ZEAL INSTITUTES

www.zealeducation.com

NARHE I PUNE I INDIA

ZEAL POLYTECHNIC, PUNE

TECHNICA

TECHNICAL MAGAZINE

2021

DEPARTMENT OF MECHANICAL ENGINEERING

FROM PRINCIPAL'S DESK

We provide best platforms to budding engineers to acquire technical knowledge, motor skills and soft skills which are utmost demands of the industry. Uniqueness of our institute is a caring, nurturing culture that recognizes the various aspects of each student and encourages them to bloom to their fullest with confidence.

We are also committed to very good quality of teaching-learning process with having maintained high grade discipline among the staff and students and to achieve sky-scraping point superiority in academic by maintaining a conductive atmosphere for studies, state-of art laboratories communication centre and digital library. MOUs have been signed with reputed organization to impart cutting edge technologies through extensive courses.

In another view, we aim at development of our student at different levels by the proper encouragement, guidance, support, and generation of in-house recourses for sports, cultural, yoga, meditation etc followed by giving them a confidence to feel free at home.

These efforts have resulted in more placements and we are

Regards,
PROF. A. A. TAMBOLI
PRINCIPAL

Mechanical Engineer is a professional who is equipped with the knowledge of designing, manufacture and maintenance or mending of machines. The Department was established in 2008 & offers Diploma in Mechanical engineering can accommodate 150 students.

Our vision is to be recognized as innovative & leading mechanical department in Pune & beyond. Our goal is to provide students a well-equipped lab to keep the students up-to-date in terms of knowledge to seek new advancements of professional skills which will make our students industry ready. The syllabus in Mechanical engineering is designed to deliver the needs of manufacturing industries, the power sector etc. With the growth of technologies, the new subjects of studies are also introduced such as CAD/CAM & Automation, Alternative energy sources & Management, Material Handling Systems. The Department has experienced and highly qualified staff, spacious classrooms and well-equipped laboratories. The faculty members extend their extensive support and guidance to the students to help them build a bright future.

FROM HOD'S DESK

The Department was established as Dnyanganga Polytechnic in 2008. It offers a diploma in mechanical engineering and can accommodate 150 students We function with the vision that the Department should get recognized as an innovative and leading Mechanical department in Pune region and afar. The department aims at offering students with the high quality education clubbed with practical exposure that empowers them with the ability to aid the society by their services in the future. The Department aims at making superior diploma engineering professionals through academic brilliance and excellent education. The syllabus in Mechanical Engineering is steered with an extraordinary approach that helps students to meet the modern requirements of industries. To cater to the current advancement in technology, new subjects such as CAD / CAM and Automation, alternative Energy Resources, Material Handling System are also conducted using modernized laboratories and the required infrastructure. A team of well qualified and experienced faculty members forms the backbone of the Department. This team is determined to empower students with sound academic knowledge and practical experience which in turn makes the students ready to face the industry challenges.

Regards,
PROF. R. S. KHORANE
HOD

DEPARTMENTAL VISION AND MISSION

VISION

Inculcate foundational and experimental knowledge with entrepreneurial skills that prepares students to succeed in the field of mechanical engineering.

MISSION

- Enlightening the students with fundamental concepts of mechanical engineering.
- Providing practical training through upgrading department resources and industry interaction.
- Inculcating entrepreneurial qualities by arranging co-curricular and extra-curricular activities.
- Nurturing ethical values among students.

PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: Graduates will have core competency in diversified areas.

PEO 2: Graduates will be able to work individually/in team to solve engineering problems.

PEO 3: Graduates will practice ethical responsibilities and services towards their employers and society.

PEO 4: Graduates will be able to continue life-long learning.

PROGRAM OUTCOMES

1. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
2. **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.
3. **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
4. **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. **Engineering practices for society, sustainability, and environment:** Apply appropriate technology in context of society, sustainability, environment, and ethical practices.
6. **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
7. **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

PROGRAM SPECIFIC OUTCOMES

PSO1: The mechanical engineering graduates will be able to supervise production planning and control of mechanical components/systems.

PSO2: The mechanical engineering graduates will be able to maintain the mechanical systems and inspect mechanical component using various tools for quality assurance.

PSO3: The mechanical engineering graduates will be able to design and draft mechanical components and systems.

