DNA- DIGITALIZATION IN OUR COUNTRY

Shivam Aggarwal¹, Sanjana Wadhwa², Hritik Chand³, Indu Khatri⁴

1,2,3 B.tech Students, ⁴Assistant Professor & Guide
Department of Computer Science Engineering
Bhagwaan Mahaveer College of Engineering and Management, Sonepat

Abstract: India is currently the world's most linguistically diverse country. In this paper, we look at how India is on its path to becoming one of the most digitally cosmopolitan countries in the world. Digitalization is the strategy of adopting recent technologies in IT to make the most of the digital resources available in the enterprise We've also mentioned a number of domains where digitalization has a significant impact, such as digital India, digital cultures, digital photography, digital computers, and digital education.

Keywords: DII, DE, DM and DC.

1. INTRODUCTION

In a variety of literatures, the terms "digitization" and "digitalization" are frequently interchanged. "The action or process of digitization; the conversion of analogue data (esp. "The conversion of analogue data (especially images, video, and text) into digital form" is defined as "the translation of analogue data (especially images, video, and text) into digital form." Digitalization, on the other hand, is defined as "the adoption or expanded use of digital or computer technology by an organisation, industry, government, or other entity."

"Digitization is the first step toward realising digitalization."



No Big Data-based solution is conceivable without digital data. The deployment of digital technologies to transform a company model and create new income and value-generating opportunities is referred to as "digitalization." It is the process of transitioning to a digital firm.



Representation of digital economy

Digitalization, in which digitised resources, such as cloud-based software and machinery equipped with digital sensors, are transformed into new sources of valuable revenue, is now the appropriate time for Indian enterprises to pursue it. Various components of India's digital ecosystem, such as the digitised consumer, the development of digital data volumes, e-commerce, and tech-savvy talent pools, are predicted to grow in the next few years. More than 100 senior executives were polled to see if they were ready to capitalize on a rapidly evolving opportunity. Very high levels of awareness of current and future digital technologies, such as the Internet of Things, were discovered among executives. Digitalization is also a strategic growth requirement, according to the executives questioned.

Many respondents say that high costs keep them from fully utilizing digital technologies. Furthermore, many are experiencing a plateau in the benefits they've reaped from digital adoption.

2. APPLICATION AREAS OF DIGITALIZATION

Digitalization goes beyond the technical process of digitization. In digitalization, innovation comes not only from the digitization of phone, cars, or booksIt's a far bigger shift in organisational logic across numerous industries and marketplaces, all of which are linked by a shared digital infrastructure. Some of the areas where digitalization is concerned in alarming rates are-

A. Digital India

The government's main endeavour is the Digital India programme, which aims to turn India into a digitally enabled society and knowledge economy



Vision Areas of Digital India. Three primary visions are at the heart of the digital India initiative. They are listed below as-Digital Infrastructure as a Utility To Every Citizen. A well-connected country is necessary for a well-served country. Once the most remote Indian villages are digitally connected via broadband and high-speed internet, electronic

government services, targeted social benefits, and other services would be available to all citizens. and financial inclusion can be achieved in reality.

Governance And Services On Demand. Various state governments and the federal government have taken a variety of initiatives over the years.

Ministries to usher in an era of e-governance. Sustained efforts have been made at multiple levels to improve the delivery of public services and simplify the process of accessing them. In India, e-government has progressed from the computerization of government departments to programmes that encompass the finer elements of administration, such as citizen centricity, service orientation, and transparency.

Digital empowerment of citizens. Digital connectivity is a great leveller. Indians, across all demographic and socioeconomic groups, are tremendously connected and communicating with one another via mobile phones and computers connected to digital networks. By focusing on digital literacy, digital resources, and collaborative digital platforms, the Digital India programme aims to convert India into a digitally empowered society. This emphasises universal digital literacy as well as the availability of digital materials and services in Indian languages.



