EP Journal on Digital Signal Processing

EP Journal on Digital Signal Processing

Aims and Scope

EP Journal on Digital Signal Processings has become very important with the ever-increasing demands of the software development to serve the millions of applications across various disciplines. For large software projects, innovative software development approaches are of vital importance. In order to gain higher software standard and efficiency, software process adaptation must be derived from social behavior, planning, strategy, intelligent computing, etc., based on various factors. International Journal of Software Engineering address the state of the art of all aspects of software engineering, highlighting the all tools and techniques for the software development process.

EP Journal on Digital Signal Processing

EP Journal on Digital Signal Processing

Contents

Digital India – A New Vision

Dr. Munila Naqvi

Assistant Professor, Bora Institute of Management Sciences, Lucknow.)

A B S T R A C T

Digital India is all about inculcating the techniques of digitalisation in every sphere in such a manner to enhance the existing scenario and its working. Furthering this vision, the Modi government has widened the scope and launched the Digital India Programme in 2014, which is scheduled to be completed by 2019. The Project will be monitored by the Prime Minister. The vision and scope of this programme is all inclusive and moves away from the silo-approach of e-governance towards a synchronised approach—that all government services be delivered to the citizens through a "one stop shop". In its scope and vision it seeks to take the country from the present state of digitally constrained economy to that of an advanced digital economy. This would result in quantum leap in GDP, thereby expanding employment opportunities. The resultant "digital India" would throw up many challenges for the political establishments as they will have to engage themselves with renewed vigour and innovation with a well-informed citizenry and businesses that would adjudge their performance in comparison with other similarly placed nations. Even during the process of implementation there would be hiccups not related to technology and its application, but for completely different factors such as cultural and societal, sharpened by the swing back action of those who see their role and influence diminishing as the process of digitisation gets underway.

Keywords :E governance, One stop shop, GDP, Employment opportunities, Technology and Digitalisation.

INTRODUCTION

Today, the world has transformed from a knowledge savvy to techno knowledge savvy. Think of something and it is available in one click. So, Digital India is a step by the government to inspire and connect Indian Economy to such a knowledge savvy world. The program targets to make Government services available to people digitally and enjoy the benefit of the newest information and technological innovations.

It brings out various schemes like E-Health Digital Locker, E-Sign, E-Education etc. and nationwide scholarship portal. Digital India is a great plan but its improper implementation due to inaccessibility & inflexibility to requisite can lead to its failure. The program strives to provide equal benefit to the user and service provider. The consumers will be benefited by way of saving time, money, physical &

cognitive energy spent in lengthy government processes. For e.g. digital ticketing will lead to reduction in queue at ticket counter with online resources for booking, online tax-return filing etc. The aim of Digital India to give a Unique ID and e-Pramaan based on authentic and standard based interoperable and integrated government applications and data basis. This program will also lead to paperless work and reduction in cost to the government expenses. Government services will be available to every citizen electronically.

VISION AREAS

The vision is focused on three key areas:

Infrastructure as Utility to Every Citizen

- High speed internet, as a core utility, shall be made available with Public cloud sharable on private space.
- Bank account and Mobile phone would enable participation in digital and financial space at individual level.
- Smooth access to a Common Service Centre within their surroundings.
- Cradle to grave digital identity –lifelong, unique, authenticable and online.
- Secure and Safe Cyber-space in the country.

Digital Empowerment of Citizens

- Universal digital literacy.
- Transportability of all entitlements through the Cloud for individuals.
- All digital resources available universally.
- All Government certificates /documents to be available on the Cloud.
- Collaborative participative governance for digital platforms.
- Availability of digital services / resources in Indian languages.

Services and Governance on Demand

- Harmlessly integrated across departments or jurisdictions to provide easy and a single window access to all persons.
- Government services digitally transformed for improving comfort of Doing Business.
- Government ministration available in real time from online and mobile platforms.
- Every citizen entitlements to be available on the Cloud to assure easy access.
- Making financial transactions above a threshold, electronic and cashless.
- Edge of GIS for decision support systems and development.

SCOPE OF DIGITAL INDIA

The scope of overall programme is:

- To develop India for a knowledgeable future by Developing central technology for allowing revolution which Covers many departments under one umbrella programme

- On being transformative, that is to realize IT (Indian Talent) + IT (Information Technology) = IT (India Tomorrow). The programme weaves together a large number of thoughts and ideas into a single, extensive vision, and making the mission transformative in totality

- The Digital India Programme will pull together many existing schemes which would be re-focused restructured and implemented in a synchronized manner for their transformative impact.

- Digital India targets to provide the much needed sense to the following nine pillars of growth areas.

METHODOLOGY FOR DIGITAL INDIA PROGRAMME

i. It also evolves standards and policy guidelines, provide technical and handholding support, to undertake capacity building, R&D, etc.

ii. The existing e-Governance initiatives would be suitably revamped to align them with the principles of Digital India. Scope enhancement, Process Reengineering, use of integrated & interoperable systems and deployment of emerging technologies like cloud & mobile would be undertaken to enhance the delivery of Government services to citizens. Success would be identified and their replication will be promoted with required customization and product correction wherever needed.

- E-Governance would be promoted through a centralized initiative to the extent necessary, to ensure citizen centric service orientation, interoperability of various e-Governance applications and optimal utility of ICT infrastructure/ resources, while adopting a decentralized implementation model. The state will be given freedom to develop state specific programs.

iii. Public Private Partnerships would be preferred wherever feasible to implement e Governance projects with adequate management and strategic control.

iv. Adoption of Unique ID would be promoted to facilitate identification, authentication and delivery of benefits. Restricting of NIC would be undertaken to strengthen the IT support to all government departments.

v. It creates necessary senior positions for managing the programme within the department for overall aggregation, integration and is considered appropriate to implement Digital India as a programme with

well-defined responsibilities and roles of each agency involved. The position can be created, so that various E-Governance projects could be developed , designed and implemented faster.

NEW VISION OF DIGITAL INDIA

The Digital India vision is centred on the following three key areas:

- Digital infrastructure as a utility which seeks to provide every citizen with high speed internet facility, a cradle to grave internet identity, mobile phone and bank account, access to common service centre, sharable private space on a public cloud and safe and secure cyberspace.

- Governance and services on demand which will be available in real time for online and mobile platforms, seamlessly integrated across departments and jurisdictions. All citizen documents to be made available on the cloud platform; as a result, citizens will not be asked to produce such documents for availing services. In addition, the provision of cashless electronic transactions will help generate business. Geographical Information Systems (GIS) will be integrated with the development schemes.

- Empower citizens, especially rural citizens, by making them digitally literate. This will be done through collaborative digital platforms and by making available the digital resources in their native language with a view to making their participation a reality. It will help tap into the data that will be freely available on the cloud computing platform independent of an intervention.

While embarking upon such an ambitious nationwide and all-pervading programme, it is instructive to review the level at which the country stands at present in terms of its efforts towards digitisation. The programme will help delineate sectors which need special attention in order to speed up the process of digitisation on the one hand, and study its efficacy in reaching the intended targets and objectives of transformation of the techno-economic environment and socio-institutional operations on the other hand. While investing in activities leading to greater digitisation, it needs to be emphasised that returns to computerization are dependent upon apart from capital investment organisational capital, encompassing managerial culture, availability of critical skills and societal and regulatory environment. There have been attempts to develop a measure of cross country progress along the digitisation development path, simultaneously identifying measurable tangible elements and indicators of perceived digitisation metrics.

1. Ubiquity: It refers to the adoption of mobile and fixed broadband networks accounting for broadband accessibility and ownership of data devices such as PCs.

2. Affordability: The existence of affordable network links, which are critical to launching new

3. Reliability: Faultless service would bind participants to the process of digitisation.

4. Speed: Signifies the status of country level international links and the capacity of the system to serve down the line.

5. Usage: It is the measure of use of digitisation infrastructure across economic, social and governmental environment.

6. Skills: Richness of skills will quicken the establishment and stabilisation of all other elements, including building up of capacities to take optimal advantage of the digital infrastructure.