EDITORIAL

We proudly present 2nd consecutive edition of our department's annual technical magazine "Prarambh-2021". This year we are showcasing innovative ideas and hidden talents of our young minds on the theme "**Technological Advancement".** The objective of the magazine is to provide platform for our students to augment the technology focus and scope of it. The technical section of this magazine elaborates the advancement of technology in this era of **technology** and how it has impacted individual's lives both personal and professional. During this time of sheer uncertainty and constant fear, our willingness to adopt technology has been our lifeline. So, we started adopting technological advancements like distance learning, online entertainment, fitness and health apps etc. On behalf of the entire magazine team, I would like to extend my gratitude to our respected Principal Prof. A. A. Tamboli Sir and HOD Prof. R. S. Khorane Sir for their invaluable guidance and support towards accomplishment of MESA events successfully. Special thanks to team of passionate and dynamic students for their incredible contribution in making of the magazine. There is remarkable contribution of the student's editorial team to make this magazine amazing. I congratulate all the participants for sharing distinguished articles in the magazine.

MAGAZINE COMMITTEE

CHIEF EDITOR

Prof. Sachin Surywanshi,

Prof. Balaji Shinde

EDITORIAL TEAM

Miss. Pratiksha Giri,

Mr. Sumit Hawaldar,

Mr. Yash Joglekar,

Miss. Ashlesha Manndhare.

INDEX

TECHNICAL ARTICLE

CONTACTLESS PAYMENT TECHNOLOGY DURING COVID-19

Contactless payments have been gaining momentum for some years now, with payment via the tap of a bank card, smartphone, or wearable device becoming commonplace. Consumers in many countries have been attracted by the speed and convenience of contactless payments compared to chip-and-pin (PIN) cards or traditional cash. Still, there is a huge amount of variation between countries in terms of how quickly this technology has been adopted. For example, in 2018 only 3% of payment cards in the US were contactless compared with up to 96% in South Korea. This imbalance may be set to change, as concerns about hygiene and social distancing during the pandemic have made contactless payments very appealing. According to MasterCard, in 2020 contactless payments as a proportion of face-to-face payments have grown 25% compared to the previous year.

Contactless payment technology experienced increased adoption during the COVID-19 pandemic due to its convenience and hygiene benefits. Here are some key points about contactless payments during this time:

Hygiene and Safety: The primary driver for the surge in contactless payments was the desire to minimize physical contact and reduce the risk of virus transmission. Using contactless methods, such as tap-to-pay cards, mobile wallets, or QR code payments, allowed individuals to complete transactions without handling physical cash or touching keypads.

Increased Transaction Limits: Many financial institutions and payment providers raised transaction limits for contactless payments to accommodate larger purchases without the need for PIN entry. This move aimed to make contactless payments more versatile and applicable to a broader range of transactions.

Mobile Wallets and Apps: Mobile payment apps and digital wallets, like Apple Pay, Google Pay, and Samsung Pay, gained popularity. These apps enable users to link their credit or debit cards and make secure, contactless payments using their smartphones or other mobile devices.

QR Code Payments: QR code-based payment systems became more prevalent during the pandemic. Merchants implemented QR codes for customers to scan using their smartphones, facilitating quick and contactless transactions. This method is particularly popular in regions where mobile payment infrastructure is already well-established.

E-commerce Acceleration: With more people shopping online, the use of contactless payment methods extended to e-commerce. Consumers increasingly used digital wallets and card-on-file options for a seamless and secure online shopping experience.

Consumer Education: Governments, financial institutions, and businesses invested in educating consumers about the benefits and security of contactless payments. This effort aimed to dispel concerns and encourage the adoption of these technologies.

Integration of Wearables: Some users opted to use contactless payment features integrated into smartwatches, fitness trackers, and other wearables. This allowed for quick and easy transactions without the need for physical cards or smartphones.

Future Trends: The increased adoption of contactless payments during the pandemic is likely to have a lasting impact. Many consumers who adopted these methods out of necessity may continue using them due to their convenience. Additionally, businesses are expected to invest further in contactless payment infrastructure to meet evolving consumer preferences.

As the situation regarding the pandemic evolves, the adoption of contactless payment technology is likely to continue shaping the future of how transactions are conducted.

- **Mr. CHNIMAY BHALERAO**

COVID AND CRYPTO CURRENCIES

Crypto currencies are digital or virtual currencies that use cryptography for security and operate on decentralized networks, typically based on block chain technology. Unlike traditional currencies issued by governments and central banks (fiat currencies), crypto currencies are decentralized and often operate on a peer-to-peer network.

