

SCHOOL OF SCIENCE AND HUMANTIES

DEPARTMENT OF VISUAL COMMUNICATION

UNIT – I – Introduction to Social Media – SVCA1303

INTERNET

The Internet is generally defined as a global network connecting millions of computers. More than 190 countries are linked into exchanges of data, news and opinions.

SOCIAL MEDIA

Social Media is a possibility of on-demand access to content anytime, anywhere, on any digital device, as well as interactive user feedback, creative participation and community formation around the media content. Another important promise of social media is the "democratization" of the creation, publishing, distribution and consumption of media content.

Social Media can be characterized by the variegated use of images, words, and sounds. These networks of images, sounds, and text data are different from old media formats such as hardcopy newspapers.

For example:

- Online video and audio streaming
- 3 D and virtual reality
- CD and DVD media
- Digital Data
- Online communities and live internet broadcasting

NETWORKING

Networking is an art to interact with others to exchange information and develop professional or social contacts. A network is a series of points or nodes interconnected by communication paths. Networks can interconnect with other networks and contain sub networks.

For Example:

- Local area networks (LANs)
- Metropolitan area networks (MANs)
- Wide area networks (WANs)

LOCAL AREA NETWORK



A **local area network (LAN)** supplies networking capability to a group of computers in close proximity to each other such as in an office building, a school, or a home. LANs are built to enable sharing of resources like files, printers, games or other services like email or Internet access.

For Example

- WIFI
- Ethernet

METROPOLITAN AREA NETWORK



A metropolitan area network (MAN) is similar to a local area network (LAN) but spans an entire city or campus. MANs are formed by connecting multiple LANs. Thus, MANs are larger than LANs but smaller than wide area networks (WAN).

WIDE AREA NETWORK

A wide area network (WAN) is a geographically distributed private telecommunications network that interconnects multiple local area networks (LANs). In an enterprise, a WAN may consist of connections to a company's headquarters, branch offices, colocation facilities, cloud services and other facilities.



For Example

- Multiprotocol label switching
- Carrier Ethernet

<u>ISP</u>

Internet service provider is a business or organization that offers user access to the Internet and related services. It provides access with Internet, usually for a fee. The most common ways to connect to an ISP are by using a phone line (dial-up) or broadband connection (cable or DSL). ISPs

provide additional services such as e-mail accounts, web browsers, and space for you to create a website.

• In 1988 the U.S. Corporation for National Research Initiatives received approval to conduct an experiment linking a commercial e-mail service to the Internet.

• In 1993 the University of Illinois made widely available Mosaic, a new type of computer program, known as a browser.

• In 1994 Netscape Communications Corpwas formed to further develop the Mosaic browser and server software for commercial use.

BROWSER

A browser is an application program that provides a way to look and interact with all the information on the World Wide Web. Technically, a Web browser is a client program that uses HTTP (Hypertext Transfer Protocol) to make requests of Web servers throughout the Internet on behalf of the browser user. World Wide Web was created in 1990. Microsoft followed with its Internet Explorer (IE).

As of September 2006, Internet Explorer is the most commonly used browser.

- Firefox, which was developed from Mozilla (the open source version of Netscape).
- Safari, a browser for Apple computers (at this writing, the third most popular browser).
- Opera, a fast and stable browser that's compatible with most relatively operating systems.

ONLINE COMMUNICATION

Online communication refers to reading, writing, and communication via networked computers. Computer-mediated communication, people communicate in real time via chat orsoftware discussion, with all participants at their computers at the same time. Online communication first became in educational realms in the 1980s, following the development and spread of personal computers.

ADVANTAGES AND DISADVANTAGES OF ONLINE COMMUNICATION

• The development of internet has provided an easy and faster way for people to communicate each other.

• Digital communication allows people to share and communicate with people from different areas, without boundary, there is no geographic limitation.

Online audio and video streaming

Online audio and video streaming technology is often employed to relay live events such as sports, concerts and more generally TV and Radio programmes. Online streaming is the process of transmitting media 'live' to computers and other electronic devices.

For Ex:

- Helix Universal Server Delivers MPEG and Live Streaming
- HelixCommunity Open Source for community broadcast
- Icecast Streaming media server

• IIS Media Services - Web server that deliver intelligent progressive downloads, Smooth Streaming, and HTTP Live Streaming

3D VIRTUAL REALITY

Virtual reality (VR) means experiencing things through computers. Computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment.