Figure.1
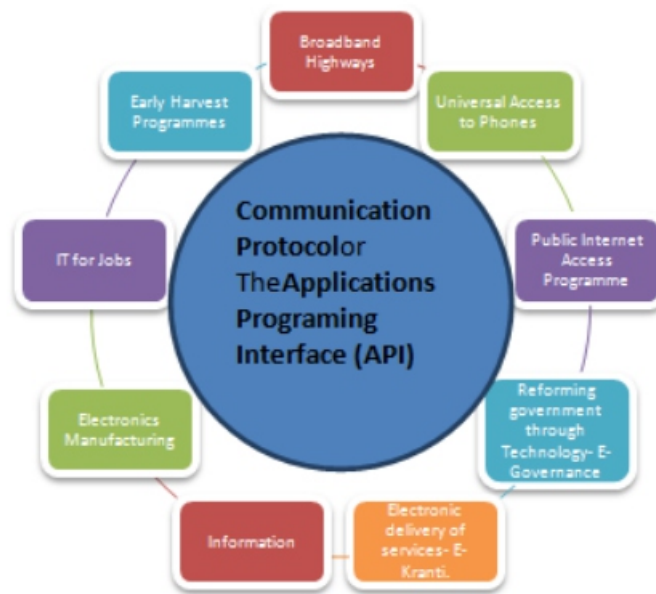
Pillars of Digital India

The vision of Digital India encompasses that by the end of 2018, India would emerge as an Advanced Digital Economy from the present stage of a Constrained Digital Economy. Accordingly, its programme content ensures: high speed internet as a core facility for the citizens who will have a "cradle to grave digital identity" with a capacity to participate in digital and financial space, access to common service centre with assurance of private space on a public cloud, and a safe and secure cyberspace. Government will ensure the availability of its online services in real time, seamlessly integrating across departments and jurisdictions. Also, business and the financial transactions would be made cashless. Target beneficiaries of governments programme will have built in Geographical Information System support to ensure that intended beneficiaries get included adequately. For giving effect to this part of the vision, it is necessary to have Universal Digital Literacy with universal access to digital resources in their own language in order to encourage and empower citizens to participate in governance on collaborative digital platforms and extract their entitlements through cloud computing.

The Indian society has been marching towards a digital way of life and at this stage it is broadly divided into three groups depending upon the digital skills of the individuals digital illiterates, digital immigrants and digital natives. Nevertheless, none of these groups have remained unaffected by the digital transformation taking place which would lead to quantum jumps as the Digital India programme gets underway. The divide among the three identified groups will need to be bridged at a faster rate than the rate of quantum leaps in the race towards becoming a Digital Nation, failing which inequalities among those groups may reach unexpected proportions. Widening inequalities would challenge the ability of the government to address these in an internet enabled society, particularly by the community leaders.

As the process of digitisation in India gets going, integrating the use of digital tools into public sector modernisation efforts would be huge. Public sector capacities, workflows, business processes, operations, methodologies and frameworks need to be adapted to the rapidly evolving dynamics and relations between the stakeholders that are already empowered by the digital environment. Resulting open approach to policy making and public service delivery will require that the government reorganises itself around user expectations rather than its own internal logic and
needs.

At the same time, the government will have to contend with the organisational maturity of its public sector institutions in relation to project management methods and approaches to optimise the impact and results of its investments towards Digital India. It would be extremely imperative to establish more effective coordination mechanism, stronger capacities and framework conditions to improve digital technologies' effectiveness for delivering public value and strengthening citizen trust. As the process of digitisation in India gets going, integrating the use of digital tools into public sector modernisation efforts would be huge. Public sector capacities, workflows, business processes, operations, methodologies and frameworks need to be adapted to the rapidly evolving dynamics and relations between the stakeholders that are already empowered by the digital environment. Resulting open approach to policy making and public service delivery will require that the government reorganises itself around user expectations rather than its own internal logic and needs.

CONCLUSION

Towards the end, government strategy for digital India needs to become firmly embedded in mainstream modernisation policies and service design so that relevant stakeholders outside the government are included and feel ownership for the final outcomes of policy reform. Such a shift in the objective of

digital technologies in shaping public governance outcomes will require use of such technologies in all areas and levels of the administration as have been envisaged in the implementation programme of the Digital India project. However, government remains organised around its units, each with clear responsibilities and processes, as well as problems to integrate their ways of working. This presents a challenge to creating broad political commitment for integration of digital government into overall public sector reform strategies. Government will have to ensure that its own capacity, norms, structures and risk management models are aligned with its strategic digital vision, and vice-versa. At the same time, the government will have to contend with the organisational maturity of its public sector institutions in relation to project management methods and approaches to optimise the impact and results of its investments towards Digital India. It would be extremely imperative to establish more effective coordination mechanism, stronger capacities and framework conditions to improve digital technologies' effectiveness for delivering public value and strengthening citizen trust.

REFERENCES

1. https://en.wikipedia.org/wiki/Digital_India

2. http://www.ibnlive.com/news/tech/digital-india-and-the-pdf-patchwork-1017055.html

3. http://digitalindiainsight.com/what-is-digital-india-campaign.

4. Government Okays Electronic Development Fund,'Hindustan Times, New Delhi, December 12, 2014.

5. Tapscott, Don and David Agnew (1999), 'Governance in the Digital Economy: The Importance of Human Development,' Finance & Development, Vol. 36, No. 4, December 2014.

Digital Literacy as a resource for E-Governance

Deepali Srivastava

Assistant Professor, Bora Institute of Management Sciences, Lucknow

A B S T R A C T

Today, the world has transformed from a knowledge savvy to techno knowledge savvy. Think of something and it is available in one click. Digital Technologies which include Cloud Computing and Mobile Applications transpire as catalysts for shaping our world.

So, Digital India is a step by the government to inspire and connect Indian Economy to such a knowledge savvy world. The program targets to make Government services available to people digitally and enjoy the benefit of the newest information and technological innovations.

To make the people Digital Literate, the citizens should be made aware of the benefits of Digital Literacy and how Digital Literacy helps. They must be taught how can they contact and understand the working of Government without depending on the middlemen or agencies. The facilities like advantage of real time, online working etc. must be explained them well. While explaining the project, they must be made aware of how they can involve with the projects of Government directly.

The consumers will be benefited by way of saving time, money, physical & cognitive energy spent in lengthy government processes. For e.g. digital ticketing will lead to reduction in queue at ticket counter with online resources for booking, online tax-return filing etc.

This program will also lead to paperless work and reduction in cost to the government expenses. Government services will be available to every citizen electronically.

Keywords : Techno-Knowledge Savvy, Cloud – Computing, Mobile Applications.

INTRODUCTION

Information and Communication Technologies (ICTs) including telephony, computing and broadcasting, can contribute to sustainable human development and poverty eradication through making social communication easier and more affordable and by enabling speedy and secure economic transactions. ICTs are powerful as accelerator, driver, multiplier and innovator, in the 21st century. ICTs in the context of governance may also play a critical role in speeding up the flows of information and knowledge between government, citizens and business. Governments in many parts of the world have made huge ICT investments aimed at improving governance processes.

E-Governance is regarded as the application of ICT to governance processes and decision-making, in ways that provide opportunities for citizens and communities to regularly receive information about government activities. E-governance will increase the efficiency of government operations between government institutions, strengthen democracy through citizen participation in decision-making, enhancing transparency by publishing government information, and through direct interaction will provide better services.

What is Digital Literacy?

Digital literacy is more than knowing how to send a text or watch a music video. It means having the knowledge and ability to use a range of technology tools for varied purposes. A digitally literate person can use technology strategically to find and evaluate information, connect and collaborate with others, produce and share original content, and use the Internet and technology tools to achieve many academic, professional, and personal goals.

The term 'digital literacy' defines the basic and essential communication skills which include the skill to use and manage the tools and services of information society, so generally speaking ICT. One may include the following skills.

1) Using the search engines in order to find information,

2) Sending e-mails with attachments,

3) Using on-line chats, groups and discussion forums,

4) Using the Internet for making phone calls,

5) Using the file exchanging programs,

6) Setting up websites.

E-GOVERNANCE

It has become common that "E" is added as a prefix in many terms in the 21st century like eCommerce, eServices, eGovernment, eVoting, eVillages, eLearning, etc. In all these "E" we find many similarities and it denotes Digital or Digitalisation. One common factor among these "E" are, they all contain the digital environments to execute or perform the task. Hence, the implementation and promotion of all "E"events are, through digital environments only.

Electronic governance or e-governance is the application of information and communication technology (ICT) for delivering government services, exchange of information communication transactions, integration of various stand-alone systems and services between government-to-customer (G2C), government-to-business (G2B), government-to-government (G2G) as well as back office

processes and interactions within the entire government framework.[1] Through e-governance, government services will be made available to citizens in a convenient, efficient and transparent manner. The three main target groups that can be distinguished in governance concepts are government, citizens and businesses/interest groups. In e-governance there are no distinct boundaries[2]

Generally four basic models are available – government-to-citizen (customer), government-to-employees, government-to-government and government-to-business.[2]

Digital Literacy to bridge the gap of E- Governance

E-Governance through Digital Literacy enables good governance, smooth administration, the development of individual and Nation, to empower the awareness and welfare of Citizens and finally to prove the efficiency and transparency of the Government. Even though ICT is the backbone of the E-Governance, the Digital Literacy is required to use the ICT tools. The successful use of any ICT tool and the implementation of E-Governance is basically depended on the Digital Literate people. Hence, ICT and E-governance is the use of information technology to support government operations, engage citizens, and provide government services comprising the E-Services, E-Democracy, E-Administration, E-Commerce etc. which reflect the functions of government to the general public. To make the people Digital Literate or to increase the percentage of Digital Literate, the citizens should make aware of that why Digital Literacy is required. They should be made aware of the benefits of Digital Literacy. How Digital Literacy is going to help in the E-Governance should be explained to them. They must be taught how can they contact and understand the working of Government without depending on the middlemen or agencies. The facilities like advantage of real time, online working etc. must be explained them well. While explaining the project, they must be made aware of how they can involve the projects of Government.