The COVID-19 pandemic has had various impacts on the crypto currency space. Here are some key aspects to consider:

Market Volatility: Initial Decline: In the early stages of the pandemic in 2020, financial markets, including crypto currencies, experienced significant volatility and a sharp decline. Investors sought liquidity, leading to sell-offs across various asset classes, including crypto currencies.

Recovery: As the situation stabilized and central banks implemented stimulus measures, financial markets, including crypto currencies, began to recover. Bitcoin, often referred to as "digital gold," attracted attention as a potential store of value during economic uncertainties.

Increased Interest and Adoption: Safe Haven Narrative: Bitcoin gained attention as a "safe haven" asset, similar to gold, during times of economic uncertainty. Some investors turned to crypto currencies as a hedge against traditional financial market risks.

Institutional Adoption: The pandemic accelerated institutional interest and adoption of crypto currencies. Major financial institutions and corporations began to explore or invest in crypto currencies as part of their portfolio diversification strategy.

Digital Payments and Remote Work: Focus on Digital Transactions: The pandemic highlighted the importance of digital transactions, and crypto currencies, with their decentralized and digital nature, became more relevant. This was particularly evident as traditional financial systems faced disruptions, and people sought contactless payment alternatives.

Remote Work Impact: Crypto currencies and block chain technology also gained attention due to their potential applications in facilitating remote work, supply chain management, and secure data sharing.

Central Bank Digital Currencies (CBDCs): Exploration and Development: Several central banks worldwide began exploring the concept of central bank digital currencies (CBDCs) as a response to the changing landscape of payments. The pandemic accelerated discussions and pilot projects related to CBDCs.

Challenges and Regulatory Developments: Fraud and Scams: The increased interest in crypto currencies during the pandemic also led to a rise in fraud and scams. Investors should remain vigilant and aware of potential risks.

Regulatory Scrutiny: Governments and regulatory bodies intensified their scrutiny of the crypto currency space, with some countries introducing or considering regulations to manage the use and trading of crypto currencies

Long-Term Implications: Acceleration of Trends: The pandemic accelerated existing trends in the cryptocurrency space, such as the move toward digital payments, decentralized finance (DeFi), and increased institutional participation.

Integration with Traditional Finance: Cryptocurrencies are gradually becoming integrated into traditional financial systems, with the potential for increased mainstream adoption.

It's important to note that the cryptocurrency market is highly dynamic, and its relationship with global events, including the COVID-19 pandemic, continues to evolve. Investors should exercise caution, conduct thorough research, and stay informed about market developments and regulatory changes

- **Mr. RAVI GURAV**

CRICKET - THE DUCKWORTH-LEWIS METHOD

The Duckworth-Lewis method is a mathematical formula used in cricket to adjust targets in limited-overs matches affected by weather interruptions, typically rain. It was developed by statisticians Frank Duckworth and Tony Lewis in the early 1990s. The method aims to provide a fair and equitable way of revising targets when rain or other weather conditions disrupt a match.

History & Origins:

The method was initially developed in response to the need for a fair way to calculate revised targets in rain-affected matches. The first version, known as the "Duckworth-Lewis method," was introduced in 1997. The original Duckworth-Lewis method faced some criticism, and revisions were made to improve its accuracy. The most significant revision came in 2004, introducing the "Duckworth-Lewis Stern" (DLS) method. Steven Stern collaborated with Duckworth and Lewis to enhance the formula.

Duckworth-Lewis-Stern Method (DLS): The DLS method takes into account the concept of a "par score" and adjusts it based on the resources (overs and wickets) remaining for the team batting second. The revised target is calculated by considering the interruption's impact on the game's resources, aiming to provide a fair target for the team chasing. The Duckworth-Lewis method (and its later iteration, DLS) is primarily used in limited-overs formats like One Day Internationals (ODIs) and Twenty20 (T20) matches. The method is not applied in Test matches, where there is more flexibility in terms of time available to complete the match. The Duckworth-Lewis method is widely accepted and used in international cricket, as well as in domestic competitions around the world.

The Duckworth-Lewis method, and its subsequent iterations, plays a crucial role in ensuring fair outcomes in limited-overs matches affected by rain, providing a methodical approach to adjusting targets based on the available playing resources. It seems like there might be a typo in your question. If you're referring to "Duckworth-Lewis" in cricket, it is a mathematical method used to adjust targets in limited-overs cricket matches that are affected by weather interruptions, typically rain. The Duckworth-Lewis method takes into account the number of overs remaining and the number of wickets lost by the team batting second when a match is interrupted by rain or other adverse weather conditions. It aims to provide a fair target for the team batting second in a reduced overs game.