CD and DVD Media

CD-Recordable and CD-Re-Writable media are ideal for backing-up digital audio files, images and other data.

DVD – Digital Versatile Disk is a digital optical disc storage format. A DVD can be written once and read arbitrarily many times.

Digital Data

Digital data is stored content as ones and zeros, which may be represented in a number of ways.

Online Communities and live Internet broadcasting

An online community is a group of people with common interests who use the Internet (Facebook, watsapp, etc.) to communicate, work together and pursue their interests over time.

Live internet broadcasting is a media presentation distributed over the Internet using streaming media technology to distribute a single content source to many simultaneous listeners/viewers.

• Search engine such as Google provides an easy way to user to find the information.

• The online security is one of the biggest threats of digital communication, thousands of spy software, hacker are trying to enter user's computer to get their privacy

• Online communication may reduce the relationship between people.

• People may rely too much as digital communication and ignore the traditional communication, because with the decreased chance of communicate face by face; the relationship between people may be affected.

• Online communication requires people at least has a computer that can access to internet, otherwise they cannot use online communication, therefore, it does not working on the areas where cannot access to internet.

DIGITAL MEDIA

Digital media is any media that is encoded in a machine-readable format. Digital media can be created, viewed, distributed, modified and preserved on digital electronics devices.

Components of Digital Media

(1) Any storage device that holds digital data.

For Ex: Magnetic disk, magnetic tape, optical disc and USB drive.

(2) Any type of information stored in the computer, including data, voice and video.

For Ex: multimedia, digital media hub and digital media server.

(3) The news from a TV network, newspaper or magazine that is presented on a Web site or blog.

<u>ICT</u>

ICT - information and communications technology refers to technologies that provide access to information through telecommunications. It is similar to Information Technology (IT) and focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication mediums.

And ICT is an umbrella term that includes any communication device or application like web radio, television, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. The term is somewhat more common outside of the United States.

According to the European Commission, the importance of ICTs lies less in the technology itself than in its ability to create greater access to information and communication in underserved populations. Many countries around the world have established organizations for the promotion of ICTs, because it is feared that unless less technologically advanced areas have a chance to catch up, the increasing technological advances in developed nations.

DIGITAL DIVIDE

Digital divide is a term that refers to the gap between demographics and regions that have access to modern information and communications technology, and those that don't or have restricted access. This technology can include the telephone, television, personal computers and the Internet.

MEDIA CONVERGENCE

Media Convergence involving the interconnection of information and communications technologies, computer networks, and media content. It brings together the "three C's" computing, communication, and content and is a direct consequence of the digitization of media content and the popularization of the Internet.

Media convergence transforms established industries, services, and work practices and enables entirely new forms of content to emerge. It is a long-established media industry and content. And increasingly uncouples content from particular devices, which turn presents major challenges for public policy and regulation. The five major elements of media convergence are the technological, the industrial, the social, the textual, and the political.

MEDIA CONVERGENCE POLICY

Media convergence has also thrown up new challenges for policy. For most of the 20th century, media content was delivered through particular platforms, such as books, newspapers, magazines, radio, television, cinema, and video games. These different media were subject to different levels of regulation based upon whether they were distributed in public or consumed in private, whether

children could access the content, whether a particular medium may have more impact on its audience, and so on.

In the 21st century the content and platforms have separated, with content now accessible in digital form across multiple devices. Moreover, as noted above, users themselves are not just the consumers of content but increasingly its producers and distributors. The environment in which media policy and regulation are undertaken has been radically shifting as users more easily control their own media environments and younger users (digital natives) are often most familiar with convergent media technologies.

The nature of media companies has also changed. For example, the computer company Apple, Inc., has become by far the world's largest distributor of music. The search-engine firm Google, Inc., plays a key role in making both news and TV content available to global audiences. How to achieve long-established principles of media policy, such as ensuring diversity of ownership and content, regulating access on the basis of community standards, and meeting local content requirements in an age of global media, is a major challenge for policy makers in the age of media convergence.

INFORMATION SOCIETY

An information society is a society where the creation, distribution, use, integration and manipulation of information is a significant economic, political, and cultural activity. Its main driver are digital information and communication technologies, which have resulted in an information explosion and are profoundly changing all aspects of social organization, including the economy, education, health, warfare, government and democracy. the People who have the means to partake in this form of society are sometimes called digital citizens. This is one of many dozen labels that have been identified to suggest that humans are entering a new phase of society.

The markers of this rapid change may be technological, economic, occupational, spatial, cultural, or some combination of all of these. Information society is seen as the successor to industrial society. Closely related concepts are the post-industrial society (Daniel Bell), post-fordism, post-modern society, knowledge society, telematic society, Information Revolution, liquid modernity, and network society (Manuel Castells).

A knowledge society generates, processes, shares and makes available to all members of the society knowledge that may be used to improve the human condition. A knowledge society differs from an information society in that the former serves to transform information into resources that allow society to take effective action while the latter only creates and disseminates the raw data. The

capacity to gather and analyze information has existed throughout human history. However, the idea of the present-day knowledge society is based on the vast increase in data creation and information dissemination that results from the innovation of information technologies. The UNESCO World Report addresses the definition, content and future of knowledge societies.

DIGITAL SECURITY

Digital security is the protection of this online identity. Criminals are finding new ways to operate and steal information from digital users for their own personal gain. Digital security is an allencompassing term which includes the tools you can use to secure your identity, assets and technology in the online and mobile world.

These tools you can use to protect your identity include anti-virus software, web services, biometrics and secure personal devices you carry with you everyday. Devices such as a smart card-based USB token, the SIM card in your cell phone, the secure chip in your contactless payment card or an ePassport are digital security devices because they give you the freedom to communicate, travel, shop and work using your digital identity in a way that is convenient, enjoyable and secure.

SMART CARD

A smart card is a physical card that has an embedded integrated chip that acts as a security token. Smart cards are typically the same size as a driver's license or credit card and can be made out of metal or plastic. They connect to a reader either by direct physical contact (also known as chip and dip) or through a short-range wireless connectivity standard such as radio-frequency identification (RFID) or near-field communication (NFC).

The chip on a smart card can be either a microcontroller or an embedded memory chip. Smart cards are designed to be tamper-resistant and use encryption to provide protection for in-memory information. Those cards with microcontroller chips can perform on-card processing functions and can manipulate information in the chip's memory.

INFORMATION PRIVACY

Information privacy is the privacy of personal information and usually relates to personal data stored on computer systems.

The need to maintain information privacy is applicable to collected personal information, such as medical records, financial data, criminal records, political records, business related information or website data.



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NEW MEDIA CULTURES

"New Media Cultures" provides a comprehensive analysis of the value of cultural in the face of new media. And it focuses on the increased interactivity in contemporary culture and shows how this has become integrated into the production and consumption of cultural forms.

1. Web publishing

There are regularly updated Internet journals dealing with far more specific topics than it is possible within the old media and therefore with strong communitybuilding potential, run by private publishing houses, various NGOs, and individuals.

2. Archives, virtual libraries, galleries and "knowledge" databases

These archives, libraries, galleries and databases can basically store any type of information and are mostly equipped with a search engine, enabling the user to find relevant information.

3. Internet radio and TV stations

The phenomenon of "streaming media" with increasing bandwidth of datatransfer. The content is "streamed" from the server to the client machine and can contain audio, video or text. This brings new possibilities for the promotion of non-mass oriented and non-commercial culture together with new opportunities of user actions.

4. Net-specific artistic projects

The Internet brought new possibilities not only in the sphere of art presentation but also affected the very nature of artistic creation.

5. Open source software development movement

This provides necessary technical background for all independent activities and its main goal is to promote free software access and voluntary involvement in the development process. The community includes programmers from all over the world.

NEW MEDIA AND POLITICAL ACTIVISM

New Media and Political activism refer to directly interactive with individuals and groups seek to exert both voice and influence on issues of public concern.

For Example

Mr. Modi uses social media for his political campaign

Role of political activism in new media

1. Participatory politics allow individuals to operate with greater independence in the political realm, circumventing traditional gatekeepers of information and influence, such as newspaper editors, political parties, and interest groups.

2. Participatory politics often facilitate a renegotiation of political power and control with the traditional political entities that are now searching for ways to engage participants. Witness how newspapers and cable television stations now try to facilitate a controlled engagement with their audience through the use of social media.

3. Participatory politics as practiced online provide for greater creativity and voice, as participants produce original content using video, images, and text.