Literacy and Education Level in India

Literacy and level of education are basic indicators of the level of development achieved by a society. Spread of literacy is generally associated with important traits of modern civilization such as modernization, urbanization, industrialization, communication and commerce. Literacy forms an important input in overall development of individuals enabling them to comprehend their social, political and cultural environment better and respond to it appropriately. Higher levels of education and literacy lead to a greater awareness and also contributes in improvement of economic and social conditions. It acts as a catalyst for social upliftment enhancing the returns on investment made in almost every aspect of development effort, be it population control, health, hygiene, environmental degradation control, employment of weaker sections of the society.

According to the Census 2001, as many as 560,687,797 persons in the country are literate. Of these 336,533,716 are males and 224, 154,081 are females. While the overall literacy rate works out to be 64.8 %, the male literacy rate is 75.3% and that for females is 53.7%, showing a gap of 21.6 percentage points between the sexes at the national level. The gap is more in the rural areas. In the urban areas, higher literacy rate has been recorded both for males and females and the difference among the sexes is lower (13 percentage points). Kerala, Mizoram, Lakshadweep, Goa and Chandigarh occupy the top five positions in literacy while Dadra & Nagar Haveli, Uttar Pradesh, Jammu & Kashmir, Arunachal Pradesh, Jharkhand, and Bihar, are at bottom.

The literacy rates for rural population are the highest in Kerala, followed by Lakshadweep, Mizoram, Goa, and Delhi. Fourteen (14) States / Uts have recorded less than 60 percent rural Literacy rate.

NUMBER AND PERCENT LITERATES BY LEVEL OF EDUCATION: INDIA 2001#

Level of education	Absolute Numbers (000')			Percent to Literate		
	Persons	Males	Females	Persons	Males	Females
Literate	5,60,688	3,36,534	2,24,154	100	100	100
Literate without educational level $	20,023	11,361	8,662	3.6	3.4	3.9
Below Primary	1,44,831	81,148	63,683	25.8	24.1	28.4
Primary	1,46,740	83,525	63,215	26.2	24.8	28.2
Middle	90,227	55,940	34,286	16.1	16.6	15.3
Matriculation/Secondary	79,230	51,202	28,028	14.1	15.2	12.5
Highsecondary/ Intermediate/PreUnivercity/ Senior Secondary	37,816	24,596	13,220	6.7	7.3	5.9
Non technical diploma or certificate not equel to degree	386	259	128	0.1	0.1	0.1
Technical diploma or certificate not equel to degree	3,667	2,901	766	0.7	0.9	0.3
Graduate and above	37,670	25,533	12,137	6.7	7.6	5.4
#India figures excludes Mao Maram, Paomata and Purul sub-divisions of Senapati district in Manipur state as census state as census results were cancelled due to administrative and technical reasons. *(source:censusindia.gov.in)*						

Computer Literacy and Digital Literacy

The definition of "Computer Literacy" also varies from group to group. A literate is one who can read any arbitrary book in their native language. Similarly, a computer literate may consider the ability to use and meet the requirements of the Computer Programs. Hence, Computer Literacy is defined as a

knowledge and ability to use computers and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving. "Digital Literacy" is defined simply as the awareness, skills, understandings etc. to operate comfortably in Information Technology (IT) enabled environments. *A person who wants to be a Digital Literate, must be able or prepare to face the above IT environments.* Here it doesn"t mean the awareness of computer or computer literacy, but the knowledge of handling any instrument or media to access the information he wanted for him or others.

The people who want to gain the Digital Literacy may be a literate or illiterate person, irrespective of his age, sex or status factor. Only thing is, a literate person may learn to access the IT environment easily in comparison with an illiterate. But basically both literate and illiterate are deprived of the Digital Literacy.

The National Digital Literacy Mission (NDLM) envisages initially to provide Information Communication and Technology (ICT) training to 10 lakh (Ten lakh) persons, one in every eligible household in selected Blocks in each State/ UT of the country. Out of 10 lakh, 9 lakh will be trained through government machinery and 1 lakh through Industry, NGOs and others through their own resources/ under Corporate Social Responsibility. The objective is to impart basic ICT skills relevant to the need of the trainees, which would enable the citizens to use IT and related applications and participate actively in the democratic process and further enhance opportunities for their livelihood. The persons shall be able to access information, knowledge and skill through the use of digital devices.

Personal Computers are no more a luxury item. It has become common and considered as an "essential" house-hold electronic gadget for daily life. The reduction in the cost and the increase in income level have enhanced the option of purchasing of computer by all class of people. Slowly the fear and approach toward the computer is diminishing and the use of computer is increasing by all age group of people day by day. This also encourages computer literacy and Digital Literacy in common man.

Since illiterate people represent a large part population, disconcerting that a high proportion of older people in India who do not use the Internet and therefore lack Digital Literacy skills. It would seem that there are a number of different reasons for this: lack of motivation, not interested in learning new skills, having a fear of technology, not having access to IT, not being able to afford going online, lacking infrastructure etc.

A Digital Literate person supports a government to operate effectively or for an E-Government, the infrastructure of E-Governance is required to establish a government-citizen-government relationship.

This will establish the flow of information between the government and citizens of a nation through the implementation of E-Governance. When the citizens become informative about the activities of Government, the citizens can enjoy faster, effective and timely government services. This will help to sprout up the culture of self-service wherein citizens can help themselves wherever and whenever required in a intelligent or meaningful manner. This will lead the government to take decision on policy matters only in the benefit of the citizen but also in favour of the government itself. Hence the government could focus its resources where they are needed the most.

Steps for Digital Literacy

The implementation of any project for Digital Literacy must be from the grass root level. To reach the grass root level, the beginning should be from rural areas. For this, there must be computer centres at rural areas like *E-District in Madhya Pradesh, Akshaya in Kerala* etc. These centres can, not only bring computer facilities to rural areas, but also helps to provide e-education and training to the rural citizens, until they are able to use these facilities by themselves. These centres have to have train at least one person from every family in the rural area. The local bodies of that area may be taken the responsibilities of the funding for training. Various organisations may be involved in the implementation process, depending on local needs by these local bodies. The Digital Literate and trained persons may be employed to convert all records of village level or panchayat level government records to digital data.

To increase and make the people Digital Literate, at least the following steps are very much necessary.

- The citizens should make aware of that why Digital Literacy is required and its benefits.
- They should know how they are benefited with Digital Literacy.
- How Digital Literacy is going to help in E-Governance.
- How can they contact and understand the working of Government without depending on the middlemen or agencies.
- They should be aware of the advantage of real time, online facilities.

The computer centers for e-education are not only a centre of e-education and access to the internet but also act as an instrument in rural empowerment and economic development. They also support in the development of e-governance in the state, as they have been met with a transfer of state services online. It means that these centres act a media of Information Communication Technology (ICT) centre and also act like training centre for accessing Information Technologies. These two actions taken together mean that villagers need not to reach distant government offices to get relevant records, papers, information etc. It not only saves their time by not going to the distant government offices, but also saves

spends for transportation as well as losing a day''s wage. This is the first stage of implementation of E-Government and the use of E-Governance. Through E-Governance and Digital Literacy, the chances of corruption also reduce, which is another curse of the Nation. Apart from all this Digital Literacy renders the Government more transparent and effective through E-Governance.

Digital Literacy Benefits

A Digitally Literate person through e-Governance prevents or discourages corruption due to the direct involvement of citizen in the Government activities. Government Web sites provide customers with access to government information, allow transactions, and provide links to other relevant agencies. In this process the middle men who demand bribe has no chance due to the transparency of the government, e-governance and online system. Increased contact improves the flow of information between government and its citizens both ways. Once E-Government begins to develop and become more sophisticated, citizens may be forced to interact electronically with the government on a larger scale. Use of paper documents should be reduced which also saves the environment.

Through E-Governance and Digital Literacy, the chances of corruption also reduce, which is another curse of the Nation. Apart from all, This Digital Literacy renders the Government more transparent and effective through E-Governance. Many employment projects like MPNREGA etc. will certainly be useful to the Government, as well as the general people. Thus the opportunity of employment also opened to the citizens. This will encourage the people to spread the Digital Literacy program and will motivate others to become Digital Literate.

Limitations in Implementing Digital Literacy

There are many barriers in Digital Literacy also. Implementation of Literacy, particularly the Digital Literacy, it is very difficult to train the people. It is a big task to Digital Literate the educated as well as uneducated. Both the literate as well as illiterates are equally afraid or avoid learning this technology due to the technical involvement. Literate as well as illiterate people are reluctant to learn anything new. They simply don't want to learn anything. Many old people, even educated are not interested in Digital Literacy because they feel that they are too old to learn any new things. Hence, "Feeling too old" was also seen to be more of a barrier in the implementation of Digital Literacy. Being a citizen and active part in E-Governance, they should be made aware of the use of E-Governance and Digital Literacy.