How The Duckworth-Lewis Method Works:

Resource Percentage: The method calculates a resource percentage, which represents the proportion of resources (overs and wickets) still available to the team batting second.

Par Score: The par score is the target that the team batting second should aim to achieve based on the current state of the game. It is determined by the resource percentage.

Adjustments: The method adjusts the target based on the number of overs lost and the number of wickets fallen, ensuring a fair target for the team chasing.

	Wickets lost				
Overs left	**0**	**2**	**5**	**7**	**9**
60	107.1	87.9	50.0	26.5	7.6
50	100.0	83.8	49.5	26.5	7.6
40	90.3	77.6	48.3	26.4	7.6
30	77.1	68.2	45.7	26.2	7.6
25	68.7	61.8	43.4	25.9	7.6
20	58.9	54.0	40.0	25.2	7.6
10	34.1	32.5	27.5	20.6	7.5
5	18.4	17.9	16.4	14.0	7.0

The Duckworth-Lewis method is commonly used in One Day Internationals (ODIs) and Twenty20 (T20) matches to provide a revised target in rain-affected games. It is important to note that while the Duckworth-Lewis method is widely accepted, it has faced criticism and has undergone revisions to improve its accuracy over the years.

It has become an integral part of the game, especially in tournaments where weather conditions can have a significant impact. Continued Refinement: Despite its widespread use, the Duckworth-Lewis method continues to be refined to address any shortcomings and improve its accuracy in reflecting the game's context.

- **Mr. AMAN SUTAR**

FUTURE TECHNOLOGY NEEDS FOR INDIA - 2047

Let us rewind back to the month of February 2020. Who would have imagined then, that our entire education system which was traditionally confined to the four walls of our classroom, would expand to such an extent, that now we are being able to take the learning at the ease of our time at home using the application on the electronic devices connected over a large area network. Today if one goes to see, our entire education system is solely based on Technology.

The choices that we make today, will be reflected in the years to come. The challenges and opportunities that we opt for today may not be admissible then, but grinds a foundation for a dominant Bharat in 2047. For decades, even into the 2000s, futuristic movies were set in years like 2020. Because 2020 is the future. Or at least it sounds like it. Of course, now that we're here, there's not a single flying car to be seen and we still don't have robot butlers running our homes for us. That doesn't mean that all those filmmakers were wrong, though. When it comes to cleaning technology and facilities management, we are yet to live in the future... There's nothing that screams "we're living in the future" more than robots, and these robots can address labour challenges, drive efficiencies, and maintain a high standard of cleaning as they work alongside employees.

The most prominent thing that we all struggle to do even today is to maintain cleanliness around us and find godliness everywhere. Cleaning robots are rapidly growing in both popularity and the number of ways they can help the facility they're being employed in. 46 Take, for instance, the Trifo Lucy, a robotic vacuum cleaner that leans on AI to avoid obstacles as it follows its mapped journey around your home. It has a 1080p video camera on board that enables it to "see" and avoid troublesome objects as small as less than an inch in height. We mentioned how mobile robots can help clean spaces, but what if some of the technology was outside the robot? How about a 'Trash Tech' consisting of sensors and sending high radio wavelengths with advanced internal technology that configures to detect all the litter for a specify square meter and alerts the people in that respective area to clear out on their behalf. If the amount of litter doesn't drop down, thereby it shall be declared as a red-light area (considering the trends of today's pandemic).

The Internet of Things (IoT) is a regular reminder that we're living in the future. From wearables that can monitor your health to smartphone apps that can get you a discount on your car insurance to making even buildings smart, the IoT

truly is surrounding us. It might surprise you just how smart buildings can be with the help of the IoT. Utilities like energy and water can use smart meters to provide use and flow insights; lights and thermostat systems can learn habits and sense occupancy to operate as efficiently as possible. It helps to have smart devices, but sometimes what's even more helpful is the data they provide. Many inevitable accidents emergency can be prevented or even cured when you use them effectively. Because ignorance is always free. "The most expensive information or advice you may receive may come to you at no cost". And somewhere the magic of IoT may help us believe this saying. Our congested cities are in desperate need of a breather and relief may come from the air as opposed to the roads.

