

PT. MOHAN LAL S.D. COLLEGE FOR WOMEN

SH. UPKAR KRISHAN SHARMA BLOCK

"आदर्श अनुशासन मर्यादा ईमानदारी तथा उच्च मानवीय
मूल्यों के बिना किसी का जीवन महान नहीं बन सकता।"



Pt. MOHAN LAL S.D. COLLEGE FOR WOMEN, GURDASPUR

A MULTI FACULTY POST GRADUATE INSTITUTE

Re - accredited with 'A' grade by NAAC (3rd cycle 2024)

IIC Ranking '3 Star' Rating by Ministry of Education 2024

Listed in the Tribune Guide to Best Colleges (25th April, 2025)

MANAGED BY: GGDSD COLLEGE SOCIETY, CHANDIGARH

AFFILIATED TO: GURU NANAK DEV UNIVERSITY. AMRITSAR

OUR INSPIRING SPIRIT



PT. MOHAN LAL JI

FORMER EDUCATION, HOME AND FINANCE MINISTER, PUNJAB
FOUNDER PRESIDENT OF GGDSD COLLEGE SEC-32, CHANDIGARH
PT. MOHAN LAL S.D. COLLEGE FOR WOMEN, GURDASPUR
PT. MOHAN LAL S.D. SCHOOL, CHANDIGARH.



SH. UPKAR KRISHAN SHARMA JI

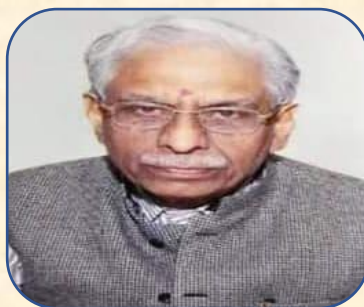
FORMER PRESIDENT GGDSD COLLEGE SOCIETY, CHANDIGARH
FORMER PRESIDENT PTMLSD COLLEGE FOR WOMEN, GURDASPUR
EX-VICE PRESIDENT, EVEREADY INDUSTRIES INDIA LTD.

E-MAGAZINE

‘DARPAN’



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Sh. Hiramani Aggarwal
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Chief Editor : Principal



Er. Surkhab Shelly
Editor



Dr. Khushboo
Editor



Mr. Ashwani
Technical Expert





Dear Sdians...

It gives me immense sense of fulfilment when I look at the monthly edition of college e-Magazine '**DARPAN**' which has now successfully completed four glorious years. The essential purpose of e-magazine '**DARPAN**' is to inform, engage and inspire faculty, students, parents, alumni and our stakeholders. This e-magazine endeavors to reflect the values and the long tradition of excellence of the institution itself. Throughout the year campus buzzes with various activities that makes learning experience at SD Gurdaspur, a unique one. The perpetual efforts of the faculty, students and clubs/societies of the college in keeping the campus alive are commendable. Workshops, conferences, competitions, rallies, sports, guest lectures, FDPs, PDPs and a great variety of activities that corroborate academic learning help our students to grow in the real sense.

I congratulate Er. Surkhab Shelly, Dr. Khushboo (editors) along with Mr. Ashwani (Technical Expert) for giving practical shape to my idea of e-magazine and wish all the best for inspired and result oriented session.

Dr. (Mrs.) Neeru Sharma
Principal



ANNUAL CONVOCATION



The Annual Convocation Ceremony for the academic session 2024–2025 was celebrated with great enthusiasm and dignity, marking a proud milestone in the academic journey of the graduating students. The occasion was graced by Dr. Sanjeev Sharma, Vice-Chancellor, Maharaja Ranjit Singh Punjab Technical University, Bathinda, who attended the event as the Chief Guest. In welcome address, Dr. P. K. Bajaj, General Secretary, extended a cordial welcome to the distinguished guests, faculty members, proud parents and graduating students. On this significant occasion, College Principal Dr. Neeru Sharma presented the Annual Report of the college, highlighting its major academic, cultural and co-curricular, sports achievements during the session. A total of 250 students from various postgraduate and undergraduate programmes were conferred degrees. Dr. Rama Gandotra, IQAC Coordinator read the profile of the chief guest. The Chief Guest in his presidential address, congratulated the students on successfully completing their academic journey and encouraged them to pursue excellence with dedication, integrity and confidence. He emphasized that a degree is not merely a certificate but a symbol of perseverance, discipline and continuous learning, and it opens the door to greater responsibilities and opportunities in life. The ceremony was graced by several eminent dignitaries, including Managing Committee Member Mr. Jatinder Bhatia; Dr. Ajay Sharma, Principal, GGSDS College, Chandigarh; Sh. Hira Mani Aggarwal, Chairman, Local Managing Committee; S. Avtar Singh Sidhu, Former Principal, Government College, Gurdaspur; Dr. Varinder Singh, Officiating Principal, Kheri Gurna College, Chandigarh; Mr. Gorakh Nath, Managing Committee Member and Dr. Mrinal Gupta, Principal, SD College, Fatehgarh Churian. The ceremony concluded with a formal vote of thanks by Shri. Jatinder Bhatia, expressing gratitude to the Chief Guest, distinguished dignitaries, faculty and staff for their invaluable contribution to the success of the event, along with heartfelt wishes for the bright and successful future of the graduating students.



ACTIVITIES OF IIC



The Startup Cell of IIC organized a workshop on 'Design Thinking, Critical Thinking and Innovation Design' with the objective of nurturing creativity, analytical ability, and problem-solving skills among students. Mrs. Harsha Sharma HOD, Dept. of Fashion Designing was the resource person. The session aimed at equipping participants with modern approaches to innovation and structured thinking processes essential for academic excellence, research orientation, and entrepreneurial growth. Participants were encouraged to identify real-world problems and propose innovative solutions using design frameworks.

A Short Video Competition on Artificial Intelligence was organized by the Social Media Cell under the IIC. The competition received enthusiastic participation from students, reflecting their creativity and awareness of emerging technologies. Three best videos were selected and awarded certificates. Ms. Ashdeep Kaur from BCA secured the First Position, Ms. Parminder Kaur from B.Sc. secured the Second Position and Ms. Simrandeep from B.Com secured the Third Position. All selected videos were uploaded on the designated portal and are also available on the official YouTube channel of the College IIC. The competition aimed to promote creativity, innovation and awareness in the field of Artificial Intelligence.

The Home Science Department, in collaboration with the IIC organized a cafeteria activity under the theme 'Learn and Earn.' Under this initiative, students prepared dishes and put up stalls of spring rolls, French toast, vada pav, dahi bhalla, aloo tikki, pav bhaji and cheese balls to students and staff members. The main objective of the activity was to provide practical exposure, develop entrepreneurial skills, and help students to while learning.



ACTIVITIES OF IIC



A workshop on 'Intellectual Property (IP) Awareness and Patent Filing' was conducted in collaboration with College IIC under R&D. Mrs. Jyoti Saini, IPR coordinator delivered an informative session on the fundamentals of Intellectual Property, covering various forms such as patents, copyrights, trademarks, and industrial designs. Special emphasis was given to patents, their significance, eligibility criteria, and the rights conferred upon patent holders. Dr. Rajwant Kaur, Assistant professor Botany explained the step-by-step process of patent filing. The session was interactive, with participants actively engaging in discussions and seeking clarification on real-world patenting scenarios.

The R&D Cell of IIC organized an informative session on 'Importance of Artificial Intelligence in Different Streams'. Mrs. Samita Khajuria highlighted the growing importance of Artificial Intelligence (AI) in various academic streams including Arts, Commerce, Science and the Fashion Designing Department. She emphasized that AI is revolutionizing every field by enhancing efficiency, accuracy, creativity and innovation.



INTER-COLLEGE COMPETITIONS



Inter-college competitions were organized by the Language Society on the occasion of International Mother Language Day. The event aimed to promote love, respect and awareness for mother languages among students. The Chief Guest, Shri Hiramani Aggarwal, Chairman, Local Managing Committee, Gurdaspur, graced the occasion. In his address, Shri Hiramani Aggarwal emphasized that the mother language is an essential part of human identity and must be preserved with dedication. He appreciated the college's initiative. 50 students from 10 colleges participated in various activities like handwriting competition, press note writing, speech competition and folk song competition. All winners were honored with mementos and certificates.

LECTURE ON 'UNIQUE IDENTITY OF HOLI IN INDIAN CULTURE'



A one-day lecture on 'Unique Identity of Holi in Indian Culture' was organized by the Punjabi Department. The main speaker, Shri Amrik Singh, Retired Lecturer from Senior Secondary School, Gohat Pokhar, discussed the historical, spiritual and social significance of Holi. He explained the mythological background of the festival, particularly the story of Prahlad and Holika. He highlighted the message of the victory of good over evil. He emphasized that Holi is not merely a festival of colors but a symbol of love, unity, brotherhood and harmony in society. At the end of the programme, a memento was presented to Shri Amrik Singh as a token of respect and gratitude.