Fear is one of the major barriers in the Digital Learning process. The fear of an illiterate can be reasonable. But even the literate persons, even the highly literate people are afraid of using the computer. Educated as well as uneducated are not able to acquaintance with computer, because they simply feared

of new technology. Some of them worry that they will break the computer by pressing the wrong button. In fact, the anxiety is turned to fear and this prevents them becoming an Digital Literate. However, the young generation shows interest in the use of a computer.

Many people simply do not know the advantages of Digital Literacy and e-Governance. They, therefore, need to be better informed. One way of doing this might be to implement a targeted marketing campaign by the Government. Strategy should be made to provide information and activities relevant to the Digital Literacy programme . The Government sector should initialise with this strategy. First the government has to implement this type of schemes within the government department and slowly compel the common people to become Digital Literate.

One of the main reasons for the failure of Digital Literacy is the non-availability of Computer and proper infrastructure to the common man. Even if both are made available, the Electricity problem in rural area persists. Government should take some initiative to solve this problem. Use of unused or old computer at various Government Departments or NGOs may be used to train Digital Literacy. These computers may be used as a Terminal in a Network System. Or the same may be updated re-cycled at a cheaper cost to meet the requirements.

Digital Literacy and E-Governance

The Governments realised their needs to focus and initiated the efforts to reduce the cost of operating government information system and there by updating the data process. States like Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, Madhya Pradesh, Gujarat, Rajasthan and West Bengal are playing a significant role in introducing IT for social and economic development. The increase in the tele-density will certainly bring the people informed about the activities of the Government. The basic requirement for reducing the digital divide is to give priority to the development of the telecommunication and IT infrastructure. This will provide universal and affordable access to information to people in all geographical areas including the rural areas. The IT infrastructure will not only improve the Digital Literacy and skills to use the information communication technology, but also provide the information about the government and its policies through the E-Governance.

The growing population of India, the nature of multicultural, multi–language and multi–religion makes the country complex to improve socio–economic conditions. The system prevailing India like insufficient funds, and delay in the implementation of government policies and programmes etc. become the hindrance for the development in the society and nation. The government has initiated many encouraging steps to improve the lives of common people by introducing and implementing several IT–oriented Central-State Government projects. The advancement in the IT industry and its impact on

Digital Learned society will bring significant social changes. Slowly, the reluctance in Digital Learning will change if all the communication between Government and the Citizen is made through various modes of e-communication. Many State Governments in India has started implementing this method for E-Governance. Hence, these governments are giving priority to boost Literacy in general and Digital Literacy in particular.

Apart from the above benefits, the following are also considered as the benefits of E-Governance through Digital Literacy:

- E-participation of citizen empowers to gather information and to get involve in the process of decision making.
- In E-Governance, IT and ICT are being recognized as an effective tool for digital economy.
- Use of E-Governance will help people to access information at anytime from anywhere

A Successful implementation of E-Governance by any Government offers better management and delivery of services to its people, improved interactions everybody and give empowerment to them through the facilitation of access to information.

Conclusion

Main reason for failure of E-Governance is lack of education among people. A variety of reasons exist for the failure of projects include lack of Proper IT Education, e-awareness, Time Frame, Training and support after the completion of the atomisation, No proper vigilance on the phase wise developments by the competent authorities. Indian Politics, lack of interest in taking training by the Government employees also a major reason for the failure of E-Governance project in India. Madhya Pradesh also introduced various schemes and policies supporting E-Governance in the State from time to time. The Gyandoot project, Gramsampark, MP Online are some them. This paper gives light to the significance of Digital Literacy in E-Government and also discusses various issues related to E-Governance.

Projects like E-District should be started for the Digital Literacy campaign. As described earlier, E-District Project is the prime Mission Mode Project (MMP) of Govt. of India by Ministry of Comm. & IT under NEGP (National E Governance Programme). This project was initialised to give various services offered by the State Government through E-Governance Programme. The same may extended to given training to the people to make them E-literate. These centres can, not only bring computer facilities to rural areas, but also helps to provide e-education and training to the rural citizens, until they

use these facilities by themselves. These centres have to have train at least one person from every family in the rural area. The local bodies of that area may be taken the responsibilities of the funding for training. Various organisations may be involved in the implementation process, depending on local needs by these local bodies Thus the opportunity of employment also opened to the citizens. This will encourage the people to spread the Digital Literacy program and will motivate others to become Digital Literate.

References:

1.   *Josienita Borlongan, "How to Recycle a Computer",*

2.   *Vineet Agrawal, Manish Mittal & Lavanya Rastogi (2012), "Enabling E-Governance;*

3.   *Integrated Citizen Relationship Management Frame Work – The Indian Perspective", Governance ICTs for Development ICTs and Governance*

4.   *Censusofindia.gov.in*

5.   *http://digitalindia.gov.in/content/approach-and-methodology*

6.   *https://en.wikipedia.org/wiki/E-governance*

7.   *http://vikaspedia.in/e-governance/digital-india/national-digital-literacy-mission*

Digitalisation- An Emerging Trend In Human Resource Practices.

Pooja Dixit

Assistant Professor, Departmnent Of Management,Bims, Lucknow

A B S T R A C T

This paper attempts to explore the use of IT tools in HR practices by the Indian organizations. This also highlights the changing role of E-HRM in Indian organizations. E-HRM refers to an integrated, organisation wide electronic network of HR data, information, services, tools, applications and transactions.

This article explains the Landscape of E-HRM by which organizations involved in technological working. The technological innovation helps in bringing new jobs and methods of working in an organisation. The HR professionals use these innovations in a positive way by transforming strategies in a digital way for the upbringing of the organizations. This paper reveals the impact of technology on various HR practices like recruitment, training & development and performance management. With the help of examples like Reliance, SBI and Bank of Baroda article highlights the working of Indian organizations by using digital tools in their HR Practices.

This paper also highlights the future scope of digital tools in industries for making the organizational culture more valuable. It also states the benefits and necessity of using IT Tools in HR Practices.

Keywords :Human Resource Management, Information Technology, E- Human Resource Management and HR Practices.

INTRODUCTION

In 21st century, the world has undergone many changes based on dominance of IT (Information tool) tools and digital media. Digitalization is present throughout every business and everyday lives. It is an emerging approach to business practices and employee's behavior. The digitalization is rapidly growing because of the dynamic behavior of the market. The organizations have to adapt these technologies for the better communication among employees and to gain the competitive advantage. Digital technology plays a vital role in Human Resource management (HRM) and effects its functioning in many ways. Apart from Human Resource Management System (HRIS), it also affects the other HR Practices.

The HR practice of Human Resource Management (HRM) is concerned with all aspects of how people are employed and managed in organizations. It covers activities such as strategic HRM, Human capital management, knowledge management, organizational development, resourcing (Human Resource

planning, Recruitment & Selection and talent management) and performance management, learning and development.

Digital technology helps the organisation to increase its productivity by maximizing its most valuable assets 'Human'. Digital HRM is a way by which strategies, policies and practices can be effectively implemented. "An umbrella term covering all possible integration mechanism and contents between HRM & IT aiming at creating value within and across organisation for targeted employees and management" (Bondarouk & Ruel, 2009 P.507). Most of the tasks associated with HR are outsourced. As a result, business requires more new expertise from their HR team.

WHY BEING DIGITAL IN HR PRACTICES

In present scenario, there seems the domination of technology all over the world. Digitalization is a tool which speeds up the communication process by reducing the cost which helps the organizations to be more productive and to work more effectively and efficiently. The technological innovation helps in bringing new jobs and methods of working in an organisation. The HR professionals use these innovations in a positive way by transforming strategies in a digital way for the upbringing of the organizations. Digitalization also helps in enhancing the skills of the employees like working on software's and computer skills. IT (Information Technology) has divided the benefits into three categories:-

Transactional systems that cut costs by substituting labor and automating processes
Informational systems that cut costs and enhance productivity by providing the information backbone of a firm
Strategic systems that increase innovativeness by enabling new products, services or the entry into new markets.
From the above systems it is clear that digital tools help the organizations in increasing productivity, improving quality of work, increasing workplace safety, reducing cost and employee engagement.

E-Human Resource Management (E-HRM) - Landscape

E-HRM refers to an integrated, organisation wide electronic network of HR data, information, services, tools, applications and transactions.

The application of any technology enabling managers and employees to have direct access to HR and other workplace services for communication, performance, reporting, team management, knowledge management and learning in addition to administrative applications (Watson-Wyatt, 2002).

The figure highlights the several functions of the HR contained within contemporary E-HRM technology. It divides the whole functions into two areas one is –Process technology and other is Human Capital Technology.

Process technology provides support for basic transactions. These functions include managing payroll, personal/ organizational data and routine administration and are aimed at reducing costs and achieving HR operational efficiencies through automation.

Human Capital Technology aimed at supporting people management activities such as performance management, skills profiling and analytics. These functions are more strategically oriented due to the wider impact on business outcome.