Plans for a different kind of transport hub – one for delivery drones and electric air-taxis – are becoming a reality. We should enforce on building more hubs that will run on the pilot-ideology and will be powered completely off-grid by a hydrogen generator, the idea is to remove the need for as many delivery vans and personal cars on our roads, replacing them with a clean alternative in the form of a new type of small aircraft. One in 4 deaths in India are now because of CVDs with ischemic heart disease and stroke responsible for >80% of this burden. We must envisage developing a heart monitoring T-shirt or a similar wearable sports bands that measure your heart rate. The accuracy can vary wildly, especially if we rely on them to count calories. This can be used for clinical applications to allow those who may already suffer with heart conditions for them to give enough warning of a heart attack. We've almost got used to the idea of driverless cars before we've even seen one on the roads. The truth is, we might as well see a lot more driverless trucks – after all, logistics make the world go 47 round. They'll be cheaper to run than regular rigs, driving more smoothly and so using less fuel. Computers never get tired or need comfort breaks, so they'll run longer routes. And they could drive in convoys, nose-to -tail, to minimise wind resistance. Now striking towards the conservation of our environment, and the irradicable situation of jungles and open lands turning into concrete buildings, we shall prepare a building material that has structural load-bearing function, also is capable of self-healing and is more environmentally friendly than concrete – which is the second most-consumed material on Earth after water. Find an alternative way to store energy in the red bricks that are used to build houses. By this method we can turn the cheap and widely available building material into "smart bricks" that can store energy like a battery. Then could store a substantial amount of energy and can be recharged hundreds of thousands of times within an hour.

That day is no long where we can talk, play, work and dine on the basis of technology. The thought that India is trying to come up with min-blowing technologies and putting all their brilliant minds and soul to it, still we are lacking in terms of advancements and that is because of the underutilised resources of our nations. And how not even though we have genius minds but because of the lack of opportunities, we are either forced to settle for less or we aim for abroad centres of technological innovation. Although a Silicon Valley 2.O in India can embark our remarkable transformation! There are thousands of Satya Nadella's and Sundar Pichai's in India, but they are forced to live an ordinary life with their extra ordinary brains. 'It has become appallingly obvious that our technology has exceeded our humanity. '