B. Digital Culture

Culture of Digital In this digital age, we are investigating the intersections between technology, knowledge, and culture!! Digital culture encompasses a wide range of themes and concepts, yet it all comes down to one thing: the human-technology interaction. As technology becomes second nature to us, these ideas are frequently neglected. The Digital Culture Program supports study into the role of technology in social scientific research, information circulation and dissemination, and the moulding of cultural and political systems, all of which help the organisation achieve its basic goals of knowledge deepening and democratization.

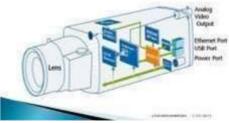


C. Digital Camera

Digital Photographer Digital cameras have become more common—and more affordable—since the 1990s. As a

result, it's now easier than ever to get into photography. Fortunately, you don't need to spend a lot of money on a high-end camera to obtain outstanding pictures. The ability of the photographer is the most crucial component. In this video, no matter what kind of camera you have, we'll show you how to use lighting, composition, and camera settings to improve your digital photographs. Digital SLR (or DSLR) cameras, point-and-shoot cameras, bridge cameras, and camera phones are the four most common types of cameras.

INTERNAL PROCESS:



D. Digital Computer

A computer which represents digital information by binary digit is called a digital computer.



It usually works with a binary number system, which means it can only understand 0 and 1.

E. Digital Economy

The digital economy is a new platform for productivity that some experts consider to be the third industrial revolution. The digital revolution, often known as 'The Internet Economy' or Internet of Everything (IoE), is expected to provide new market development opportunities in the next 30 to 40 years. jobs, and become humanity's largest business opportunity.



The global network of economic activity facilitated by information and communication technology is known as the digital economy (ICT). It can also be characterized as an economy that is based on digital technologies. There are a variety of meanings for the phrase, each with its own take on what should be included in this new economic paradigm.

Components of Digital Economy. The two main components of the 'Digital Economy' concept can be identified as:

- a) Infrastructure for e-business (hardware, software, telecoms, networks, human capital, etc.).
- b) Electronic-Commerce (transfer of goods, for example when a book is soldonline).

The digital economy, on the other hand, is about more than just transferring business transactions from face to face to the internet. The digital economy aims to revolutionize several aspects of corporate interactions and transactions while also facilitating economic innovation. For example, new digital currencies and payment systems are both enabled by and have given rise to the digital economy (i.e., Bitcoin and the digital wallet.

F. Digital Economics

Digital has been an afterthought to "business as usual" for several years. Digital transformations, on the other hand, have lately reached a tipping point, when digital has become "business as usual," and the tail has become the dog. Digital isn't simply a component of the economy; it's the entire economy.

For some, it's an economy of endless opportunity, but for others, it's an economy of disruption and displacement. Many companies, like Kodak, Blockbuster, Sears, and Blackberry, have struggled to adapt, while others have thrived. Companies that are adjusting to a digital world are 26 percent more lucrative than their industry peers, according to MIT Sloan research



The 4 Keys to Succeeding in the Digital Economy- Customer expectations. Companies can better engage with their customers and provide improved experiences at lower prices thanks to digital technologies. However, giving exceptional experiences to more sophisticated and fickle clients is becoming more difficult. Customer expectations have shifted from ease of use to proactive experiences.

Product enhancements. Companies that are thriving are also incorporating related products and services into complex industry solutions, as well as extending and reorganising industry boundaries, basically creating new industries. Michael Nilles, Schindler's new chief digital officer, is an excellent example. Schindler has evolved from an elevator and escalator manufacturer to a mobility solutions provider, with technology used in a wide range of industries, including health care, hotels, workplaces, malls and retail outlets, and sports arenas and expos.

The creation of smart elevators and escalators that continuously collect sensor data and transfer it over the internet to Schindler's back-end systems, where the data is processed and maintenance notices are generated long before a breakdown occurs, was a major facilitator in this growth. These alerts, which include expert repair suggestions, are sent in real time to Schindler's service applications, where professionals are dispatched as needed.