The impact of Hr technology is likely to be some combination of process and human capital. E-HRM technology is advancing faster as many organizations are working on web technologies like e-recruitment by the portals or websites, performance management software's and e-learning for their workforce.
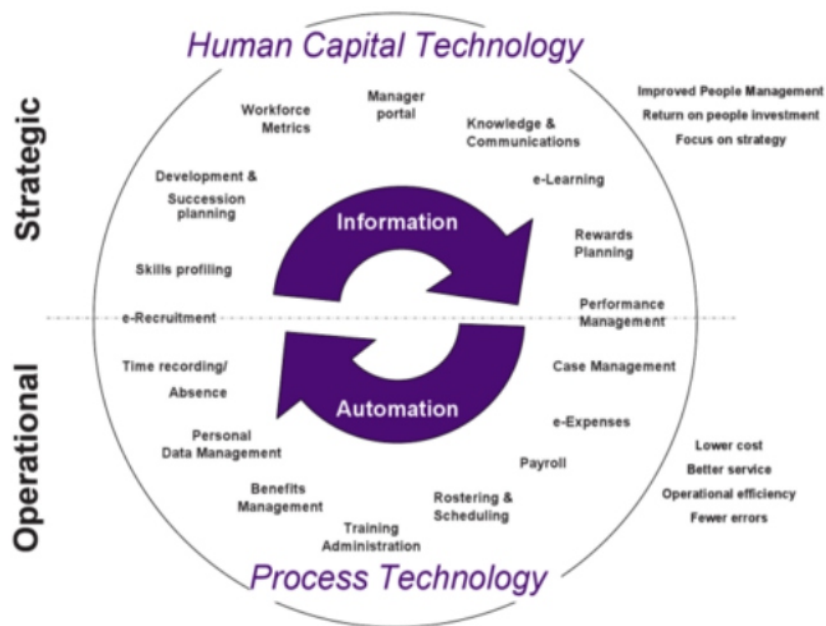
Digitalization and HR Practices in 21st Century

DIGITALIZATION IN RECRUITMENT

The recruitment industry is the oldest industry among the other service industries of the world. Technology has a positive impact on recruitment. Recruitment is the process of attracting potential candidates for the organizational anticipated vacancies. E- Recruitment provides many digital tools.

Types of E- Recruitment

1. **Operational E-Recruitment-** this includes basic transactions characterized by short term applicant relationships global messages and major automation.

2. **Relational E-Recruitment-** this is characterized by development of real applicant relationships through better feedback, the personalization of applicant messages and the use of web 2.0 tools, such as social network sites.

3. **Transformational E-Recruitment-** it is anchored in a global talent management strategy, consisting in identifying the critical positions, and then attracting and retaining individuals who correspond to the established profile (Foster 2005). Employer branding and reputation could be a solid support.

E-methods Used in Recruitment

a. Company's websites are their own websites having a link for careers options where candidate can sign in with current openings or submit the resume for better opportunities. Many companies use this method of recruitment like idea, HCL, Wipro etc. these companies have separate recruiters team for responding towards these activities.

b. Commercial Job portals are the websites that allows employees to post their job requirement for the fulfilling of their vacancies and candidate post their resume for getting the job opportunities. The job sites in India are Naukri.com, Monster. Com, Times job, shine.com etc.

DIGITALIZATION IN TRAINING DEVELOPMENT

IT tools have affected the way of formal learning in a work place. In the era of digitalization, E Learning provides an enormous opportunity to the employees by making learning more interesting and attractive. "E Learning refers to the use of internet technologies to deliver a broad way of solutions that enhance knowledge and performance" (Marc Rosenberg). The training changes from basic training activities like lectures, case studies, role play etc. to the more complex techniques like technology based learning, video, internet and computer based. Many public as well as private sector companies are adopting the

concept of E- Learning. According to Nagy [9]"E-Learning refers to learning that depends on or is enhanced by electronic or online communication using the latest information and communication technology".

DIGITALIZATION IN PERFORMANCE MANAGEMENT

Performance measures the employee efficiency and effectiveness in the achievement of organizational goals. E-Performance Management is the planning and implementation of Information technology in managing Performance Management System. E- Performance Management is the part of E-HRM. IT enabled Performance Management comes to an effective tool to leverage the full benefits of the system at a comparatively lesser cost of administration. The E- Performance Management allows the organizations to maintain the record of core skills and competencies into the employee's managing process. With the emergence of technology, performance appraisal software's are becoming common in the organizations. Performance management software helps the HR to carryout performance of the employee in the most effective way, by saving time and cost. Performance management software provides a innovative approach to employees performance appraisals. It not only provides performance review but also helped in increasing productivity, relationship, behavior, development and core competency.
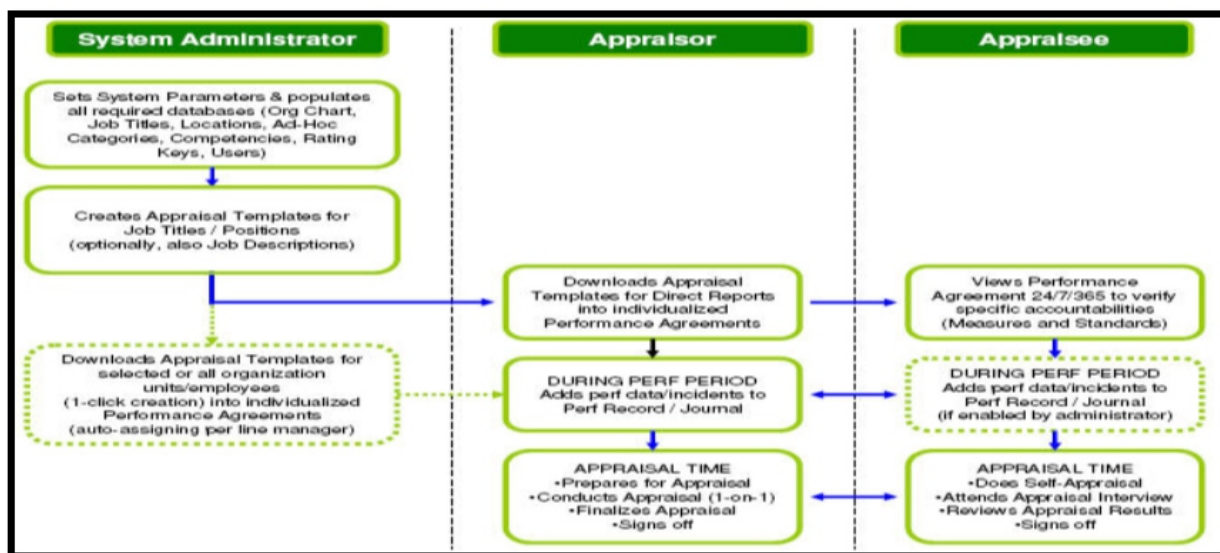

Figure: Format of Performance Appraisal software
Source: www.appraisal-smart.com
Use of Digital Tools in HR Practices: Examples from Indian Industry
E-Recruitment in Reliance Company

Reliance Company provides e- recruitment which is designed to make the recruitment process more effective and efficient. Reliance values the innovation, initiative and entrepreneurship. It gives an opportunity to join them in the process of actualizing your potential. The system works on the following steps:-

1.   Basic requirement- candidates have to fill their basic information like name, email id, experience in years, qualification and skills.

2.   Uploading Resume- After filling all the necessary details candidates have to upload or submit their resume/ CV.

3.   Screening- after submission of resume, reliance recruitment team short list the potential candidates to complete the module of the company.

4.   Interview- Reliance team after short listing goes through the process of interview. They provide the facility of video conferencing for the candidates who live outside station.

Above example shows there is a need for organizations to have a cost effective, fast and convenient system for the personnel selection. IT tools are the latest tools in hiring the personnel's.

DIGITALIZATION IN SBI- GYANODAYA E LEARNING GATEWAY

It is the e- learning portal of the SBI which provides the training facilities in order to enhance the skills of the employees. The portal has the learning modules for various posts like chief manager, branch manager, cash officer and field officers separately. Every employee of SBI is able to access portal that have their data in HRMS portal. The idea behind this portal is to provide learning at anytime and anywhere. By using this portal the employees are free to choose any module and they can get certified by accessing tests.

Getting Started with Portal:-
The portal has the following steps-

1.   New Users Registration- the first step to access e- learning is to get registered with the application. The employee has to click on "New User Registration" link to get login and employee has to enter his PF no and Date of Birth. After entering this detail he has to click on

"Get Details" button. The details of the employees from HRMS will be computed in your personal details and official details section. After that employees have to enter work details and contact details. The employees after filling this information are able to create his account.

2. Registering for lessons- to register for the courses and lessons employee has to click on "course registration" menu from "my courses" in "my workspace". In course registration page employee has to click on "enrollable courses" menu. To register for the lesson employee has to click on join link that is below the course title.

3. Accessing Lessons- after registering on my courses employees get list of registered courses, then he has to access lesson of the course from "course tools". The lesson content will be opened in new window from where employees access the lessons.