-

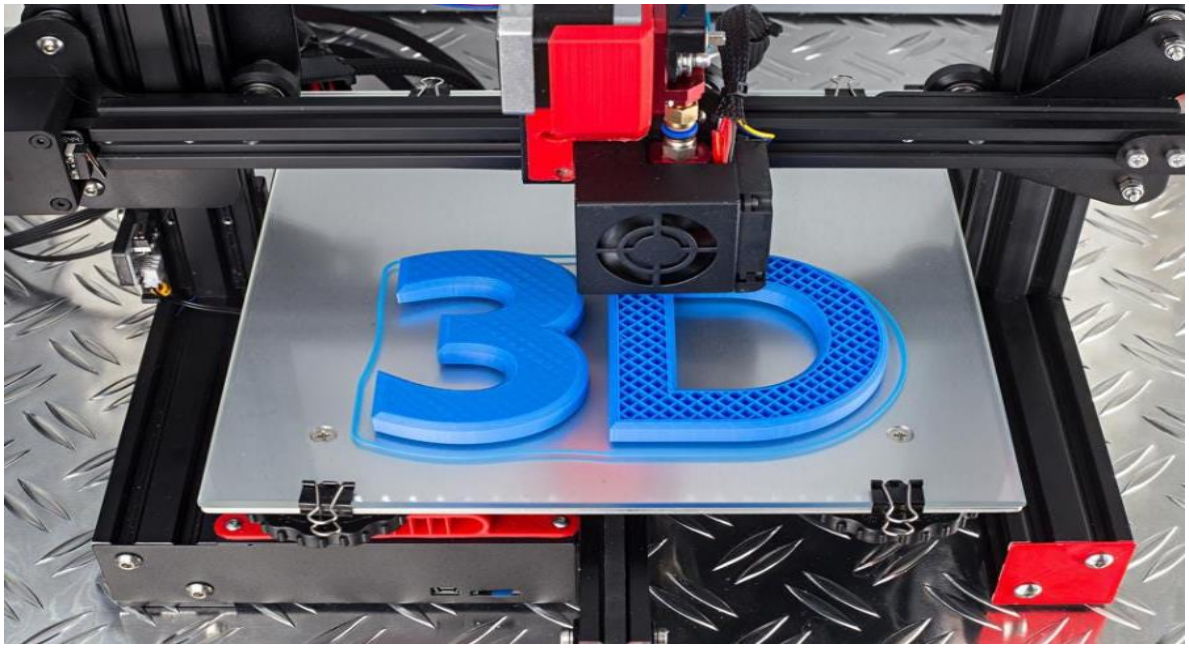
Miss. PRATIKSHA GIRI

-

PRINTING A NEW FUTURE: THE REVOLUTIONARY APPLICATIONS OF 3-DIMENSIONAL PRINTING

- Picture this, almost out of thin air, what resembles the sole of a shoe starts to materialize from a viscous pool of liquid polymer. This is not a scene from a sci-fi movie, it is the future of manufacturing. The athletic wear company, Adidas, has already started using 3D printing, also known as additive manufacturing, in their two new highly automated factories. Flashback to the 1980s, invented by Charles Hull, the 3D printer was originally called a stereolithography.
- Basically, 3D printing uses a blueprint created from software on a computer uploaded to a printer that uses certain materials such as glass, metal, plastic, ceramic. Which means it is faster and cheaper system. Though most 3D printing uses a layer-by-layer process, a method used by Carbon3D called Continuous Liquid Interface Production creates monolithic forms out of a pool of polymer. This technique is generally 25 to 100 times faster with the potential of being 1000 times faster. We can already see that 3D printing is the future of manufacturing. In 2013 alone, the use of metal 3D printers increases by 75%. Now 3D printing is a billion-dollar industry. Researchers have many great strides in the young field of 3-Dimenstional technology. Just in the last 10 years we've gone from a few companies experimenting to actually making and using engine parts that are FAA certified. What might the not-so-distant future have to offer in terms of 3D printing? The current printers can only print objects the size of itself, but with the innovation of a printer head attached to a robotic arm we take a step into the field of construction automation.
- Cheaper production methods of rockets can lead us to more innovation in space, travel, mining and colonization. 3D printing in the medical field has the greatest potential to significantly alter human lives, for the better. The many applications of a 3D printer in the medical field can be organized into three general categories: tissue and organ fabrication, the creation of customized prosthetics, and pharmaceutical research.

-



- 3D printing, also known as additive manufacturing, is a transformative technology that has significantly impacted various industries. It involves creating three-dimensional objects by layering materials based on a digital model. Here are some key aspects of 3D printing and its influence on technology:
- Prototyping and Rapid Prototyping: One of the earliest and most widely adopted applications of 3D printing is in prototyping. It allows designers and engineers to create physical prototypes of products quickly and cost-effectively before mass production. Customization and Personalization: 3D printing enables the production of customized and personalized products. This is particularly relevant in industries like healthcare, where custom medical implants or prosthetics can be created to match an individual's unique anatomy.
- Manufacturing and Production: In addition to prototyping, 3D printing has evolved to be used in actual manufacturing and production. Small-batch and specialized production runs can benefit from the flexibility and efficiency of additive manufacturing. Complex Geometries and Design Freedom: 3D printing allows the creation of complex geometries that may be challenging or impossible with traditional manufacturing methods. This design freedom is leveraged in aerospace, automotive, and medical industries, among others.
- Materials Innovation: The range of materials used in 3D printing has expanded, including plastics, metals, ceramics, and even biological materials. This versatility opens up possibilities for diverse applications across industries. Distributed Manufacturing: 3D printing facilitates distributed or decentralized manufacturing. Instead of centralized production facilities, products or components can be produced closer to the point of need, reducing shipping costs and environmental impact. Education and Research:3D printing is widely used in educational settings to teach design and engineering principles. It also plays a role in research, allowing scientists and researchers to create prototypes and models for experimentation. Medical Applications: In healthcare, 3D printing is used for creating patient-specific models for surgical planning, producing customized implants, and even printing living tissues for regenerative medicine. Art and Design: Artists and designers use 3D printing to create intricate and unique pieces of art and sculptures. The technology allows for the realization of intricate designs that may be challenging with traditional methods.
- Home and Consumer 3D Printing: The availability of affordable desktop 3D printers has brought the technology into homes and small businesses. Hobbyists and enthusiasts can create their own designs and prototypes. Challenges and Considerations: Despite its benefits, 3D printing also presents challenges, including the need for quality control, intellectual property concerns, and the environmental impact of certain materials used in the process.
- As technology continues to advance, 3D printing is likely to play an increasingly significant role in various industries, contributing to innovation, efficiency, and new possibilities in design and manufacturing.