COMMEMORATING OUR FORMER COLLEGE PRESIDENT



The college commemorated the 85th birth anniversary of former College President Shri Upkar Krishan Sharma ji. On this occasion, the College Principal Dr. (Mrs.) Neeru Sharma, along with faculty members, office staff and students paid floral tributes with deep respect and reverence. Essential items such as flour, pulses, rice, sugar, tea leaves and other necessary goods were donated to the Old Age Home at Lehal village as an act of humanitarian service. The 'Shri Upkar Krishan Sharma Scholarship' was also awarded to five deserving students to support their education. Speaking on the occasion, College Principal Dr. (Mrs.) Neeru Sharma said that Shri Upkar Krishan Sharma ji dedicated his life to upliftment of the college and the welfare of students.

DOCUMENTARY SCREENING ON 'ART HISTORY OF PUNJAB'



The Fine Arts Department in collaboration with IIC organized a documentary screening on 'Art History of Punjab'. The programme aimed to acquaint students with the rich artistic heritage of Punjab, highlighting its traditional paintings, sculptures, architecture, crafts and folk art forms. The documentary traced the evolution of Punjabi art from ancient times to the modern era, showcasing the cultural diversity and creative excellence of the region.

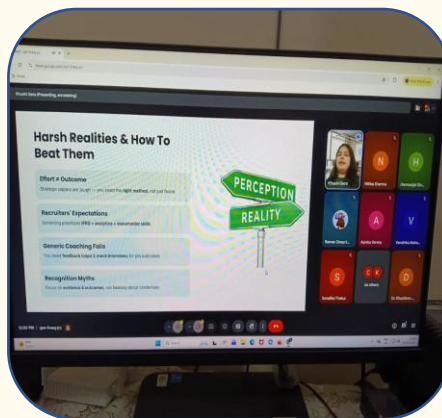


LEARNING BEYOND CLASSROOMS



Students from the Department of Commerce undertook an educational visit to Bank of Baroda as part of the Add-On Course on Banking and Insurance. The visit was organised to give students real-world exposure on banking functions beyond the classroom. The session was conducted by the Branch Manager, Mr. Ajay Kumar, who delivered an engaging and informative talk on topics such as KYC compliance, cyber security awareness, digital banking advancements, traditional deposit schemes and investment options including SIPs and Mutual Funds. He also highlighted the pivotal role of banks in money circulation and economic stability, while guiding students about career opportunities in the banking sector. The visit served as a valuable learning experience, broadening students' understanding of the banking industry and its relevance to their academic and professional growth.

WEBINAR TITLED 'GETTING JOBS IN BIG 4S AND MNCS'



The Post Graduate Department of Commerce organized an engaging webinar titled 'Getting Jobs in Big 4s and MNCs.' The resource person for the event was Ms. Khushi Gera, an ACCA Affiliate, Finance Educator, CFA, and former Audit Professional, who shared practical insights on building a strong profile for careers in the Big 4 firms and leading multinational companies. She highlighted essential technical competencies, interview strategies, certification pathways, and industry expectations.



OUTREACH PROGRAM



The Rotaract Club organised a Langar Sewa as an outreach activity on the auspicious occasion of Mahashivratri outside the college premises. All Rotaract members actively participated and came together with great enthusiasm, teamwork, and a spirit of selfless service. Members served langar to devotees and passersby, reflecting the true essence of Mahashivratri—devotion, humility, and community service. The club extended special thanks to Mr. Vinod Gupta Sir for his constant encouragement and unwavering support towards the club's initiatives.

WORKSHOP ON 'MAKEUP MASTERY'



The Department of Cosmetology in collaboration with IIC organized a workshop on 'Makeup Mastery' to enhance practical skills and product awareness among students. Mrs. Raj Deol, a renowned makeup expert from Kalanaur, Gurdaspur, was invited as the resource person. Mrs. Raj Deol provided an insightful demonstration focusing on makeup techniques and detailed knowledge of various makeup products, which greatly benefited the participants.



GROUP DISCUSSION ON UNION BUDGET



With the objective of enhancing students' understanding of India's fiscal framework and policy priorities, the Department of Economics and Political Science organized a group discussion and presentation of the Union Budget. The programme began with an introduction to the Union Budget by Mrs. Jyoti Saini, Head, Department of Economics, followed by an informative session on the budgetary process by Mrs. Daljinder Kaur, Head, Department of Political Science. Bavleen and Navjot (BA IV Semester) delivered a well-structured presentation highlighting key features of the Union Budget 2026, focusing on major policy announcements, sector-wise allocations, and their impact on economic growth and social welfare.

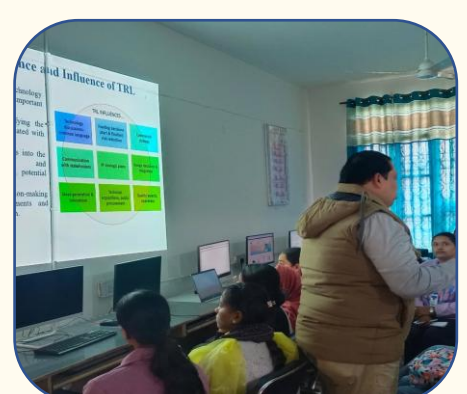
EXPLORING NATURE AT DALHOUSIE



A one-day educational trip to the scenic hill station of Dalhousie was organized for the students. A group of 56 students, accompanied by three faculty members, participated in the excursion. Surrounded by the beautiful valleys, pleasant weather, and serene environment of Dalhousie, the students thoroughly enjoyed the experience and captured memorable photographs. The trip proved to be both refreshing and educational, encouraging interaction, teamwork, and experiential learning beyond the classroom.



FROM IDEAS TO IMPACT: THE INNOVATION JOURNEY



The Innovation Cell, in collaboration with the IIC organized an expert talk on 'Technology Readiness Level (TRL), MRL, IRL, IP Commercialization and Technology Transfer.' The session was delivered by Sachin Gupta, who provided valuable insights into the different frameworks used to assess the maturity and applicability of technological innovations. During the session, he explained the concepts of Technology Readiness Level (TRL), Manufacturing Readiness Level (MRL), and Innovation Readiness Level (IRL) and how these frameworks help researchers evaluate the development stage of their ideas—from basic research to practical implementation. The session proved highly informative and encouraged students and faculty members to think beyond theoretical research and focus on translating their innovations into impactful real-world solutions.

GURMAT COMPETITIONS



Punjab Educate Trust organized Gurmat competitions to commemorate the 350th Martyrdom Day of Sri Guru Tegh Bahadur Ji, Bhai Mati Das Ji, Bhai Sati Das Ji and Bhai Dayala Ji. Around 40 students participated enthusiastically and seven students were selected for the second round. Jashandeep Kaur secured second position with an excellent performance. Area Incharge of Punjab Educate Trust, S. Jagdeep Singh Ji, personally visited the college to honor the winners with certificates, smart watches and mementos, while seven other students were also encouraged with smart watches and certificates.



CELEBRATING NATIONAL SCIENCE DAY



The Science Department, in collaboration with the Celebration Cell of the IIC celebrated National Science Day under the theme 'Women in Science: Catalysing Viksit Bharat.' On this occasion, a documentary was screened highlighting the inspiring contributions of renowned Indian women scientists. The documentary showcased their remarkable work in the fields of botany, biochemistry, rocket fuel development, and nuclear science, emphasizing their pioneering roles in advancing scientific knowledge in India. Students Pavneet Kaur, Geetika, and Khushdeep also shared their views on the significance of National Science Day.

ALUMNI MEET



An Alumni Meet and Greet for the session 2024-25 was organized in the college campus. Former students participated enthusiastically and fondly reminisced about their memorable days at the college. The College Principal Dr. Neeru Sharma stated that the main objective of the event was to bring alumni together on one platform and strengthen their bond with the institution. Dr. Dinesh Sharma, also emphasized the importance of maintaining a strong connection between alumni and the institution for its continuous growth. She encouraged alumni to stay involved in the college's academic and cultural activities so that current students can benefit from their guidance. The program concluded with best wishes from the staff and students for the continued success of the college.