4. Taking Tests & Quizzes- to access test and quizzes click on "Test & Quizzes" from course tools. Employees will be directed to tests & quizzes window. Under "take an assessment" section, list of test & quizzes will be displayed. Click on "Begin Assessment" to take the test. At the ends of the test click on "submit for grading" button to complete the test.

System requirement for the SBI E-Learning portal is very normal. It requires the use of Internet Explorer 6.0 or Firefox 3.x or above.

DIGITALIZATION IN BANK OF BARODA (E-PERFORMANCE MANAGEMENT)

Bank of Baroda has started the Human Resource Network for employee services. It covers the entire gamut of HRM function in the bank. Bank covers all the HR processing by the Oracle Core HR Module. This software helps the employees to undergo with various learning courses. The Performance Management System is implemented foe all officers w.e.f 2009-10 onwards. System starts from performance planning and goal setting and takes it forward into performance review, discussions, feedback and development. The new system is business linked, highly objective and fully transparent with individuals owning and managing their own performance themselves. Baroda sujhav and ideaonline@bank of baroda.com are the idea channels where new employees can share their ideas. The bank elicits new ideas from employees with structured rewards provisions for the best ideas.

CONCLUSIONS

Hence, the increased need of IT tools in HR, replaced the traditional methods by the modern methods. Organizations are trying to reduce their cost and time to achieve profitability. Organizations are trying to convert their HR Practices in to E-HR Practices. In the era of globalization, Companies want to expand globally by reaching the people all across the world companies needed end to end visibility in their value chain and enhanced process efficiency throughout the organizations. Industries in India like Telecom industry such as Reliance and service industry like SBI- Gyanoday E –Learning Portal, Bank of Baroda are trying to convert their HR practices into E-HR practices. These companies used different software's for different HR Functions. These web technologies help the organizations in achieving competitive advantage. These organizations shows the importance and need of digital tools in Indian Industry Most of the companies for their HR activities are dependent upon third-party consultants, so they need more experts in their HR team. The concept behind E-HR is to create organizational culture that enhances the working knowledge of the employees by adding value to the business.

REFERENCES

· Handbook of Research on E-Transformation and Human Resources Management - by Bondarouk, Tanya
· Aligning Information Technology, Organization, and Strategy: Effects on Firm-By Ferdinand Mah
· Electronic HRM in Theory and Practice- By Tanya Bondarouk, Huub Ruel,J.C Looise 2011.
· Michael Allen's 2009 E-Learning Annual By- Michael W. Allen

Web Resources

https://mybanklearning.sbi.co.in/xsl-portal ·   (Accessed on 2 February 2016).

http://www.bankofbaroda.co.in/hr_initiatives.asp ·   (Accessed on 2 February 2016)

http://www.rcom.co.in/Rcom/aboutus/careers/careers_applyonline.html ·   (Accessed on 3 February 2016).

Digitalization – What Is And Why Being Digital?

Amit Kumar Dubey

Assistant Professor, Bora Institute of Management Sciences, Lucknow

A B S T R A C T

A New Year means new possibilities, and a new kind of consumer means new ways of doing business, as the digital marketplace continues to grow each and every year, the physical customer experience of brick-and-mortar stores is changing to accommodate more digital tools, as well.

Digitalization, as we call it today, is right from gathering the news we find in the newspapers every morning to the billing process at our neighborhood grocery shop, it is digital technology that is making tasks faster and more accurate. The impact of digital technologies is prevalent in every field of our lives and consequently the current era is also termed as the "digital age". Today digitalization can be seen as a tool of transformation which extends beyond our lifestyle to the way we transact, interact and conduct business.

This article focuses on what is being digital means and why it is important to being digital and using different platforms of digitalization by different organization for better customer relation & satisfaction.

Keywords : Digitalization, Customer, Customer Experience, Customer satisfaction, Digital tools.

INTRODUCTION

'Digitization' and 'digitalization' are two conceptual terms that are closely associated and often used interchangeably in a broad range of literatures. The Oxford English Dictionary traces the first uses of the terms 'digitization' and 'digitalization' in conjunction with computers to the mid-1950s. According to Oxford English Dictionary, digitization refers to "the action or process of digitizing; the conversion of analogue data into digital form."

The term Digitalization is used to describe a scope of transformation that goes beyond simply substituting analog or physical resources for their digital or information counterparts. In this sense books don't simply become eBooks but complete interactive and multi-media experiences and processes might become online dialogues between parties that were not previously directly connected.

Digitalization, by contrast, refers to "the adoption or increase in use of digital or computer technology by an organization, industry, country, etc."

A new year means new possibilities, and as the digital marketplace continues to groweach and every year, the physical customer experience of brick-and-mortar stores is changing to accommodate more digital tools, as well.

Business today doesn't happen from9 to 5, Monday through Saturday. In a world that is fueled by the Internet of things, today businesshappens during all the time 24x7x365. Customers and prospective customers are searching and browsing and shopping and asking and talking and reviewing all day, every day. And customer service, it's never been more important. That's why harnessing the power of technology to deliver a digital customer service experience whenever and wherever customers need it is integral to your success. This is true of enterprise level companies as it is for small to midsize businesses. The way of doing business in current era has been changed, the organisations understand the need to transform to digital business apart from this leaders are struggling to make it core part of their business. According to Forrester analysts Hopkins and Gillett, "connectivity will enablecompetitive differentiation and will transform business models based on service, not just product."Delivering emails and ads that are customized based on the websites consumershave visited, the social networks they use, or the loyalty programs they belong to is quickly becoming the norm in marketing.

Customer behaviour and customer expectations are shaped by trends in the economy and society and advances in technology.

LITERATURE REVIEW

The digital revolution has impacted consumers and businesses alike. Over the past decade technology and the way it is used has changed drastically. The Internet, once purely a source of information has become a place where people meet to share their stories and experiences, a platform for discussion and debate, a source of entertainment and much more.

Furthermore, the Web has several important marketing aspects that enable companies to boost their performance: 24 hours online; multimedia compatible; globally available; interactive; micromarketing compatible; integration ready. (Rowley, 2004, p. 26)

Communication across continents now takes seconds, not weeks. When consumers experience your

brand through the web (positively or negatively) the impact is immediate. Nutella is a perfect example; when many passionate consumers began creating online communities around the brand the company intervened – preventing consumers from using the Nutella name – and the company suffered as a result (Cova & Pace, 2006).

Kwak, Lee, Park and Moon (2010) present an empirical study of Twitter and how information spreads across the service. The authors analyzed 41.7 million users, 1.47 billion social relations, 4,262 trending topics and 106 million tweets. During the research the authors noted a tendency on Twitter; contact between similar people occurs at a higher rate than among dissimilar people. Twitter"s homophily can benefit businesses that establish their Twitter presence and start building a follower database. It enables companies to reach out to the right people and be sure that the information will be passed on and reach people with similar interests who could be potential clients. When looking deeper into how Twitter operates and spreads information the authors noted that any re-tweeted tweet reaches an average of 1000 users no matter the number of followers had by the original tweet. Reaching a thousand potential customers by only one click is undoubtedly a valuable opportunity for businesses. The article presents a good description of how Twitter operates and how tweets reach masses. However the article, though valuable, is purely scientific and very limited as it does not address how the business world is making use of this potentially profitable tool.

RESEARCH METHODOLOGY

The paper searches the various dimensions attached to the concept of digital marketing. It looks into some of initiatives taken in India, and the opportunities ahead. This paper is a descriptive study, where examples are cited based on the references from some secondary material available and some from the personal experiences of the authors. The study suggests why and how companies can improve their marketing strategies to increase customer satisfaction by being digital.

RESEARCH OBJECTIVES

The primary objective of taking up this study is to analyze various aspects of digital marketing in India, and to reveal the necessity of using digital marketing as a marketing strategy by the companies for the marketing of their product and services.

WHAT DOES MEAN BEING DIGITAL?

Being digital means using digital channels leveraging digital platforms such as e-chats, forums, FAQs, personal accounts, virtual assistants, & social media instead of traditional channels such as phone, vendor, mail/fax, and click to call.

A company focusing on Digitalization, might aim to realize more effective outcomes from those processes by improving the customer engagement.

Customers are finally getting the importance they deserve. Customers buy a zinger from KFC and the bill he got advertises a 15% discount for feedback on their website, similarly many Airways sends their customers a mail after customers flight asking how they experienced. Even the new government has announced that it will use social media as a tool for participative governance. The digital tsunami is changing customer expectations, and the Prime Minister of India Sri Narendra Modi has aimed to make India a Digital India.

Being digital doesn't only mean to set up a company Facebook or Twitter account so that customers can post their complaints to you. Being digital is a complex and ongoing process, which integrates the delivery of customer service and support via the web and the social networks into the very fabric of your organization. Hence, in simplistic terms, digital marketing is the promotion of products or brands via one or more forms of electronic media.

WHY BEING DIGITAL?

The time is right for Indian companies to pursue digitalization—whereby digitized resources, such as cloudbasedsoftware and machines equipped with digital sensors, are transformed into new sources of profitable revenue.