- **Mr. SUMIT HAWALDAR**

IMPACT OF SOCIAL MEDIA ON STUDENTS LIFE

- In this article, we are going to find what is the impact of social media on students' life in school and college. In this modern technology era using social media is a common thing some prime examples of social media sites are Facebook, What's App, Twitter, and Instagram. We all know that all these social media websites are growing rapidly due to the heavy traffic they receive from people around the globe. The Estimate traffic of Facebook is 2.23 billion. Facebook is considered to be the biggest social media website in the world. Mark Zuckerberg founded Facebook on February 4, 2004, in college with his roommates. Twitter is also one of the famous social networking websites which were founded on 21 March 2006 by Jack Dorsey and the first tweet ever was written by himself saying.
- "Just Setting Up twttr" and estimate traffic is 335 million.

Instagram is a photo and video-sharing website with estimated traffic of 1 billion. It was created by Kevin Systrom and Mike Krieger and launched in October 2010 on iOS As everybody knows that there are two sides to the coin so there are negative and positive impacts of social media on student's life which we are going to discuss in brief. The overuse of social media websites by students and professionals can damage the personal, as well as academic life of students as the majority of students, are using these social sites just for entertainment purposes which are hampering their educations and mental growth. Wasting precious time on social sites will harm their future goals and will lead to compromised life which will hurt them badly in the near future.

-

What is Social Media?

Social media is a virtual world where users share their thought, opinions; ask questions, images, pictures, and videos over the internet. Social media is a platform where information and data are stored and spread at lightning speed. They also act as the intermediate between users and outside the world. Social media can perform a positive as well as negative impact on people around them. To become famous or to promote business social media is the best and the cheapest platform over the internet where you can advertise your business at a very low cost. People are using these social media due to the large audience using this platform and reach these websites present. Prime Examples of Social Media Sites are TikTok, Tumblr, Instagram, Facebook, Twitter, Reddit, Linked In, etc.

10 Positive Impacts of Social Media on Students

The social media platform can be used to share some positivity and encourage thoughts, views, and opinions on the internet. Social media must be used for the betterment of society and pinning the bad practices around. These platforms must be used for sharing knowledge with other students, kids, and people who are ready to acquire some good stuff from the internet.

1. Education
2. Business
3. Innovative thinking
4. Freedom of Expression
5. Creating Group of People with Similar of Different opinions
6. Increase in Traditional Values
7. Awareness
8. Increase in Positive Thinking
9. Analysis of Content Published on Social Network
10. Research whether the Content Published is trustworthy or not.

Education –

Social media sites can be used for educational purposes as these platforms can be used positively for sharing information and knowledge. I myself am joined in some of the computer programming groups where we share new trends and innovations happening in our Information technology Sector. In that group, we encourage new members to ask questions and participate in the discussion forum which is related to the respective fields which on the other hand enhanced the skills and knowledge which will be priceless for their upcoming professional career. On some of these social media, you can see that many skilled professionals create videos and graphics to teach other fellow or colleagues some skills which are very rare or new. Therefore, I strongly believe if these social media platforms are used for education and knowledge that will help the students and professionals immensely. Social media can spread information

at a very lighting speed across the globe hence when used in a positive manner can reflect in a good educational environment which will be more beneficial for every student and professional.

Freedom of Expression

Social media platforms are used for expressing views and opinions as these platforms permit users to express their thoughts and views to the world without any cost. After publishing their content on social media one can also check the user's response whether they liked your views or not. If one gets positive feedback from other users we get charged up and it motivates us to write more awesome content.

Research whether the Content Published is trustworthy or not Because of the awareness, many users don't just share the content which may look very appealing and interesting they are rechecking on the content whether the content is worth sharing or not.

it is also a good habit to check whether the information submitted is inaccurate or improper. Social Media Impacts on Students Life There are plenty of negative impacts of using social media on student's life which we are going to mention below. If we overdo or overuse these platforms without applying our brains we will definitely get some negative results from our deeds. Before using such a platform, one must have a good and clearer understanding that this platform must have limited use without distracting our primary goal for a successful career and life. Users must take into consideration that they are for our advantage and if misused can eat our precious time and money.

According to me, social media platforms must be used for authenticating knowledge and information sharing. But as we can see these websites are flooded with foolish content, hatred, violence, communal hatred, and spreading rumours which is a downside of these sites. Some users are making nuisance and making the life of other users inconvenient due to their inaccurate and improper content.

Let us now talk about the Negative Impacts of Social Media on college and school student life essays.