EMPOWERING DIGITAL SKILLS: TWO-WEEK TRAINING PROGRAM



The Department of Computer Science organized a Two-Week Training Programme on 'Web Development' to enhance the technical and practical skills of students in the field of modern web technologies. The training was conducted by Sachin Gupta, Owner of Hard Lines Institute, Gurdaspur, who shared his professional expertise and industry insights with the participants. During the programme, students were introduced to the fundamentals of HTML, CSS, JavaScript, responsive web design and the basics of backend development. Through live demonstrations, guided exercises and project-based learning, students learned how to create simple and functional websites while understanding the importance of user-friendly design and efficient coding practices. The training not only strengthened their technical knowledge but also helped them develop problem-solving abilities and confidence in applying web development tools. Overall, the programme proved to be highly informative and beneficial, providing students with valuable exposure to real world web development practices and preparing them for future opportunities in the rapidly growing field of information technology.



FROM CLASSROOM TO FIELD: AN EDUCATIONAL VISIT



An educational visit to the Punjab Agricultural University Regional Research Station was organized as part of the Skill Enhancement Course 'Gardening Techniques.' The visit was jointly arranged by the Celebration Cell of IIC, Eco Club and the Department of Botany to provide students with practical exposure to modern agricultural and gardening practices. During the visit, Vivek Pandey delivered an informative session on modern vegetable cultivation techniques, including hydroponics and soilless farming methods. He also discussed the cultivation of exotic vegetables and highlighted their nutritional value as well as commercial potential in contemporary agriculture. The visit provided valuable experiential learning and significantly enhanced the students' understanding of innovative gardening techniques, sustainable agriculture and scientific soil management, making the programme both enriching and inspiring for the participants.

READING COMPETITION



A Reading Competition was organised by the library committee and Newspaper club. The library books, Journals, magazines and newspapers were made available to the students. A quiet, conducive environment was created for deep reading and learning, reinforcing the library's role as a center of knowledge and intellectual exploration. The college Principal and organising faculty members also spent one hour in the library along with the students. Students read a diversity of books including motivational, poetry, biographies and about 15 daily newspapers. This event highlighted the importance of reading as a vital activity for personal growth and intellectual development.



STUDENTS ACHIEVEMENTS



- It is the matter of honour that our four students Pinky, Sehajdeep Kaur, Palwinder Kaur and Jaisleen participated in the Inter-State Youth Exchange Programme 2026 organized under Mera Yuva Bharat (MY Bharat), Ministry of Youth Affairs and Sports, Government of India, held at Srinagar, Jammu & Kashmir from 06th to 08th February 2026. As a token of recognition and encouragement, the participating students were rewarded with track suits, shoes, caps, and other kits provided by the organizing authorities. The college team was also selected as the best team at district level.
- It is a proud moment for the College as our students achieved outstanding results in the Annual Moral Education Examination conducted by Guru Gobind Singh Study Circle, Ludhiana, which is organized every year to promote moral values and ethical awareness among students. Out of 44 participating students, Preneet Kaur secured first position, Sukhmanjit Kaur secured second position, and Gagandeep Kaur secured third position. The winners were honored with mementos and certificates by Mr. Amrik Singh Ji, Area Incharge. Additionally, Navdeep, Tania, Isha, and Tanvi Salaria received medals and certificates, while all other participants were awarded certificates.
- The University School of Financial Studies, Guru Nanak Dev University, Amritsar organized a Two-Day National Seminar on 'Punjab 2047: Forging the Future through Entrepreneurship and Innovation' on 10th and 11th February, 2026. Three students of the Commerce Department of our college—Ms. Bavneet Kaur, Ms. Janvi and Ms. Lovepreet Kaur—actively participated in the seminar and presented their research papers.

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STUDENTS ACHIEVEMENTS



- 26 students from the Department of Commerce attended the Career Counselling Session organised by DBEE, Gurdaspur. During the session, the DBEE officer explained the objectives and functioning of the Bureau and provided valuable insights into recruitment procedures for various government jobs. Placement and Training Generation Officer Sh. Purshotam Singh guided students about reliable job portals.
- Youth Club and NSS Unit volunteers participated in a five-day Adventure Hiking and Trekking Camp organized by the Youth Services Department, Punjab at Wetland Tarn Taran Adventure Camp, Harike Pattan from 16–20 February 2026. The aim of the camp was to develop interest in nature, promote adventure activities and encourage a healthy lifestyle among students. Students Mandeep Kaur, Vanshika, Deepika, Tanisha and Nandini actively participated and gained valuable experience. During the camp, students trekked 14–16 km daily, which strengthened their spirit of determination, tolerance and teamwork. The camp included visits to Harike Gurdwara Sahib, Nanaksar Harike and the confluence of the Sutlej and Beas rivers.
- Students of our college participated in the Annual Inter-College Cultural & Tech Fest 'Utsav 2026,' organized by the Golden Group of Institutions, Gurdaspur. The participants brought laurels to the institution by achieving remarkable success across various competitions. Ms. Priya (B.A. 6th Semester) secured 1st Prize in Solo Song, while Ms. Anakhdeep Kaur (B.Sc. FD 4th Semester) won 1st Prize in Mehndi. Ms. Japanpreet Kaur (4th Semester) earned 2nd Prize in Extempore, and Ms. Manjot (M.Sc. FD 4th Semester) secured 2nd Prize in Face Painting. Ms. Jasmeen and Ms. Sehaj (B.A. 6th Semester) clinched 3rd Prize in Debate, while Ms. Tanisha (Diploma in Cosmetology 2nd Semester) secured 3rd Prize in Nail Art. Ms. Sakshi (B.A. 6th Semester) also won 3rd Prize in the Selfie Challenge. In addition, Appreciation Awards were conferred upon Ms. Gurwinder Kaur (B.A. 2nd Semester) for Poster Making and Ms. Manjot Kaur (B.A. 2nd Semester) for Rangoli.

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STUDENTS ACHIEVEMENTS



- Seven Students from our college participated in the State Level Adventure/Hiking/Trekking Camp organized by the Department of Youth Services Punjab at Mirzapur SAC Mohali from 28 February to 04 March 2026. The students who represented the college were Rytham Rathi, Gagandeep Kaur, Simranjeet Kaur, Gurleen Kaur, Ashdeep Kaur, Bavleen Kaur and Surbhi Sharma. During the camp, they participated in activities such as hiking, trekking, morning exercises and outdoor challenges which improved their physical fitness, stamina and teamwork. Living in a mountainous environment with limited resources and without mobile networks also taught them discipline, independence and adaptability.
- A seven-day Disaster Management Training Camp was organized at SSM College, Dinanagar from 5th February to 11th February 2026 in collaboration with the Yuva Aapda Mitra Scheme (YAMS). The training was conducted by the Mahatma Gandhi State Institute of Public Administration (MGSIPA), Government of Punjab, under the sponsorship of the National Disaster Management Authority (NDMA), Ministry of Home Affairs, Government of India. The camp concluded successfully, significantly strengthening disaster preparedness awareness among the students. Certificates were awarded to the participants upon successful completion of the training.



SPORTS ACHIEVEMENTS



- The Handball team of the college secured the second position in the Inter-College Handball Championship held at Guru Nanak Dev University, Amritsar, from 31st January to 2nd February. The team displayed excellent performance under the leadership of Captain Arshdeep Kaur, with Kangan serving as the Vice-Captain. The team was coached and trained by Ms. Gagandeep Kaur, Head of the Department, whose guidance played a significant role in this achievement. The college principal appreciated the efforts of the team and the coach for bringing laurels to the institution.
- Our students delivered an outstanding performance in the Inter-College Boxing Championship held at Khalsa College, Amritsar on 29th January 2026 where 8 to 10 colleges participated. Arshdeep Kaur clinched the Gold Medal in the 60–65 kg weight category, while Japanpreet Kaur secured the Bronze Medal in the 54–57 kg weight category.
- Our student Kangan is selected for All India Inter Varsity Camp in GNDU, Amritsar.
- Arshdeep Kaur has been invited by the University for Advance sports practice. She is currently staying at the University Sports Hostel, where she is receiving free training along with food and refreshments at no cost.



ECONOMIC IMPACT OF UNION

BUDGET 2026-27

The Union Budget 2026–27 is presented on February 1st, 2026, focuses on 'Viksit Bharat' by targeting 7.4% GDP growth, with 4.3% fiscal deficit estimate. The Budget emphasizes strengthening domestic manufacturing, energy security, and reducing import dependence. It highlights inclusive measures supporting employment, agriculture, household purchasing power, and universal services, contributing to growth of around 7%. The Budget also recognizes global trade disruptions, supply chain risks, and rapid technological change shaping the external environment.