McKinsey in mid-2012 conducted a survey on 2000 respondents of French customers of the main telecom operators in that country and found that a purely digital journey drives higher customer satisfaction.

A new year means new possibilities, and as the digital marketplace continues to grow each and every year, the physical customer experience of brick-and-mortar stores is changing to accommodate more digital tools, as well.

In a recent BCG study it was found that 9% of urban Indian consumers use the internet during the purchase process. This number will grow to 29% in the current year 2016 with their main activities being searching for information and social networking. A bulk customer is concentrated in pre-purchase activities.

An un-favourable review is enough for a potential customer to turn their back on you. For most products and services, word of mouth is a key influencer, many times more important than traditional media.
While a lot of this is offline, online recommendations and feedbacks are public, permanent and uncontrollable.Not listening can create long term damage the companies.
For example, A leading American airline had refused to pay $3500 for a broken checked in guitar, and the Airlinelose $180million in market cap over four days when a YouTube video of song posted by an unhappy customer got half a million views.

The solution is of course listening to customers. But it's not simple for a variety of reasons.
Today consumers use multiple devices as part of their buying decision process such as Discovery, research, comparing, asking peers for recommendations or reading reviews. Then consumers bought something and have a different journey with the company purchased from. Consumers might have questions, Consumers might need support, and Consumers might have problems. Consumers might want to upgrade or buy more of something. Consumers might want to recommend to someone else. Many of those things all Consumers do as part of the customer path to purchase are across multiple

channels. These are the few reasons why it is being necessary to be digital in current era.

DIGITAL TOOLS FOR BEING DIGITAL

Some of the key forms of digital tools for being digital are listed below:

- Content Marketing (Websites, Blog, & White papers)
- SEO (Meta Data, Keywords & Display ads)
- Online video content
- Pay-per-click (PPC) advertising
- Email marketing (Distribution, content strategy)
- Social media marketing (Facebook, Twitter, LinkedIn, Pinterest etc.)
- Mobile marketing (SMS, MMS, etc.)

THE BENEFITS TO ORGANIZATION & CUSTOMERS

McKinsey sees benefits to a business in increasing customer engagement and satisfaction, together with the potential to cut operational costs by implementing a digital strategy. Obviously the complexity of the implementation, and the potential cost saving will depend on the size of the business, but it's a safe bet that if you're thinking about this you're ahead of the pack. And bottom line, no matter what the size of your business, it's a safe bet that developing and implementing a digital customer service strategy will result in happier, more satisfied customers, repeat business, referrals, and, of course, growth and profitability. In fact, one of the tenets of McKinsey's piece was that the more digital the journey, the higher the satisfaction.

If considered, planned and managed well, business process digitization programs can have a number of benefits for an organization. For example, organisations can:

- improve business process efficiency, quality and consistency
- integrate records with digital systems
- improve accessibility and facilitate better knowledge sharing
- improve response time and client service
- reduce costs
- promote greater staff flexibility.

- ➢ better plan for business continuity.
- ➢ And last but not the least is customer satisfaction

CONCLUSION

A new kind of consumer means new ways of doing business.

Today, most companies are either thinking about or pressing ahead with digital transformation initiatives. Every company has a website, and few marketing strategies are signed off without incorporating social media. Certainly, social media is a critical component of any digital strategy, but a holistic response to the digital shift must go much further.

The digitization of everything is a step change even greater than the invention and adoption of the internet, primarily because of its scale and pace of change. What we describe today as 'digital' in a few years, time will have no need for the descriptive word.

A 'digital camera' is already a mere 'camera' to those who know no different. In the same way, a 'digital' strategy will become business as usual strategy. This is why it is so important to get a head start and learn while there is still time.

Digital is changing the world, and progress is not linear. In a world where a smartphone is no longer just a smartphone, but a potential revolution8, we invite organisations to explore what digital advances mean for them and their stakeholders.

We support the opinion of executives who view digital much more as an opportunity to be tapped than as a risk to guard against. Not every digital initiative will work for every organization, and it is important to assess capability and capacity for change before deploying a digital strategy. It is believed that those who act holistically, and act now, stand to gain the greatest competitive advantage.

REFERENCES
JOURNALS
[1] Singh S. N., Dubey A. K., & Kumar Pavan (2015). "Digital Marketing: Necessity and Key Strategies to succeed in current era." Paper presented and published in International conference, "Gyanodya 2015, 247-252.
[2] Cova, B., Pace, S. (2006). Brand Community of Convenience Products: New forms of customer empowerment – the case ―"My Nutella The Community". European Journal of Marketing. 40, 1087-1105.

[3] Kwak, H., Lee, C., Park, H., and Moon, S. 2010. What is Twitter, a social network or a news media? In Proceedings of the 19th international conference on World wide web (WWW '10). ACM, New York, NY, USA, 591-600.

WEBSITES

https://www.accenture.com/inen/insightindiapathdigitalization.aspx

https://www.capgemini.com/digitalcustomerexperience

http://articles.economictimes.indiatimes.com/20140709/news/51248002_1_feedbackunhappycustomeremployees

http://culturedigitally.org/2014/09/digitalizationanddigitization/

http://www.mckinsey.com/insights/marketing_sales/digitizing_the_consumer_decision_journey

http://www.v3b.com/2014/08/digitalcustomerservicewhyitsthelifebloodofyourbusiness/

Digitalization Of India Empowering Online Infrastructure

Kumar Saurabh

Assistant Professor Department Of Education Bims, Lucknow.-226201

INTRODUCTION

The digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities. It is the process of moving to a digital business. Digitalization is moving from an innovative trend to a core competence for every enterprise and Digital is different for every enterprise and presents unique challenges for each in term of talent structure etc.

The digital (online) roots of digitalization go for back as much as 1970, when the government of India set up the Department of Electronics. At that time computing was largely confined to cumbersome main frames and was something only the engineers of the geeks could handle. It was in 1976, that the National Informatics Center(NIC) came into being. The sole purpose of NIC was to interconnect the various ministries, Central and state governments and bring them on a single platform. In pursuance of that goal, a national satellite based computer network called NICNET was created. To promote the uptake by the government departments, especially the states, they were offered software and hardware free. Over the years, many states took a lead in these digitization.

Thus in a manner of speaking, Digital India is a broader version of the e-governance programs that were running till now. A portal (mygov.nic.in) has been launched and approximately 6 lakh kms of fiber has been laid to create the digital highway. The ball has started rolling on Digital India, and the canvas for development is huge. With Internet penetration hovering at around 20%.

With a whole host of services and innovation that can ride the digital platform, citizens can draw immense benefits from healthcare to education, citizen services to transport and the like.

WHAT COMES UNDER THE DIGITALIZATION OF INDIA:

"Technology transforms people's lives. It empowers and connects from mitigating poverty to

simplifying process, ending corruption to providing better services, vitality of technology is everywhere. It is an instrument of human progress" Narendra Modi.

Launching the Digital India programme formally at Indira Gandhi National Stadium on 1 July 2015, PM Modi said that it is time for India to move to mobile governance, to deliver services and facilities through mobile phones and the Internet.

Nine pillars of Digital India

    1-   Broadband Highways

    2-   Universal Access to Mobile Connectivity

    3-   Public Internet Access Programme

    4-   E-Governance : Reforming Government through Technology

    5-   E-Kranti : Electronic Delivery Services

    6-   Information for All

    7-   Electronics Manufacturing

    8-   IT for jobs and

    9-   Early Harvest Programme.

Recent Developments

India has teamed up with Google to have 500 free WiFi at 500 railway stations.

The government also seek to link 600,000 villages by optical fibre network.

BSNL partners with Facebook to set up 100 hotspots in rural India.

More programme are launched

- Digilocker

- E Basta

- Start-up India, Stand-up India

- Atal Pension Yojana

- Mudra Bank Yojana

- Sukanya Samriddhi Account

- Pradhan Mantri Jeevan Jyoti Bima Yojana

- Pradhan Mantri Surksha Bima Yojana

- Pradhan Mantri Krishi Sinchai Yojana

- Government to set up 300 rural clusters by 2020

- Pahal Scheme

- Jan Dhan Yojana

- Skill India

- Swachh Bharat Abahiyan: Making India Clean and Man

The government of India is taking a big step forward to transform the country into Digitally empowered knowledge economy. Includes various schemes worth over Rs 1 lakh crore. BharatNet and Next Generation Network (NGN) are also a heart of Digital India Campaign. The ministry of communication is the nodal agency to implement the programme.

BENEFITS OF ONLINE INFRASTRUCTURE:

The programme includes projects that aim to ensure that government services are available to citizens electronically and people get benefit of the latest information and communication Technology. Creation of IT jobs. Digital Locker facility will help citizens to digitally store their important documents like PAN Card, Marksheets and Degree Certificates. Digital Locker will provide secure access to Government issued documents. It is aimed at eliminating the use of physical documents and enables sharing of verified electronic documents across government agencies. Digital Locker provides a dedicated personal storage space in the cloud Of citizens, linked to citizens Aadhaar number Digital Locker will reduce the administration overhead of government departments and agencies created due to paperwork. It will also make it easy for the residents to receive services by saving time and effort then documents will now be available anytime and can be shared electronically.