Collaborative innovations. To effectively respond to the extremely competitive, global business climate, businesses must become more inventive. Collaboration is essential for innovation, both within the organisation and with customers, partners, startups, institutions, and research communities outside of it. Amazon, PayPal, Fidelity, Aetna, Apple, and Microsoft, for example, are using collaborative digital networks to construct ecosystems.

Organizational leadership. To better deal with evolving market situations and business models, companies must rethink their structures and cultures. In the more global and fast-changing digital economy, the hierarchical organisation that prevailed in the production-oriented industrial economy of the twentieth century will not operate. Companies that are most successful in adjusting are shifting from "Mad Men" to "Math Men," with decision-making increasingly focused on facts rather than on senior executives' usually incorrect judgments. To improve organisational learning, these organisations are hiring data scientists. They've used algorithms to speed up some choices, and they're incorporating artificial intelligence, robotics, and other modern technology when needed.

G. Digital Media

Digital media is a mix of technology and content, and creating digital media products necessitates a team of experts with a wide range of capabilities, including technical, artistic, analytical, and production coordinating abilities.



All of these abilities must be balanced on a team, with everyone focused on providing the greatest possible user experience.

Digital media products can be found in:

. E-Commerce



- Games console, online and mobile
- Websites and mobile applications
- Animation
- Social media
- Video
- Augmented reality
- Virtual reality
- Data visualization
- Location-based services
- Interactive Storytelling



Digital media can include these industries: Entertainment, Technology, E-Commerce, Non- Profit, Health, Education, Marketing and advertising, Government, Sports, Environment, Television, Publishing.

H. Digital versus Film Photography

In many ways, the digital revolution has caught up to cinema, putting to rest many of the arguments that film is superior to its electronic cousin. The resolution obtained by medium format cameras, however, may be the most compelling reason to shoot analogue. However, not all reasons can be found in technical comparisons. Many feel that shooting analogue is a more personal and engaging experience; nonetheless, the choice is entirely yours.

I. Digital Education

When it comes to economy, every learning individual plays a thousand-fold part. A student today is a future asset for the country, so what he is taught and where he gets his information should be carefully considered. That's when the world of computers, the internet, and swagger enters the scene!!



A new age of civilization's distinguishing characteristics has begun.

3. CONCLUSION

To assist businesses in adopting digitalization in a methodical manner, we developed a framework for achieving

both efficient and profitable digitalization. To develop this framework, we analyzed the experiences of firms that have begun finding their feet in this effort. The proposed framework comprises three steps:

Step1) Raise digitalization awareness and ownership: Assist individuals across the business in understanding what digitalization is and the benefits it provides, and build a sense of responsibility for digitalization at the highest level.

Step2) Create a digitalization strategy that puts consumers first. Create a digital business value tree and a digital operating model that maps the technology and capabilities needed to fully exploit the potential of digital assets.

Step3) Digitalize business model: Make the right choices about your customer value proposition, resources, profit formula and performance metrics and nurture the capabilities and culture needed to support your business model.

We believe that by mastering this three-step approach, Indian businesses would be able to speed their transformation into true digital powerhouses capable of capitalising on the country's abundant resources.

REFERENCES

- http://play.google.com/store/apps/details?id=com.in cog nisys.digitalindia
- https://petapixel.com/2015/05/26/film-vs-digital-acomparison-of-the-advantages-and-disadvantages/
- http://culturedigitally.org/2014/09/digitalization-and-digitization/
- http://www.dighist.org/wp-content/uploads/2011/03/DigitizationBannerFinal1.
- https://acloudin.wordpress.com/2016/04/09/impactof-digitalization-of-education-in-india/
- https://digitalculturist.com/what-is-digital-culture-5cbe91bfad1b#.mlprjfl4z
- https://hbr.org/2016/03/the-4-things-it-takes-tosucceed-in-the-digital-economy 9
- https://googleweblight.com/i?u=https://www.accent ure.com/in-en/insight-india-pathdigitalization&grqid=QSFlAXkz&hl=en-IN