Economic Impacts and Priorities:

- **Fiscal Consolidation & Stability:** The budget pledges a tight fiscal discipline, reducing the fiscal deficit to 4.3% of GDP, which is expected to lower interest rates over time and free up resources.
- **Infrastructure-Led Growth:** Public capital expenditure has been raised to ₹12.2 lakh crore, with a focus on new freight corridors, waterways, and upgrading 200 legacy industrial clusters.
- **Manufacturing and Sectoral Boosts:** Focused on "Atamnirbhar Bharat," the budget introduces incentives for biopharma manufacturing (Biopharma SHAKTI) and reforms for IT/ITeS, including relaxed safe harbour norms for MSMEs.

- **Employment and Human Capital:** Anchored in "Yuvashakti," it focuses on skill development, innovation, and training over 1 lakh allied health professionals.
- **Taxation and Consumer Impact:** The personal income tax structure remains consistent with the 2025 revision, offering stability to taxpayers.
- **Foreign Investment:** Liberalized rules for data centers and a strong emphasis on service sector FDIs (80.2% of total inflows in recent years) are designed to boost global partnerships.

Policy Highlights

- **Finance and Economy:** A 'High Level Committee on Banking for Viksit Bharat' will be set up to review the sector. The Foreign Exchange Management (Non-debt Instruments) Rules will be reviewed to simplify framework for foreign investments. Individual Persons Resident Outside India (PROI) will be permitted to invest in equity instruments of listed Indian companies through the Portfolio Investment Scheme. The investment limit under this scheme will be increased from 5% to 10% for individual PROI. A market making framework (with access to funds and derivatives on corporate bond indices) and total return swaps on corporate bonds have been proposed. An incentive of Rs 100 crore has been announced for single bond issuance of more than Rs 1,000 crore to encourage issuance of municipal bond

- **Industry and Commerce:** A scheme will be introduced to revive 200 legacy industrial clusters through updated technology and infrastructure. An integrated programme for the textile sector will be introduced with five sub-parts:

- (i) National Fibre Scheme,
- (ii) Textile Expansion and Employment Scheme,
- (iii) National Handloom and Handicraft Scheme,
- (iv) Tex-Eco Initiative, and
- (v) Samarth 2.0. To strengthen khadi, handloom and handicrafts, Mahatma Gandhi Gram Swaraj initiative has been proposed.

To enable the creation of 'Champion SMEs,' following initiatives are proposed:

(i) SME Growth Fund, with outlay of Rs 10,000 crore, (ii) top up of Self-Reliant India Fund, and (iii) liquidity support.

- **Infrastructure:** Public capex will be increased from Rs 11.2 lakh crore to Rs 12.2 lakh crore. An Infrastructure Risk Guarantee Fund will be set up to strengthen the confidence of private developers. Five tourism destinations will be developed in the Purvodaya states and 4,000 electric buses will be allocated to the region. A dedicated freight corridor will connect Surat to Dankuni and 20 new national waterways will be operationalized over the next five years. Schemes will be launched for Enhancement of Construction and Infrastructure Equipments and for container manufacturing.

- **Urban development:** City Economic Regions (CERs) will be mapped based on specific growth drivers, with allocation of Rs 5,000 crore per CER over five years. Seven high speed rail corridors will be developed between select cities.
- **Labour and Employment:** A Standing Committee on 'Education to Employment and Enterprise' will be established to develop the service sector. The Committee will also assess the impact of artificial intelligence on jobs.
- **Education:** Five university townships will be created in the industrial and logistic corridors. Support will be provided to the Indian Institute of Creative Technologies, Mumbai to establish animation, visual effects, gaming and comics content creator labs in 15,000 secondary schools and 500 colleges.
- **Energy:** Outlay of the Electronics Component Manufacturing Scheme will be raised from Rs 22,919 crore to Rs 40,000 crore. Dedicated Rare Earth Corridors will be established in Odisha, Kerala, Andhra Pradesh and Tamil Nadu. Rs 20,000 crore will be allocated over five years for carbon capture utilization and storage. Semiconductor Mission 2.0 will be launched.
- **Health:** New Allied Health Professional institutions will be established in both public and private sectors, in disciplines such as radiology, anesthesia, and behavioral health. To promote medical tourism, five regional medical hubs will be established. Three All India Institutes of Ayurveda will also be established.
- **Pharmaceuticals:** To enable domestic production of biologics and biosimilars, the Biopharma SHAKTI (Strategy for Healthcare Advancement through Knowledge, Technology, and Innovation) scheme will be implemented for five years with an outlay of Rs 10,000 crore. Three National Institutes of

Pharmaceutical Education and Research will be established and seven existing institutions will be upgraded.

▪ **Agriculture:** Deductions will be extended to cooperative members engaged in supplying cotton seeds and cattle feed. The animal husbandry sector will be supported through a credit linked subsidy programme. A coconut promotion scheme will be implemented to increase production

Impact on Individual

Income tax structure: Income tax slabs are not changed, but the new Income Tax Act, 2025 and redesigned forms are intended to make filing easier from April 2026.

Return revision window: The time available for revising returns is extended up to 31 March, which can reduce stress when you need to correct genuine errors.

Overseas payments: Tax collected at source on overseas tour packages and certain education and medical remittances under LRS is proposed at 2 per cent, which can improve cash flow planning.

Market participation: Changes to Securities Transaction Tax on futures and options are proposed, which may affect trading costs and hedging choices. STT changes include futures at 0.05% versus 0.02% earlier.

Impact on Business

Easier tax administration: Tax assessment and penalty proceedings are proposed to be integrated and several offences are proposed to be decriminalized, which can lower dispute risk.

IT and services competitiveness: A common safe harbour margin of 15.5 per cent for Information Technology Services and a higher threshold for availing safe harbour can improve certainty for exporters.

Corporate tax: Minimum Alternative Tax is proposed to be reduced to 14% from 15% and made final tax under stated conditions

India's Economic Outlook for 2026-27

While near-term performance depends on global trade, commodity prices and domestic demand, the fiscal math in the Budget provides a baseline for expectations. This India economic outlook 2026 view is anchored in the government's growth assumptions and deficit targets.

Nominal GDP growth assumption: Nominal GDP growth expectations implied by fiscal projections are around 10%.

Debt trajectory: Outstanding liabilities are estimated at 55.6 per cent of GDP in 2026-27, with a stated aim of reducing towards around 50 per cent of GDP by March 2031.

Borrowing and liquidity signals: Non-debt receipts are estimated at ₹36.5 lakh crore and total expenditure at ₹53.5 lakh crore, implying continued reliance on market borrowings to fund the gap.

References

- Summary of Union Budget 2026-27 - PIB
- Union Budget 2026 Impact: Key Sector Analysis - DBS Bank
- India's Union Budget FY 2026-27: Key highlights - Invest India
- Union Budget 2026-27, Highlights and Economic Impact | IBEF
- Union Budget FY 2026-27: A Push for India's Services Exports - PIB
- Union Budget FY 2026-27: Strengthening Capital Goods Sector - PIB
- UNION BUDGET 2026-27 - SIDBI <https://www.sidbi.in/uploads/Union>

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HoD & ASSISTANT PROF.

DEPARTMENT OF ECONOMICS

AI-INTEGRATED BUSINESS MODELS: TRANSFORMING MODERN ENTERPRISES

Introduction

Artificial Intelligence (AI) has emerged as one of the most influential technologies driving digital transformation in the twenty-first century. Businesses today operate in an environment characterized by intense competition, rapid technological change, and evolving consumer expectations. To survive and grow in this dynamic environment, organizations must adopt innovative strategies and technologies that enhance efficiency and deliver superior customer value. AI provides such capabilities by enabling machines to perform tasks that traditionally required human intelligence, including learning, reasoning, decision-making, and pattern recognition.

In recent years, AI has evolved from being a supporting technological tool to becoming a central component of business strategy. Organizations are integrating AI into their core processes to develop intelligent systems that automate operations, analyse large datasets, and provide predictive insights. This integration has given rise to AI-integrated business models in which artificial intelligence plays a fundamental role in value creation and revenue generation.

AI-integrated business models enable companies to personalize services, optimize supply chains, improve marketing strategies, and develop innovative products. Many leading global organizations such as Amazon, Netflix, Tesla, and Google have successfully embedded AI into their business models to achieve competitive advantage. These companies use machine learning algorithms, big data analytics, and automation technologies to improve efficiency and customer engagement.

The purpose of this article is to examine the concept of AI-integrated business models, analyse their key features, and explore real-world examples demonstrating how AI is transforming modern business operations.

Concept of AI-Integrated Business Models

A business model describes how an organization creates, delivers, and captures value. Traditionally, business models relied heavily on human decision-making, manual processes, and conventional market analysis. However, with the rise of digital technologies, organizations are shifting towards data-driven strategies.

An AI-integrated business model incorporates artificial intelligence technologies into core business functions such as production, marketing, customer service, logistics, and financial management. These models rely on large datasets, machine learning algorithms, and automated systems that continuously improve through data analysis.