NOFN (National optical fiber Net work) will connect 250 Gram Panchayats in 3years public WiFi spots will be provided around the clusters after that all villages will be provided with internet connectivity. "India would become a very powerful digitally connected world. India is sitting at cups of a big digital revolution". **Ravi Shanker Prasad** Communication and IT Minister

BharatNet: This is the backbone of the Digital India programme. It will provide internet and telecommunication services to every part of the country, including connecting the villages spread all over India through broadband. This is the world's largest rural broadband connectivity project.
BSNL Next Generation Network (voice, data and multi-media on one landline): BSNL has prepared a massive plan to use the advanced technology of Next Generation Network (NGN) to provide Telecommunication services using various modes such as voice, data networks (internet), wireless network and multimedia video conferencing and fixed mobile convergence (FMC). In the first phase, BSNL aim is to cover four million customers.

BSNL Wi-Fi Services (Wi-Fi hotspots, affordable connectivity on the go): BSNL has also chalked out a plan to roll out Wi-Fi in 2500cities and towns, including major tourist places across India. The aim is to provide affordable seamless connectivity through 2G/3G mobile connectivity.

National scholarships portal (All Government scholarships under a single website): This is a one-stop solution for implementing the entire scholarship process. Here, in a single website, you can apply and register for different scholarships provided by different central and state ministries, governments and other agencies. You can receive application forms and process online. This helps in effective and faster processing of scholarships and delivery of funds to the beneficiaries' accounts.

e-Hospital/ORS: This system facilities in making an on-line appointment with doctors at specialized government hospitals. The aim is to relieve the common man from waiting for long hours or running around in hospitals searching for doctors. The patient can also check his reports on line. Presently, e-Hospital service is available in AIIMS, Ram Manohar Lohia Hospital, Sports Injury Centre, Delhi and National Institute of Mental Health and Neuro Sciences, Bengaluru. The plan is to extend service to different hospitals spread across the country.

e-Sign: This is another product introduced in Digital India. The e-sign or electronic signature facilitates an Aadhar card holder to digitally sign a document, which can be integrated with service delivery applications.

Digital India Plant form (DIP): This is to digitize physical records and reduce piles of papers in record rooms and offices.

IMPACT:

Global investors like Sundar Pichai, Satya Nadella, Elon Musk have supported Digital India.

Microsoft CEO, Satya Nadella Intends to become India's partner in the Digital India Programme. He said that his company will set up low cost broadband technology sciences to 5 lack villages across country.

Sundar Pichai CEO Google said that India will play a big part in driving technology forwarding partner which will improve people's live in India

CHALLENGES:

First Digitalization through digital India will be crippled if domestic manufacturers do not source electronics locally.

Second The private sector may not be interested in public private partnership (PPP) projects in the villages may not be commercially viable.

There is another reason why private sector may not be interested in funding such projects because about Rs 5000 Crore In contract payments to technology companies are still stuck with government from previous projects.

Third Another issue is more structural The government may not form the institutional capacity to executive programme of such massive scale. To execute a vision of this scale one world require more professional programme management skills and a body that can coordinate across ministries and states. In conclusion we can point out that digitalization has helped transmit Services faster, more efficiently but challenges for the future are big and unpredicted. It will be interesting to see how we tackle these challenges.

BIBLIOGRAPHY

1.   *http://www.moneycontrol.com/digitizingindia/news/the-making-of-digital-india1399699.html*
2.   *http://www.mapsofindia.com/my-india/government/what-comes-under-the-digital-india-programme*
3.   *http://flowtv.org/2012/07/digitizing-india/*

Instructions for Authors

Essentials for Publishing in this Journal

1 Submitted articles should not have been previously published or be currently under consideration for publication elsewhere.

2 Conference papers may only be submitted if the paper has been completely re-written (taken to mean more than 50%) and the author has cleared any necessary permission with the copyright owner if it has been previously copyrighted.

3 All our articles are refereed through a double-blind process.

4 All authors must declare they have read and agreed to the content of the submitted article and must sign a declaration correspond to the originality of the article.

Submission Process

All articles for this journal must be submitted using our online submissions system. http://enrichedpub.com/ . Please use the Submit Your Article link in the Author Service area.

-

Manuscript Guidelines

The instructions to authors about the article preparation for publication in the Manuscripts are submitted online, through the e-Ur (Electronic editing) system, developed by **Enriched Publications Pvt. Ltd**. The article should contain the abstract with keywords, introduction, body, conclusion, references and the summary in English language (without heading and subheading enumeration). The article length should not exceed 16 pages of A4 paper format.

Title

The title should be informative. It is in both Journal's and author's best interest to use terms suitable. For indexing and word search. If there are no such terms in the title, the author is strongly advised to add a subtitle. The title should be given in English as well. The titles precede the abstract and the summary in an appropriate language.

Letterhead Title

The letterhead title is given at a top of each page for easier identification of article copies in an Electronic form in particular. It contains the author's surname and first name initial .article title, journal title and collation (year, volume, and issue, first and last page). The journal and article titles can be given in a shortened form.

Author's Name

Full name(s) of author(s) should be used. It is advisable to give the middle initial. Names are given in their original form.

Contact Details

The postal address or the e-mail address of the author (usually of the first one if there are more Authors) is given in the footnote at the bottom of the first page.

Type of Articles

Classification of articles is a duty of the editorial staff and is of special importance. Referees and the members of the editorial staff, or section editors, can propose a category, but the editor-in-chief has the sole responsibility for their classification. Journal articles are classified as follows:

Scientific articles:

1. Original scientific paper (giving the previously unpublished results of the author's own research based on management methods).

2. Survey paper (giving an original, detailed and critical view of a research problem or an area to which the author has made a contribution visible through his self-citation);

3. Short or preliminary communication (original management paper of full format but of a smaller extent or of a preliminary character);

4. Scientific critique or forum (discussion on a particular scientific topic, based exclusively on management argumentation) and commentaries. Exceptionally, in particular areas, a scientific paper in the Journal can be in a form of a monograph or a critical edition of scientific data (historical, archival, lexicographic, bibliographic, data survey, etc.) which were unknown or hardly accessible for scientific research.

Professional articles:

1. Professional paper (contribution offering experience useful for improvement of professional practice but not necessarily based on scientific methods);

2. Informative contribution (editorial, commentary, etc.);

3. Review (of a book, software, case study, scientific event, etc.)

Language

The article should be in English. The grammar and style of the article should be of good quality. The systematized text should be without abbreviations (except standard ones). All measurements must be in SI units. The sequence of formulae is denoted in Arabic numerals in parentheses on the right-hand side.

Abstract and Summary

An abstract is a concise informative presentation of the article content for fast and accurate Evaluation of its relevance. It is both in the Editorial Office's and the author's best interest for an abstract to contain terms often used for indexing and article search. The abstract describes the purpose of the study and the methods, outlines the findings and state the conclusions. A 100- to 250-Word abstract should be placed between the title and the keywords with the body text to follow. Besides an abstract are advised to have a summary in English, at the end of the article, after the Reference list. The summary should be structured and long up to 1/10 of the article length (it is more extensive than the abstract).

Keywords

Keywords are terms or phrases showing adequately the article content for indexing and search purposes. They should be allocated heaving in mind widely accepted international sources (index, dictionary or thesaurus), such as the Web of Science keyword list for science in general. The higher their usage frequency is the better. Up to 10 keywords immediately follow the abstract and the summary, in respective languages.

Acknowledgements

The name and the number of the project or programmed within which the article was realized is given in a separate note at the bottom of the first page together with the name of the institution which financially supported the project or programmed.

Tables and Illustrations

All the captions should be in the original language as well as in English, together with the texts in illustrations if possible. Tables are typed in the same style as the text and are denoted by numerals at the top. Photographs and drawings, placed appropriately in the text, should be clear, precise and suitable for reproduction. Drawings should be created in Word or Corel.

Citation in the Text

Citation in the text must be uniform. When citing references in the text, use the reference number set in square brackets from the Reference list at the end of the article.

Footnotes

Footnotes are given at the bottom of the page with the text they refer to. They can contain less relevant details, additional explanations or used sources (e.g. scientific material, manuals). They cannot replace the cited literature.

The article should be accompanied with a cover letter with the information about the author(s): surname, middle initial, first name, and citizen personal number, rank, title, e-mail address, and affiliation address, home address including municipality, phone number in the office and at home (or a mobile phone number). The cover letter should state the type of the article and tell which illustrations are original and which are not.

<u>**Address of the Editorial Office:**</u>

Enriched Publications Pvt. Ltd.
S-9,IInd FLOOR, MLU POCKET,
MANISH ABHINAV PLAZA-II, ABOVE FEDERAL BANK,
PLOT NO-5, SECTOR -5, DWARKA, NEW DELHI, INDIA-110075,
PHONE: - + (91)-(11)-45525005

Notes: