existing inequalities. It is important for educators to be aware of this issue and actively work to mitigate bias in AI systems.

3. Privacy and Data Security

AI systems in education are powered by vast amounts of data, including personal information about students. This raises concerns about privacy and data security, as this information could potentially be accessed by unauthorized parties. It is crucial for educational institutions to have strong data protection measures in place to ensure the safety and privacy of their students.



4. Cost and Access

The implementation of AI in education can be costly, making it difficult for some schools and institutions to adopt this technology. This could lead to a widening gap between schools that can afford to integrate AI and those that cannot, creating inequalities in education. Additionally, students from marginalized communities may not have access to the necessary technology to fully benefit from AI in education.

Conclusion:

Artificial Intelligence (AI) has rapidly advanced in recent years and has AI has the potential to transform the education system and improve learning outcomes for students. Personalized learning, accessibility, and efficiency are some of the key benefits that AI can bring to education. However, it is essential to address the concerns and challenges associated with the use of AI in education, such as the fear of replacing human teachers and ethical considerations. By collaborating with AI and using it as a tool to enhance teaching and learning, we can create a more effective and inclusive education system. As AI continues to advance, it is crucial for educators and policymakers to keep up with the developments and embrace its potential to improve education. The opportunities of AI in education are vast and have the potential to greatly enhance the learning experience for students. However, it is important to address the challenges that come with integrating AI into education in order to ensure the fair and ethical use of this technology. With proper consideration and implementation, AI has the power to revolutionize the education system and provide students with a more personalized, engaging, and inclusive learning experience. As AI continues to evolve and improve, it is crucial for educators to stay informed and adapt to these advancements in order to effectively prepare students for the future.

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A STUDY ON ARTIFICIAL INTELLIGENCE AND ITS APPLICATIONS

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Abstract

This research paper investigates the multifaceted applications of Artificial Intelligence (AI) across key industries, including healthcare, finance, and education. It provides a comprehensive overview of AI technologies, such as machine learning, natural language processing, and computer vision, emphasizing their roles in enhancing operational efficiency and decision-making. In healthcare, AI tools are reshaping diagnostics and treatment personalization, leading to improved patient outcomes. In finance, AI-driven algorithms optimize trading strategies and enhance fraud detection, significantly improving risk management. In the educational sector, by synthesizing current research and case studies, this paper aims to provide valuable insights into the transformative potential of AI while advocating for responsible practices to mitigate associated risks and ensure equitable benefits for society.

Introduction:

Artificial Intelligence (AI) software is used to build and develop an clever application from scratch with the help of Machine learning and Deep Feep learning capabilities. Deep nourish is a powerful social media management platform leveraging the latest in AI technology that automates and optimize social media efforts. Artificial intelligence (AI) is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human aptitude. AI is machine-displayed intelligence that simulates human behavior or thinking and can be trained to solve specific problem.

Applications of Artificial Intelligence (AI): A list of the top applications of AI (Artificial Intelligence):

A. Application of AI in E-Commerce:

Artificial intelligence (AI) has many applications in e-commerce, including-

Personalized shopping: AI analyzes customer data to suggest products based on their preferences.

Demand forecasting: AI can predict sales and help businesses manage inventory and marketing campaigns.

Visual search: AI can identify and match products based on pictures, allowing users to search for products they don't know the name of.

Fraud detection: AI can help prevent fraudulent activities and protect customers' private data.

Marketing: AI can help businesses understand their customers and create targeted ads and offers.

Inventory management: AI can help automate routine tasks like inventory management and order processing.

Logistics optimization: AI can help optimize supply chains and improve delivery times.

1) Applications of Artificial Intelligence (AI) in Education:

- **I. Personalized Learning:** AI in education has enabled every student to find the best ways to learn and study their curriculum. Educational software's personalized learning approach has supported individuals in the best possible ways.
- **II. Task Automation:** AI in schools and virtual classrooms automates nearly every value-added job. In addition to customizing the teaching process, AI software systems can check tasks, grade tests, organize research pacers, maintain reports, and generate presentations and notes, among other administrative duties. Thus, automating everyday activities using AI has made the learning environment more productive.

III. Visualization of data: Where conventional methods of instruction, with the possible exception of lab tries, are unable to offer visual aspects, AI-generated material increases the real-world relevance of visualized online communication educational settings. The technology aids in 2D-3D visualization, enabling pupils to interpret the data in several ways.

IV. Creating digital lessons: AI education can facilitate bit-size education by utilizing low-storage study materials and other digital lessons. In this way, students and professionals can use the entire content for research while taking up much computer space. Furthermore, these materials will be accessible from any mobile device, removing the need for distance learning.

B. Applications of AI in intelligent manufacturing:

Some of the primary benefits of AI in manufacturing include more effective maintenance, improved decision-making and ultimately, more uptime. With equipment running at full capacity more often, production throughput will naturally increase, yielding higher output and better quality.

Applications of AI techniques to combating cyber crimes: AI transforms security log analysis by harnessing machine learning algorithms to analyze copious amounts of real-time log data. By detecting patterns and anomalies, even without known threat signatures, AI empowers organizations to identify and respond to potential security breaches swiftly

Applications of AI in medical field : AI can help identify diseases before symptoms appear, and can analyze data from CT scans, MRIs, and X-rays. AI can help identify repurposed drugs, create new combination therapies, and reduce errors. AI can also predict a molecule's suitability based on its structural fingerprints and molecular descriptors. AI can provide real-time recommendations to patients based on their preferences. AI can help with remote treatment of patients.

C. Techniques used for AI:

Some techniques of artificial intelligence (AI) include:

Machine Learning:

Machine learning uses two types of techniques: supervised learning, which trains a model on known input and output data so that it can predict future outputs, and unsupervised learning, which finds hidden patterns or intrinsic structures in input data.

Natural Language Processing:

Natural Language Processing (NLP) is a branch of artificial intelligence that focuses on the interaction between computers and humans through natural language. The objective is to program computers to process and analyze large amounts of natural language data.

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Conclusion:

In conclusion, Artificial Intelligence, ranging from narrow AI to super intelligent AI, has profoundly impacted various sectors, from healthcare to transportation. Its ability to analyze vast amounts of data and make predictions has led to increased efficiency and new opportunities. AI technologies continue to advance, it is crucial to address the ethical implications, including bias, accountability, and transparency. Ensuring responsible AI deployment will be essential for maximizing benefits while minimizing risks. Moving forward, a collaborative approach involving policymakers, industry leaders, and researchers will be vital in shaping an AI-driven future that is equitable and beneficial for all.

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RECENT TRENDS IN DIGITAL MARKETING: SPECIAL EMPHASIS ON INFLUENCER MARKETING

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Abstract

Marketing is being a vital aspect of business. Only manufacturing or providing best products and services doesn't serves the purpose of sale. Reaching to the customer is an important, basic and most crucial part of sales. Despite delivering the best with affordable price many businesses fail everyday due to lack of marketing. Presence of computers, mobiles and internet transformed marketing into a Digital marketing. This digital marketing also captured a market and brought many revolutions which left old marketing methods. This Digital marketing outgrown so fast and also uses social media and entertain media such as Facebook, Instagram and You tube. Organisations along with hiring celebrities for their marketing engaging influencers social media for promotion. This Influencers Marketing is expanding so rapidly and capturing the large share in Digital Marketing

Keywords: Marketing, Digital Marketing, Influencer Marketing and Social Media Marketing

Every Business wish to stand out distinct in a market of competition. Whatever may be the business, whatever may be the market, reaching to the customer, educate them about the product is the secret to achieve sell. Here, Marketing comes to you as a rescue.