According to research on digital transformation, AI enables businesses to transform raw data into actionable insights that guide strategic decisions.

Instead of relying solely on intuition or historical data, organizations can use predictive analytics to anticipate market trends and customer behaviour.

Types of AI-Integrated Business Models

1. AI-Driven Personalization Model

One of the most common applications of AI in business is personalization. Companies analyse customer data to recommend products, services, or content that match individual preferences.

 **Example: Netflix**

The streaming platform Netflix uses AI-based recommendation algorithms that analyse users' viewing history, search patterns, and ratings to suggest movies and television shows. These personalized recommendations significantly increase user engagement and retention. Studies show that the majority of content watched on Netflix comes from its recommendation system.

 **Example: Amazon**

The e-commerce giant Amazon uses machine learning algorithms to recommend products based on browsing behaviour, purchase history, and similar customer preferences. This personalized recommendation system plays a crucial role in increasing sales and improving the customer shopping experience.

2. AI-Driven Operational Efficiency Model

Another important AI business model focuses on improving internal operations and supply chain efficiency.

 **Example: Walmart**

Retail corporation Walmart uses AI to manage inventory, forecast demand, and optimize supply chains. AI systems analyse purchasing patterns and seasonal trends to ensure that products are available when customers need them.

 Example: Coca-Cola

Global beverage company The Coca-Cola Company uses AI-based analytics to improve marketing strategies, predict product demand, and optimize distribution networks.

3. AI-Powered Autonomous Systems Model

In this model, AI enables machines to operate independently with minimal human intervention.

 Example: Tesla

Electric vehicle manufacturer Tesla integrates AI into its autonomous driving technology. The company's Autopilot system uses cameras, sensors, and machine learning algorithms to analyse road conditions and assist drivers with navigation and safety.

 Example: Waymo

Autonomous vehicle company Waymo operates self-driving taxis that rely on advanced AI systems to navigate roads without human drivers. This represents a new transportation business model based on driverless mobility services.

4. AI-Driven Platform and Data Monetization Model

Digital platforms often use AI to analyse user data and generate revenue through targeted advertising or subscription services.

 Example: Google

Technology company Google uses AI algorithms to interpret user search queries and deliver relevant results. The company also uses AI to analyse user behaviour and display targeted advertisements, which form the primary source of its revenue.

 Example: Facebook

Social media platform Facebook uses AI to analyse user interests and interactions to deliver personalized content and advertising.

5. AI in Healthcare Business Models

Healthcare organizations are increasingly using AI to improve diagnosis, treatment planning, and medical research.

 Example: IBM Watson

The AI platform IBM Watson analyses large volumes of medical data and scientific research to assist doctors in diagnosing diseases and recommending treatments.

 Example: Tencent AIMIS

Technology company Tencent developed the AIMIS system that uses AI to analyse medical images and detect diseases such as lung cancer and diabetic retinopathy.

Benefits of AI-Integrated Business Models

- Improved Decision-Making

AI systems analyse vast amounts of data quickly and provide insights that help managers make informed decisions.

- Increased Efficiency and Productivity

Automation reduces manual tasks and allows employees to focus on more strategic activities.

- **Enhanced Customer Experience**

AI-driven personalization improves customer satisfaction by providing relevant recommendations and services.

- **Cost Reduction**

Automation and predictive maintenance help reduce operational costs.

- **Competitive Advantage**

Companies adopting AI technologies gain strategic advantages by innovating faster and responding more effectively to market changes.

Challenges in Implementing AI-Integrated Business Models

- **High Implementation Costs**

Developing AI infrastructure requires significant investment in technology, data management systems, and skilled professionals.

- **Data Privacy and Security Issues**

AI systems rely heavily on data, raising concerns about privacy and cybersecurity.

- **Lack of Skilled Workforce**

Organizations often face difficulties in recruiting professionals with expertise in AI, data science, and machine learning.

- **Ethical and Regulatory Concerns**

AI decision-making systems may raise ethical questions regarding bias, transparency, and accountability.

Future of AI-Integrated Business Models

The future of business will be strongly influenced by the continued development of artificial intelligence technologies. As AI systems become more advanced, organizations will be able to automate complex processes, improve predictive analytics, and develop entirely new services.

Emerging technologies such as generative AI, robotics, and intelligent automation will further transform industries including finance, healthcare, retail, and manufacturing. Businesses that successfully integrate AI into their strategic planning and operational frameworks will be better positioned to adapt to market changes and maintain long-term competitiveness.

Furthermore, governments and organizations are increasingly developing regulations and ethical frameworks to ensure responsible AI use. This will help build public trust and encourage wider adoption of AI-driven innovations.

Conclusion

AI-integrated business models represent a major shift in the way organizations operate and compete in the digital economy. By embedding artificial intelligence into core business processes, companies can analyse large datasets, automate operations, and deliver highly personalized customer experiences. Leading organizations such as Amazon, Netflix, Tesla, and Google demonstrate how AI can transform traditional business strategies into intelligent and scalable systems.

While the adoption of AI offers significant benefits including efficiency, innovation, and improved decision-making, businesses must also address challenges related to cost, data privacy, and ethical considerations. With proper governance and strategic planning, AI has the potential to reshape industries and create new opportunities for growth and innovation in the global economy.

References

Chui, M., Manyika, J., & Miremadi, M. (2018). AI adoption advances, but foundational barriers remain. *McKinsey Global Institute*.

<https://www.mckinsey.com/capabilities/quantumblack/our-insights/ai-adoption-advances-but-foundational-barriers-remain>

Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.

<https://hbr.org/2018/01/artificial-intelligence-for-the-real-world>

Iansiti, M., & Lakhani, K. R. (2020). *Competing in the age of AI: Strategy and leadership when algorithms and networks run the world*. Harvard Business Review Press.

<https://www.hbs.edu/faculty/Pages/item.aspx?num=56960>

Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.

<https://www.pearson.com/en-us/subject-catalog/p/artificial-intelligence-a-modern-approach/P200000003500>

Wirtz, B. W., Weyerer, J. C., & Geyer, C. (2019). Artificial intelligence and the public sector—applications and challenges. *International Journal of Public Administration*.

<https://doi.org/10.1080/01900692.2018.1498103>

McKinsey Global Institute. (2023). *The state of AI in 2023: Generative AI's breakthrough year*.

<https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year>

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GREENER ONLINE SHOPPING: THE RISE OF SUSTAINABLE SUPPLY CHAINS IN E-COMMERCE

Introduction

In recent years, the rapid growth of e-commerce has significantly changed the way people shop. With just a few clicks, products can be delivered to doorsteps anywhere in the world within hours or days. This convenience and accessibility go beyond what traditional retail can offer.

Consumers have more freedom to compare products, read reviews, and make informed choices from the comfort of their homes. Online shopping has transformed consumer behavior and allowed small businesses to reach global markets, creating a new economic landscape.

However, this convenience comes with a notable environmental cost. The increase in e-commerce activity has led to higher energy use, more packaging waste, and greater carbon emissions from transportation and logistics. As the world confronts the effects of climate change, businesses, governments, and consumers are realizing that ignoring sustainability in e-commerce is no longer an option. The push for environmentally responsible practices has sparked the growth of sustainable supply chains. These chains aim to minimize environmental harm while ensuring quality service, operational efficiency, and customer satisfaction. Sustainable supply chains in e-commerce are becoming

key strategies for businesses to stay competitive while positively impacting global sustainability goals.

Environmental Challenges in E-Commerce

Modern e-commerce depends on complex global supply chains that involve manufacturers, transporters, warehouses, and delivery systems. Every part of this network consumes natural resources and produces emissions. Manufacturing, for example, often requires large amounts of electricity, water, and raw materials. Many factories still rely on fossil fuels, causing air pollution, greenhouse gas emissions, and resource depletion.

A policy brief by the International Institute for Sustainable Development (2023) highlights the significant environmental footprint of e-commerce, particularly due to packaging waste and increased delivery traffic. The growing demand for quicker delivery services, like same-day or next-day shipping, worsens these environmental issues. While expedited shipping is convenient for consumers, it often needs more vehicles, extra trips, and less efficient delivery patterns. This results in a 10-12% increase in carbon emissions compared to standard shipping methods (AP News, 2023).

Packaging waste is one of the most visible environmental challenges in e-commerce. Plastic packaging, like bubble wrap, plastic mailers, and polystyrene fillers, is commonly used to protect goods during transport. Unfortunately, these materials are rarely reusable or recyclable. A study reported by The Guardian (2024) indicates that e-commerce packaging can produce up to four times more waste than traditional retail packaging. This waste leads to overflowing landfills,

pollution, and microplastic contamination in ecosystems, endangering wildlife and human health. Tackling these environmental challenges has become a top priority for companies aiming for long-term sustainability and operational resilience. Additionally, energy use in warehouses and fulfillment centers adds to the environmental burden. Climate-controlled storage, lighting, and automated sorting systems require significant electricity, often sourced from non-renewable energy. Studies show that energy consumption in e-commerce warehouses can account for up to 40% of a company's total supply chain carbon emissions. When combined with transportation emissions, this highlights the urgent need for more sustainable practices.

Sustainable Sourcing: The Foundation of Green Supply Chains

Sustainable sourcing means obtaining raw materials and products in ways that reduce environmental impact and ensure ethical production standards. Traditional supply chains often depend on non-renewable materials, energy-heavy processes, and potentially unsafe or unfair labor conditions. In contrast, sustainable sourcing focuses on working with suppliers who practice eco-friendly methods, such as using recycled or renewable materials, lowering energy use, and guaranteeing fair labor standards.

In the fashion industry, for example, brands are increasingly moving towards organic cotton, which requires fewer pesticides and fertilizers, thus reducing soil and water contamination. Similarly, electronics manufacturers are using components made from recycled metals, which decreases reliance on mining and cuts down carbon emissions from raw material extraction.

Sustainable sourcing also highlights the fair treatment of workers, including fair wages, safe working conditions, and respect for labor rights, which conscious consumers now increasingly demand.

Research published in Sustainability (Mdpi, 2023) shows that selecting sustainable suppliers not only minimizes environmental impact but also enhances brand reputation and builds consumer trust. Companies that commit to ethical and eco-friendly practices can boost loyalty among environmentally conscious shoppers willing to pay more for products that align with their values. Moreover, sustainable sourcing can reduce supply chain risks by ensuring compliance with environmental regulations and minimizing exposure to resource shortages, thus improving long-term operational resilience.

Eco-Friendly Packaging: Reducing Waste Throughout the Chain

Packaging is one of the most prominent and impactful elements of e-commerce. Traditional packaging materials—like plastic wraps, Styrofoam, and multilayer films—are mostly non-recyclable and meant for single use. These materials add to waste and environmental pollution, especially as global e-commerce continues to expand rapidly. To address these challenges, companies are increasingly implementing eco-friendly packaging solutions. Biodegradable mailers, recycled cardboard boxes, and paper padding help lessen environmental harm. Minimalist packaging designs that use only necessary materials to protect products are also becoming more common. Some businesses have introduced closed-loop systems, where customers return shipment boxes for reuse. This promotes a circular economy in which materials are repurposed rather than

thrown away.

Choosing sustainable packaging benefits both the environment and brand image. Research shows that when consumers view packaging as environmentally friendly, their satisfaction and loyalty grow (The Guardian, 2024). Brands that emphasize green packaging can stand out in competitive markets, attracting eco-conscious shoppers while lowering costs related to waste disposal and regulatory compliance. Over time, this shift can foster a culture of sustainability throughout the supply chain, encouraging innovation in materials, logistics, and design.

Green Logistics: Cleaner Delivery and Transportation

Transportation is a significant contributor to the carbon footprint of e-commerce. Delivery trucks, vans, and airplanes powered mainly by fossil fuels emit greenhouse gases that worsen climate change. To tackle this issue, companies are adopting green logistics, which opts for optimizing transportation systems to lower environmental impact while maintaining efficiency.

Electric delivery vehicles, including vans and cargo bikes, have introduced a significant innovation in this area. Electric vehicles produce fewer emissions and help reduce urban air pollution, particularly in crowded city centers. Companies are also using advanced route planning software to create efficient delivery paths, avoiding unnecessary trips and reducing fuel consumption. Strategically placing warehouses and fulfillment centers near high-demand areas cuts down travel distances and speeds up delivery times, further shrinking the

environmental footprint.

A review published in Sustainability (Mdpi, 2023) states that combining vehicle electrification with route optimization and intelligent warehouse placement is vital for reducing the carbon footprint of e-commerce operations. Green logistics benefits the environment while improving operational efficiency and lowering long-term costs, making it a beneficial strategy for companies committed to sustainability.

Technology and Data: Enabling Sustainable Efficiency

Technology plays a key role in building sustainable supply chains. Artificial Intelligence (AI), machine learning, and predictive analytics help businesses forecast demand accurately, cutting down overproduction and limiting inventory waste. Producing only what is needed conserves natural resources, energy, and materials while minimizing unnecessary environmental impact.

Blockchain technology and QR code tracking provide additional transparency in the supply

chain. Blockchain securely records and verifies every step of a product's journey—from raw material sourcing to final delivery. Consumers can scan codes to validate sustainability claims, labor practices, and ethical sourcing standards. This transparency fosters trust between businesses and consumers while encouraging responsible buying behavior.

Consumer Awareness and Demand for Sustainability

Sustainable supply chains depend on active engagement from consumers. Studies indicate that informed shoppers often choose greener options, like

selecting slower delivery methods that lower emissions or picking products with minimal or eco-friendly packaging. E-commerce platforms are increasingly taking note by highlighting sustainable products with eco-labels, badges, and filtering options, making it easier for consumers to make conscientious choices.

Providing clear information about a product's environmental impact builds consumer trust and encourages repeat purchases of sustainable goods (Wisdomlib, 2024). This teamwork, where companies offer transparency and consumers make thoughtful decisions, strengthens the overall sustainability of the e-commerce system. Consumer education, awareness campaigns, and reward programs for eco-friendly purchases are additional strategies that can boost engagement and support a culture of sustainability.

Challenges Facing Sustainable E-Commerce Supply Chains

Despite the clear benefits, creating sustainable supply chains has its challenges. Eco-friendly materials, green technologies, and improved logistics often require higher upfront costs, which may not be practical for every company. Global supply chains also face varying environmental regulations in different countries, making compliance and standardization difficult.

Consumer readiness to pay more for sustainable products remains a significant obstacle. While environmental awareness is increasing, price-sensitive consumers may still choose cost over sustainability. According to EJ-Develop (2024), overcoming financial and regulatory challenges is crucial for wider adoption of sustainable practices. Nonetheless, advancements in technology, stricter environmental laws, and rising consumer demand suggest that

sustainable supply chains will likely become a standard requirement for competitive e-commerce in the near future.

Conclusion

Greener online shopping is not just a trend; it signifies a major shift in how e-commerce functions in the 21st century. Sustainable supply chains decrease environmental harm, conserve resources, and promote ethical practices in manufacturing, packaging, transportation, and delivery. By adopting sustainable sourcing, eco-friendly packaging, green logistics, and innovative technology, companies can create robust operations while building consumer trust and long-term loyalty.

As consumer awareness grows and technology evolves, sustainability is likely to become a base expectation rather than an optional practice. Companies that embrace green supply chains now are likely to become leaders in the future of e-commerce, delivering value not just to their profits but also to society and the environment. Greener online shopping is therefore both an economic and ethical necessity, reflecting the urgent need for businesses and consumers to work together to create a sustainable future.

References

- International Institute for Sustainable Development (2023). E-Commerce & the Environment. Retrieved from <https://www.iisd.org/articles/policy-analysis/e-commerce-environmental-footprint>
- AP News (2023). Study Shows Faster Delivery Increases

Emissions. Retrieved from

<https://apnews.com/article/e809c3508a15033f4707dc2abbb6de69>

- The Guardian (2024). E-commerce Packaging Waste Up to Four Times That of Retail. Retrieved from

<https://www.theguardian.com/lifeandstyle/2024/feb/27/reduce-carbon-footprint-clothes-shopping-online-or-retail>

- Mdpi.com (2023). Sustainable Supplier Selection in E-commerce Supply Chains. Retrieved from <https://www.mdpi.com/2071-1050/15/24/16642>

- Wisdomlib.org (2024). Consumer Awareness for Sustainable Shopping. Retrieved from

<https://www.wisdomlib.org/science/journal/sustainability-journal-mdpi/d/doc1835804.html>

- EJ-Develop.org (2024). Challenges in Sustainable E-Commerce Implementation. Retrieved from <https://www.ej-develop.org/index.php/ejdevelop/article/view/252>

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DIGITAL CONSUMER BEHAVIOUR

Introduction

Consumer behaviour refers to the study of how individuals select, purchase, use, and dispose of products and services to satisfy their needs and desires. With the rapid development of digital technologies, consumer behaviour has undergone a significant transformation. The increasing use of the internet, smartphones, social media platforms, and e-commerce websites has reshaped how consumers gather information and make purchasing decisions.