1. Foolishness
2. Distraction
3. Waste of Time
4. Community Hatred
5. Depression
6. Insomnia
7. Health Issues

Foolishness

- Some students while using social media platforms do not use common sense, they do not understand what to post? And try to show the audience how smart they are? Meanwhile, make fool of themselves. Recently I have witnessed a post this was an anti-national post and the content in it was objectionable also saw in the comment box it was full of abuse and bad words for the community and another counterpart country. I was amazed to see some students were sharing that same post which was against their own nation and also abusing people of the same nationality because of the false narrative which was explained to them. This was an anti-national element and the student who posted and shared the content went through a trial. Therefore, I strongly felt to include this in the article that students must be aware and must have a good amount of understanding of the truth and the myth and also, they must take out some time to investigate what's right and what's wrong? Common sense is not so common these days. Therefore, the student found guilty was FOOLISH to me.

-

Distraction

- Distraction is one of the most negative impacts of social media on student's life. As we all know that the students' time is more precious than gold dust. Now students with low understanding and careless types of nature tend to waste their time on social media platforms chatting and surfing on the internet. Student's time is most valuable if they invest time in their studies, they will definitely get good grades which eventually will help them in securing their future and accomplish their dreams. But it has been observed that students who have a mobile phone with an internet connection lose their focus in their studies and waste their hugely precious time on social media platforms. Some of the students are so focused on their goals and ambitions that these highly attractive media don't affect their routine and hence one day they see that their hard work gets them the desired output. Therefore, it is highly recommended that students must have a timetable that can be exercised daily for better results and better performance to accomplish their goals their duties.

Waste of Time

Students are unaware of how precious their time is; therefore, I strongly believe that the parents, teachers, and older family members should share the responsibility of educating their children about the future and the discipline towards their goals and studies. I consider the waste of time as a crime for students.

Stitch in Time Saves Nine"

Therefore, while studying youth should avoid using cell | mobile phones and also stop using social sites for a temporary period.

Depression

Working on the internet and social media sites for long hours a late night can hamper your sleep which in return can cause depression. It is observed that people who spend more time on the internet can feel lonely because the virtual world is not the same all the time. Depression can occur to these types of people as they don't have any fellow person to have a talk or share their feelings which as a result their feelings and thoughts are inside their mind which can cause serious trouble to their mental condition and hence fall in the trap of depression. People with a low amount of physical activity are also prone to these sorts of diseases. Therefore, it is highly recommended that you must be active and should have a proper timetable to use the internet and social sites. Yoga, Gym, laughing clubs, and bricks walking with a proper diet are found to be good for persons suffering from depression.

Health Issues

Students who work on the internet and mobile phones for long hours have serious health conditions. Constantly watching the screen of the mobile device and the laptop screen which emits harmful lights that affect the eyesight and make eyes dry. Sitting in the same position for long hours without break can make your back rigid, slowly, and steadily if not taken care of can make the pain worse as the days go. Also, continuous typing can also have pain in the finger and the wrist of hands, many students and professionals ar complaining of the stiff neck with serious pain.

What are the 10 Advantages of social media?

Social media and the internet have become essential to our life and business. Social media helps in communication with people with just a few clicks. We can connect with friends, family and colleagues using text, video, message, and phone calls. Social media is the fastest-growing form of marketing and communication. It's also one of the most cost-effective ways to reach your target audience and grow your business.

Let us discuss 10 advantages of social media.

1. Social media is an excellent way of communication.
2. Social media is an efficient and cheaper mode of communication.
3. Fast and easy way to reach customers.

4. Easy to find people and businesses.
5. Sharing content with others is easy.
6. Keep in touch with trends and updated news,
7. Social media can drive sales.
8. If authentically using social media can improve your skills and knowledge.
9. It helps to build trust with customers and businesses.
10. Marketing with social media is simple to use and handle.

What are the 10 Disadvantages of Social Media?

There are several disadvantages of social media. Let us discuss some of them.

1. Using social media for long hours can be a big distraction.
2. Social media fraud can be seen nowadays, so use it carefully. Avoid sharing personal information.
3. Social media can be addictive.
4. A health issue can occur if a computer, laptop or mobile is used for long hours without enough breaks.
5. Fake and unauthenticated news can be shared and made viral. So, recheck before sharing content over social media.
6. It can kill your precious time.
7. Social media accounts can be hacked, and you can lose sensitive data and information.
8. Depression and loneliness.
9. Virtual world.
10. If you overuse it, you can become lazy.

Mr. GAURANG CHITNISE

ZEAL POLYTECH NIC, NARHE, PUNE

DEPARTEMENT OF MECHNICAL ENGINEERING