Marketing:

Philip Kotler, known as the father of modern marketing, defined marketing as the art and science of creating, exploring, and delivering value to a target market at a profit. Kotler's definition of marketing includes:

- Identifying unfulfilled needs and desires
- Defining, measuring, and quantifying the market size and profit potential
- Pinpointing which segments a company can best serve
- Designing and promoting the right products and services
- Regulating which products or services are of interest to customers
- Determining the strategy for sales, communications, and business development

Kotler also said that marketing is "the creative use of truth" and "the homework that we do before we have a product".

So, if a business wants to sell their products or services they should use some form of marketing. Marketing is transformed drastically over the period of time. From Calling out the features of a product in a local market to sending a promotional emails Marketing evolved itself drastically. In the presence of computer and internet marketing is becoming a digital marketing these days.

Objective-

- 1. To analyse the concepts of digital Marketing and Influencer Marketing
- 2. To understand the meaning, concept, advantages, limitations and use of Influencers Marketing for Businesses and Brands

Type of Research-

This descriptive type of study with an objective to understand Digital Marketing and Influencer Marketing. The study is based on secondary data which is collected through reference books, websites and reports available related to the subject.



Digital Marketing:

Digital marketing is the component of marketing that uses the Internet and online-based digital technologies such as desktop computers, mobile phones, and other digital media and platforms to promote products and services (Wikepedia, 2024)

Thus, in a nutshell, if a business house is using a computer, mobile and internet for marketing their product or service that business is doing a digital Marketing.

Traditional marketing methods includes poster advertisement, billboards, sales person also newspaper advertisement etc. Then when Televisions and radio were introduced commercials were run on the TV and radio. That was the most popular methods of marketing that time. Even today television commercials are playing important role in the marketing and advertising their product the impact has been reduced. Nowadays in era of social media social media marketing is in a boom.

Digital Marketing has many branches, some important marketing strategies are as follows:

- Content Marketing: In a content marketing business houses try to educate customers by helping them find information about the products through videos, blogs and e-guides etc.
- Search engine marketing: Search engine marketing uses search engine like Google to market their products. Search engine encompasses
 - 1. digital marketing strategies
 - 2. Search Engine optimization
 - 3. Pay-per-click advertising
- **Email marketing:** Business houses use email marketing because it's very effective. In email marketing business houses send promotional emails to the customers.
- **Public relations:** Is a type of modern marketing where business houses can build brand reputation in media using various tactics.
- Social Media Marketing: Different authors have defined social media marketing (SMM) in different ways, including:

Jara et al. (2014): SMM is a marketing tool that uses social networks to encourage consumer participation and attention.

Kim and Ko (2012): SMM is a communication method that uses empathy to target young and older consumers.

Thus, social media marketing is the process of using social networking platforms to increase your brand awareness and customer leads. This social marketing comprises many subs division. Influencers marketing is blooming branch in social marketing.

• Influencers Marketing:

Influencer marketing is a social media marketing strategy where brands collaborate with influencers to promote their products or services. Influencers are people or organizations who have a following and are considered experts in their field through their channel or handle on different social media.

Influencer marketing is commonly used in B2C, particularly for e-commerce businesses. However, B2B companies can also take advantage of these popular marketing methods if they find a thought leader in the industry with a large enough following.

Who are Influencers:

Influencers are people who have a large following on social media and use their platform to promote products and share information. There are several types of influencers, each with different follower sizes and characteristics:

- Micro influencers: Have a following of 10,000–50,000 and create content based on their area of expertise
- Nano influencers: Have a following of 1,000–10,000 and are often everyday people with emerging personal brands
- Macro influencers: Have a large audience that may have originated from a niche
- Mega influencers: Have a following of 1 million or more and are experts in their niche
- Mid-tier influencers: Have a following of 500,000–1 million and are a trusted group of content creators

Influencers as the name itself they suggest really influence the people. These influencers through their content made people listen their videos. Many times, the format of the content when it comes to a promotion or marketing is the same. Here, a person who is influencer claims that he or she already used the products or services. Thus, they can talk on it authoritatively. Previously when an actor or actress used to market the product people believed them and started using the product so that was a hit strategy at that time. But nowadays people learned that mostly these celebrities didn't used the product and thus present fake promises and reviews.