Digital consumer behaviour focuses on how consumers interact with digital platforms such as websites, mobile applications, and social media while searching for product information, comparing alternatives, and completing purchases. The rapid growth of online retailing and digital marketing has made digital channels an essential component of the modern consumer decision-making process.

Today's consumers are more informed and empowered because they can easily access product information, compare prices, read online reviews, and interact with brands through digital platforms. This shift has forced businesses to redesign their marketing strategies by focusing more on digital engagement, personalized communication, and customer experience. Understanding digital consumer behaviour is therefore essential for businesses that aim to remain competitive in the evolving digital marketplace.

Objectives of the Study

The major objectives of this study are:

- To understand the concept of digital consumer behaviour.
- To analyse the role of digital marketing in influencing consumer decisions.
- To examine the impact of digital technologies on consumer buying patterns.
- To suggest strategies for businesses to effectively engage digital consumers.

Concept of Digital Consumer Behaviour

Digital consumer behaviour refers to the actions, interactions, and decision-making processes of consumers when they use digital technologies during the purchasing journey.

It includes several online activities such as:

- Searching for product information through search engines
- Reading customer reviews and ratings on e-commerce platforms
- Comparing prices across multiple online stores
- Interacting with brands on social media platforms
- Purchasing products through websites or mobile applications

Digital consumer behaviour also includes consumer participation in online communities where individuals create, share, and discuss content related to

products and brands. Such engagement plays a significant role in influencing consumer perceptions and brand loyalty.

Factors Influencing Digital Consumer Behaviour

Convenience

Online shopping provides consumers with the ability to purchase products anytime and from anywhere, making the process highly convenient.

Social Media Influence

Social media platforms significantly affect consumer preferences through advertisements, influencer marketing, and peer recommendations.

Online Reviews and Ratings

Consumers frequently rely on reviews and ratings from other customers before making purchase decisions, which helps reduce uncertainty and perceived risk.

Personalization

Digital platforms use artificial intelligence and data analytics to provide personalized recommendations and targeted advertisements based on consumer behaviour and preferences.

Price Comparison

Consumers can easily compare prices across multiple online platforms, which influences their final purchase decisions.

Mobile Technology

The widespread use of smartphones has increased the popularity of mobile commerce and digital shopping applications.

Trust and Security

Consumers prefer digital platforms that provide secure payment systems and ensure the protection of personal data.

Promotional Offers

Discounts, coupons, and special promotional deals encourage consumers to make online purchases.

Digital Consumer Decision-Making Process

The digital consumer decision-making process begins with problem recognition, where the consumer realizes a need or identifies a problem that requires a solution, such as the need for a new product or service due to changing preferences, lifestyle, or external influences like advertisements and social media trends. This is followed by the information search stage, in which consumers actively seek relevant details through digital channels such as search engines, company websites, online reviews, blogs, and social media platforms, enabling them to gather extensive knowledge about available options. Next comes the evaluation of alternatives, where consumers compare different brands, prices, features, quality, and customer feedback to assess which product best meets their needs and expectations; tools like comparison websites and

user ratings play a crucial role in this stage. Finally, in the purchase decision stage, the consumer selects and buys the most suitable product either through an online platform (e-commerce websites or mobile apps) or from a physical store, influenced by factors such as price, convenience, trust, return policies, and promotional offers.

Impact of Digital Consumer Behaviour on Businesses

Growth of E-Commerce

Businesses increasingly depend on online platforms to reach a global audience and expand their market presence.

Importance of Digital Marketing

Companies use digital marketing tools such as social media marketing, search engine marketing, and email marketing to influence consumer behaviour.

Customer Engagement

Digital platforms enable brands to interact directly with consumers and build long-term relationships.

Data-Driven Marketing

Businesses analyse consumer data to understand purchasing patterns and improve marketing strategies.

Personalized Customer Experience

Companies use artificial intelligence and recommendation systems to provide customized product suggestions and improve customer satisfaction.

Challenges in Digital Consumer Behaviour

- **Concerns related to data privacy and security**
- **Information overload for consumers**
- **Fake reviews and misleading advertisements**
- **Lack of physical inspection of products**
- **Trust issues with unfamiliar online sellers**

To address these challenges, businesses must ensure transparency, authenticity, and secure digital transactions.

Future Trends in Digital Consumer Behaviour

- **Use of artificial intelligence and chatbots in online customer service**
- **Increasing adoption of voice search and smart assistants**
- **Augmented reality (AR) and virtual reality (VR) shopping experiences**
- **Growth of mobile commerce and app-based shopping**
- **Greater focus on data privacy and ethical digital marketing practices**

These trends indicate that technological innovation will continue to reshape consumer behaviour and digital marketing strategies.

Conclusion

Digital consumer behaviour has transformed the way individuals interact with brands and make purchasing decisions. The widespread adoption of the internet, mobile devices, and social media platforms has created new opportunities and challenges for businesses.

Modern consumers expect convenience, personalization, and reliable information when making purchasing decisions. As a result, businesses must adopt effective digital marketing strategies, focus on customer engagement, and utilize data analytics to understand consumer preferences.

Understanding digital consumer behaviour is therefore essential for organizations to remain competitive in today's rapidly evolving digital marketplace.

References

Efendioğlu, İ. H. (2024). Digital consumer behaviour: A systematic literature review. *Prizren Social Science Journal*, 8(1), 67–80.

<https://doi.org/10.32936/pssj.v8i1.479> (Prizren Journal)

Degefa, E. S. (2025). Consumer behaviour in the digital era: A systematic literature review of internal and external influences. *International and Public Affairs*, 9(2), 59–70.

<https://doi.org/10.11648/j.ipa.20250902.12> (Science Publishing Group)

Putri, J. C. I., & Milad, M. K. (2024). Transformation of consumer behaviour in e-commerce regarding the impact of AI personalization and brand loyalty.

<https://doi.org/10.54066/jiesa.v6i2.719> (ITB Semarang)

Rahman, M. A., Alam, Z., & Afzal, M. K. (2025). Customer webrooming behaviour and purchase offline factors in consumer electronics.

<https://doi.org/10.46947/jarj612025404> (Jamal Academic Research Journal)

Wikipedia. (2025). Research online, purchase offline.

https://en.wikipedia.org/wiki/Research_online,_purchase_offline (Wikipedia)

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ARTIFICIAL INTELLIGENCE, ECONOMIC GROWTH, AND SOCIAL GOODS — A CRITICAL PERSPECTIVE

Introduction

While intelligent artificial intelligence offers significant opportunities for economic development and social improvement, its rapid adoption also raises serious concerns. The benefits of AI are not automatically shared equally, and without careful governance, intelligent systems may deepen economic inequality and threaten social cohesion. This perspective examines both the economic advantages of AI and the challenges it poses to social goods.

Economic Growth and Inequality

Intelligent AI undoubtedly boosts productivity and economic output, but these gains are often unevenly distributed. Large corporations with access to data, capital, and technical expertise benefit the most from AI technologies. In contrast, workers performing routine or low-skill tasks face job displacement due to automation. This can lead to structural unemployment and wage stagnation if reskilling programs are not adequately implemented. Moreover, AI-driven economic growth may concentrate wealth in technology-focused regions and industries, increasing regional and global inequalities. Developing economies that lack AI infrastructure risk falling further behind, creating a digital divide that limits inclusive growth.

1. Economic Advantages of Artificial Intelligence

a. Increased Productivity and Efficiency

- **AI automates repetitive and time-consuming tasks.**
- **Businesses can operate faster with fewer errors.**
- **Enables workers to focus on higher-value, creative activities.**

b. Innovation and New Industries

- **AI drives the creation of new sectors like autonomous vehicles, smart healthcare, and fintech.**
- **Encourages entrepreneurship and technological breakthroughs.**
- **Fuels research in areas like robotics and data science.**

c. Cost Reduction for Businesses

- **Automation reduces labor and operational costs.**
- **Predictive analytics minimize waste and improve resource allocation.**
- **Small businesses can scale faster using AI tools.**

d. Improved Decision-Making

- **AI analyzes large datasets quickly and accurately.**
- **Helps governments and firms make data-driven policies and strategies.**
- **Enhances forecasting in areas like weather, finance, and supply chains.**

e. Economic Growth and Global Competitiveness

- Countries investing in AI gain a competitive edge.
- AI contributes significantly to GDP growth.
- Attracts foreign investment and boosts digital economies.

2. Social and Economic Challenges of AI

a. Job Displacement and Unemployment

- Automation replaces routine and low-skill jobs.
- Workers in manufacturing, retail, and transport are most affected.
- Reskilling programs often lag behind technological change.

b. Widening Economic Inequality

- Wealth generated by AI is concentrated among tech companies and skilled workers.
- Low-income groups may not benefit equally.
- Digital divide limits access to AI opportunities.

c. Bias and Discrimination

- AI systems can inherit biases from training data.
- May lead to unfair outcomes in hiring, policing, and lending.
- Lack of transparency makes accountability difficult.

d. Threats to Privacy and Surveillance

- AI enables large-scale data collection and monitoring.

- Governments and corporations may misuse personal data.
- Raises concerns about individual freedom and autonomy.

e. Erosion of Social Cohesion

- Unequal benefits can create social unrest.
- Trust in institutions may decline if AI decisions seem unfair.
- Cultural and ethical tensions around machine decision-making.

3. Governance and Policy Challenges

a. Lack of Clear Regulations

- AI is evolving faster than legal frameworks.
- Governments struggle to create effective policies.
- Risk of misuse without oversight.

b. Ethical Concerns

- Questions about accountability for AI decisions.
- Moral dilemmas in areas like autonomous weapons and healthcare.
- Need for human-centered AI development.

c. Global Inequality Between Nations

- Developed countries dominate AI innovation.
- Developing countries risk being left behind.
- Unequal access to technology deepens global divides.

4. Pathways to Balanced AI Development

a. Inclusive Economic Policies

- Invest in education and reskilling programs.
- Support workers affected by automation.
- Promote equitable distribution of AI benefits.

b. Strong Regulatory Frameworks

- Establish laws for transparency and accountability.
- Encourage ethical AI standards.
- Protect user data and privacy.

c. Public-Private Collaboration

- Governments and tech companies must work together.
- Share knowledge and resources.
- Ensure responsible innovation.

d. Focus on Human-Centered AI

- Design AI systems that enhance human well-being.
- Prioritize fairness, inclusivity, and safety.
- Maintain human oversight in critical decisions.

Challenges to Social Goods

Although AI improves access to services, it also introduces ethical and social risks. In healthcare, biased data can lead to unequal treatment outcomes for different social groups. In education, reliance on AI tools may reduce human interaction and critical thinking if not carefully balanced. Surveillance technologies powered by AI raise concerns about privacy, data security, and individual freedoms. AI decision-making systems can also lack transparency, making it difficult to understand or challenge automated outcomes in areas such as credit approval, employment screening, or social welfare allocation. This undermines trust in public institutions and may harm vulnerable populations.

Need for Responsible Governance

To ensure that intelligent AI contributes positively to economic growth and social goods, strong governance frameworks are essential. Governments must invest in education and reskilling to help workers adapt to AI-driven labor markets. Ethical guidelines, transparency requirements, and accountability mechanisms should guide AI development and deployment. International cooperation is also necessary to prevent global inequality and ensure that AI benefits are shared across nations. Without deliberate policy intervention, the social costs of AI may outweigh its economic advantages.

Conclusion

From a critical standpoint, intelligent artificial intelligence is neither purely beneficial nor inherently harmful. Its impact on economic growth and social goods depends on how it is developed, regulated, and distributed. While AI has the potential to enhance prosperity and well-being, addressing inequality,

ethical risks, and governance challenges is essential to ensure that its benefits serve society as a whole.

REFERENCES

- Angwin, J., Larson, J., Mattu, S. & Kirchner, L. (2016). Machine Bias: There's software used across the country to predict future criminals. And it's biased against blacks. Available at: <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing> (Accessed 25/03/21).
- Chatbot.org (no date). A.L.I.C.E. Available at: <https://www.chatbots.org/chatbot/a.l.i.c.e/> (Accessed 25/03/21).

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THE AI PARADIGM: A HIGH-LEVEL SYNTHESIS OF ECONOMIC AND SOCIAL EVOLUTION (2026-2030)

The Economic Architecture: Productivity and the Labor Friction

Artificial Intelligence is currently acting as a General-Purpose Technology (GPT), comparable in scope to the introduction of electricity. Its economic impact is characterized by a “J-curve”—where initial implementation costs and structural disruptions are now giving way to exponential productivity gains.

Macro-Level GDP Projections

By 2030, AI is projected to add approximately \$13 trillion to \$15.7 trillion to the global economy. This reflects a cumulative GDP increase of roughly 16% over the decade.

- * **The Disinflationary Effect:** By automating routine cognitive tasks and optimizing logistics, AI lowers the marginal cost of production.

- * **The Growth Bipolarity:** Research from McKinsey and the IMF indicates a growing divide. “AI Leaders” (nations/firms with high adoption) may see a 25% increase in cash flow, while laggards could face a 20% decline as they lose market relevance.

The Labor Market Transformation

The labor market is undergoing a “Post-Routine” transition. Estimates from Goldman Sachs suggest that while AI could automate the equivalent of 300 million full-time jobs, it acts primarily as a task-shifter rather than a job-killer for 60% of the workforce.

* **The Juniority Crisis:** Public sentiment data in 2026 reveals significant “Youth Anxiety.” Entry-level “stepping-stone” roles—junior coding, paralegal work, and basic data analysis—have seen a 35% reduction in hiring as AI absorbs these tasks.

The Social Goods Frontier: Democratization and Ethical Erosion

While the economic pillar focuses on efficiency, the social pillar addresses the “common good.” AI’s impact here is measured by its ability to solve systemic human challenges: healthcare, education, and environmental sustainability.

1. Healthcare: The Diagnostic Democratization

In 2026, AI-powered diagnostic tools are closing the “Doctor-Patient Gap” in underserved regions.

* **Case Study:** Organizations like the WHO are using AI-driven predictive analytics to forecast disease outbreaks with 90% accuracy weeks before they occur.

* **Social Fact:** In rural Southeast Asia and Africa, mobile-based AI tools now allow non-specialist health workers to detect tuberculosis and pregnancy complications, effectively moving “Tier 1” care from elite hospitals to the village level.

2. Education: Scaling Personalized Mentorship

The shift from “standardized” to “personalized” education is AI’s greatest social gift.

- * **The Impact:** AI tutors (like those utilized in UNICEF’s literacy programs) adapt curricula in real-time to a child’s specific learning speed.

- * **The Risk:** Despite these gains, a “Digital Divide 2.0” is emerging. While 71% of high-income households utilize AI for educational advancement, two-thirds of the world’s youth still lack the basic digital literacy to access these tools.

Political Discourse and Public Sentiment: The Great Regulation

The year 2026 marks the “Year of Sovereign AI.” Politicians no longer view AI as just a business sector, but as a critical national asset.

. The Politician’s Lens: Sovereign AI vs. Global Safety

- * **The EU/US Dual Track:** The EU AI Act (fully enforced as of August 2026) imposes penalties up to €35 million for high-risk violations, prioritizing human rights. Meanwhile, the US maintains a “Pro-Innovation” sector-led approach, focusing on market dominance while grappling with “Legal Personhood” lawsuits for AI systems.

- * **National Security:** Leaders in China and the US are racing for “AI Stacks”—owning everything from chips to data centers. This has led to the “Sovereign AI” movement, where nations prioritize domestic models over foreign dependencies to ensure data privacy.

People's Thoughts: The Trust Gap

According to the World Economic Forum 2026 Sentiment Report:

- * 54% of global executives expect AI to displace jobs.
- * Only 12% of employees believe AI will lead to higher wages for the average worker.
- * The Youth Perspective: Young professionals are the fastest to adopt “Hybrid Skillsets,” but they report the highest levels of “algorithmic burnout” and concerns over the loss of “human touch” in professional mentorship.

The Future Path: 2030 and Beyond

As we move toward the end of the decade, the success of AI will not be judged by its intelligence, but by its integration.

- * Urban Transformation: Autonomous transit and AI-managed power grids are projected to reduce urban carbon footprints by 30% by 2030.
- * The Redistribution Debate: If the “AI Divide” persists, politicians may be forced to implement “Data Dividends” or Universal Basic Income (UBI) to mitigate the concentration of wealth in the hands of AI infrastructure owners.
- * The Human Premium: As AI masters logic and routine, the future economy will place an extreme premium on Empathy, Ethics, and Strategic Complexity—the final frontiers of human uniqueness.

Conclusion:

AI in 2026 is an amplifier. It amplifies economic growth, but also inequality; it amplifies healthcare access, but also privacy erosion. The trajectory toward 2030 depends on whether global governance can pivot from “catching up” to “anticipating” the social shifts this technology creates.

References

- Goldman Sachs (2024/2026): The Potentially Large Effects of AI on Economic Growth.
- McKinsey Global Institute (2025): The State of AI in 2025: From Pilot to Profits.
- World Economic Forum (2026): Annual Sentiment Report: AI and the Global Workforce.
- European Commission (2026): Implementation Timeline of the EU AI Act.
- IMF (2024/2026): Gen-AI: Artificial Intelligence and the Future of Work.

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