On the other hand, Influencers who are more trust worthy because of relatability with the most of the population. Influencers are most trusted than celebrities these days. Many brands hire a celebrity as a brand ambassador for their product along with influencers to use, to review to market and to promote their business or products.

Recently International brand hired many Indian influences as their official partners.

As per the Influencers benchmark Report following are the findings:

- The Influencer Marketing Industry is set to grow to approximately \$24 Billion by the end of 2024
- 63% plan to use AI in executing their influencer campaigns, 55% of these brands will use AI for influencer identification
- 85% of our survey respondents believe influencer marketing to be an effective form of marketing, an increase from previous years
- 75% admit to having increased the amount of content they produce and share
- 60% of those respondents who budget for influencer marketing intend to increase their influencer marketing budget over 2024
- Nearly 1/4 of respondents intend to spend more than 40% of their entire marketing budget on influencer campaigns
- There is a strong preference for working with small (nano 44% and micro 26%) influencers ahead of expensive macro-influencers (17%) and celebrities (13%)
- It is now the norm to pay influencers (41%), rather than just give them a free product (31%).
- TikTok (utilized by 69% of brands using influencer marketing) is by far the most popular influencer marketing channel, now well ahead of Instagram (47%), YouTube (33%) and Facebook (28%)
- The main purpose of running influencer campaigns is to create User Generated Content (56%). Generating sales (23%) is a distant second. (Report, 2024)

This increased influence of social media is a result of many things. Therse things positively left impact on people's mind. Customers are started searching the sources, contents advantages, disadvantages of the product or services they intend to use.

The reason behind increased Influencers Marketing are as follows:

- 1. Increased use of social media: Specially during and after pandemic people started using more social media than never before. Easier and cheaper availability of devices and internet leads to higher viewer. And higher viewer leads to larger number of people becoming as well as choosing to become an influencer.
- 2. Trustworthiness and reliability of Influencers: Unlike celebrities Influencers are real, common, normal people. Their daily life, the problems they face the resources they have are resembles with the users. Many a times

solutions provided by them are realistic and practical. Many Influencers gained the confidence of users over the time by their honest reviews of product (As they actually used it for themselves)

Thus, people believe them and use buy products on the recommendations of Influencers and business houses want to cash this for the marketing of their products.

3. Targeted marketing: Often these Influencers targets of have group of viewer shares some commonality among them. This commonality may be gender wise, demographic, regional, cultural or anything.

Thus, brands want to target such specific class take help of influencers.

- **4.** Content quality: Influencers whose content quality is good. When they make a content which is learned, trustworthy and reliable people resonate with them.
- **5.** Cost-effective: This method is cost effective when compared with traditional marketing as well as promotions through celebrities or shotting advertisement.
- **6. Tracking of result and effectiveness:** Influencer marketing provides results that can be track through engagement metrics and promotional codes. Promotional codes when purchasing allows customers to avail discounts.
- **7. Increased reach:** Influencers expand a brand's reach beyond its existing audience which was limited as compared to traditional media.

These are the ways where Business houses can use influencers marketing:

- 1. Sponsored posts: Business houses make partnerships with the Partner with influencers to create sponsored content on their social media channels.
- 2. Product reviews: Business houses Send influencers their product or service and ask for a review.
- **3. Giveaways:** Collaborate with influencers to host giveaways or contests. Giveaways are the gifts send by the company through that specific influencer so that probable customers can use it. Otherwise it would be very difficult to target a class who can become a customer of that business house.
- **4. Commission:** Business houses can make partnerships with influencers on the basis of commission. Also.
- **5. Influencer takeovers, webinars, events:** In takeovers Influencer runs brands social media for a day or specific time, events and webinars are programmes, workshop arranged especially for the influencers.
- **6. Long-term partnerships and Brand ambassador:** Collaborate with influencers for longer periods, building a stronger relationship. Obviously, these are done with big ang trustworthy content creators.

But as everything has its limitations Influencer Marketing is not an exception to this. Despite of being emerging and overarching it suffers from some limitations which needs to be understand and taken care of while using influencer marketing.

Here are some limitations to influencer marketing:

- 1. Followers trust for sponsored content: When even a very big and trustworthy Influencer promotes a product which is a sponsored by that company followers may not be necessarily trust him and follow his advice. Thus, relying and depending on the Influencers followers and goodwill may harm the companies' expectations from marketing.
- **2. Excessive influencer marketing:** If a company hire excessive number if influencer and it they make excessive promotion this increased frequency and aggressive marketing strategy make viewer reluctant and negative about the brand which results into negative impact on sales.



- **3. Quantifying effectiveness:** Despite of techniques like view summary, promotional discount code, logging details it's not always easy to measure and quantify the effectiveness of specific or all the influencers altogether.
- **4. Fake followers and engagement:** Some influencers may mislead brands by pretending larger number of followers. Partnering with such influencer can affect the brand negatively.
- **5. Influencers goodwill:** Just a larger number of followers could not be a sole criterion for choosing a right influencer. The content he/she created before, the values the goodwill they created should also be aligned with brands image value and goodwill.
- **6. Reliability:** Influencers are unreliable sometimes. Thy could also promote a competitor product or can stop working to reach people for any issue or even can retire. This probability can make them unreliable. Overdependency on them can mislead to business houses.
- **7. Quality and consistency concern:** Once a brand entered into a partnership and promotion is done by an influencer there is no guarantee that the influencer will stick to the same value as he done before the promotion. Many a times due to any reason if the influencer become less popular among the followers or it he is not consistent with the wok it can definitely hamper the brand.

Conclusion:

In a nutshell influence marketing is very important day by day it is becoming a very important component of digital marketing strategy which offer number of benefits such as increased reach and awareness among customers niche a marketing reliability and authenticity of influencer can positively affect brand. The effectiveness of the influencer can be measured with various statistic techniques and for promotional code there is a direct relationship between promotion code and sales. Thus, brand can measure the effectiveness this new method is relatively cost effective when compared to traditional advertising and hiring celebrity or shooting a promotional or advertisement or photoshoot.

But there are also a limitation and drawbacks to this many times when a company want to promote the product company choses very aggressive marketing strategy and with this company hire or enter into a partnership with many influences. Firstly, it is not necessary that all the influencers are authentic and many times influences only pretend to have a larger number of followers but actually the followers are fake and artificially created plus when a company collaborates with larger number of influencers the continuously promote the product, they ask people to buy the product. It can become a very unnatural and people can lose interest in your brand so it could affect negatively the brand image. Brands can measure the effectiveness of influencer but that does not always give real results. The concern is also about a consistency and quality as it is not always necessary that influencer always maintain the same quality and the morals and values which are associated with the brands

But despite of advantages and limitation limitations there are mid-ways to take benefit of the emerging concept of influencers marketing. It can give a very fruitful result. The precautions or the things which need to be understand before choosing the influencer or going for influencer marketing. The company should choose influencer who are very much aligned with the brand value moral and target customers. Company should enter into a long-term partnership and collaboration with the influencer instead of instead going for short term collaboration. Brand should promote the transparency and clear disclosure of the content which is sponsored so that trust of the followers should remain with the brand. Brand should monitor and check the results of on this influencer marketing regularly. Brand should also adopt the changes and regulations which are happening in this social media industry and influencer's market. So, by understanding the Digital marketing and influencer marketing Brands can fetch positive results.

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