4. Participatory politics afford individuals the capability to reach a sizable audience and mobilize others through their social networks in an easy and inexpensive manner.

GENDER IDENTITY

Fluidity of identities and the decline of tradition

The traditional view of a woman as a housewife or low-status worker has been kick-boxed out of the picture by the feisty, successful 'girl power' icons. Meanwhile the masculine ideals of absolute toughness, stubborn self-reliance and emotional silence have been shaken by a new emphasis on men's emotions, need for advice, and the problems of masculinity. Although gender categories have not been shattered, these alternative ideas and images have at least created space for a greater diversity of identities. Modern media has little time or respect for tradition. The whole idea of traditions comes to seem quite strange. Modern media is encouraging the overthrow of traditions.

Generational differences

There are some generational differences which tend to cut across these discussions. Surveys have found that people born in the first half of the twentieth century are less tolerant of homosexuality, and less sympathetic to unmarried couples living together, than their younger counterparts.

The mass media has become more liberal, and considerably more challenging to traditional standards, since then, and this has been reflection of changing attitudes, but also involves the media actively disseminating modern values.

Representations of genders

Media spread the idea of a modern woman, happy and willing to get the right to build her own life. In those stories, heroines are women with a professional life, who are determined and independent. After the Second World War, media broadcast a new propaganda that a housewife's lifestyle is the only proper way for women to reach happiness.

Representations: Gender identity built through media

Our identities are built in relation to cultural processes, including the production and reception of media content. The media will impact, for example, on dominant ideals, expectations about beauty, age, gender, and what is considered normal in a society.

VIDEOCONFERENCING

A video conference is a live, visual connection between two or more people residing in separate locations for the purpose of communication. At its simplest, video conferencing provides transmission of static images and text between two locations.

Role of Video Conferencing

Increases Productivity

Web sites and the Internet are quickening the speed of communication. The use of videoconferencing is the next driver for productivity because its closer contact with customers. This closeness will lead to new ideas and speed up the development of new products and services.

Improves Communication & Reinforce Relationships

Videoconferencing allows the opportunity for more interactions and to have contact with customers. It improves business relationship with best customers and to meet more of internal employees.

Reduces Travel Expenses

In today's economy, cutting down on company travel expenses is usually a real attention grabber. It can save a lot of money on airfare and hotel costs, saving the loss in productivity from being out of the office.

Time Zones & International Boundaries

Videoconferencing lets put together a meeting of various people, from different locations, for a common discussion. Participants can be across the country or on the other side of the globe. Participate in the same videoconference.

Improves Effectiveness

A live video is much more effective than a phone call in many situations. Visually seeing the part during a videoconference is far more effective and meaningful than trying to describe it over the phone.

ONLINE LEARNING

Online learning is a method of delivering educational information via the internet instead of in a physical classroom.

Advantages of Online Learning

Online schooling is a popular alternative to attending a brick-and-mortar college or university. Students can learn through online lectures, projects and discussions. Online degree programs are available at every level, from certificates to doctorates.

Convenient Schedule

Online education allows for the attendance of class wherever the student has access to the Internet. Online learning is, in many cases, available 24 hours a day and seven days a week, so the student can participate in class whenever it's most convenient.

Financial Savings

Students also save money, some online programs cost less per credit hour, and students have no transportation expenses. Students may also be able to reduce the total course time if they can devote more time in single sittings.

Applicable Skills

Students gain more knowledge of the functions of the Internet, typing and software programs are necessary to be considered digitally literate, and online learning helps strengthen these skills.

WEB CONFERENCING

Web conferencing enables the real-time sharing of computer screens, individual applications or web-based content among two or more computers or mobile devices.

This technology to use, on open publishing sites such as Indymedia and on countless weblogs, adding a grassroots dimension to the media landscape. Bloggers and other amateur journalists are scooping mainstream news outlets as well as pointing out errors in mainstream articles, while people who've been made subjects of news articles are responding online, posting supplementary information to provide context and counterpoints. Increasingly, the public is turning to online sources for news, reflecting growing trust in alternative media.

OTT



An over-the-top (OTT) media service is a streaming media service offered directly to viewers via the Internet. OTT bypasses cable, broadcast, and satellite television platforms, the companies that traditionally act as a controller or distributor of such content. It has also been used to describe nocarrier cellphones, where all communications are charged as data, avoiding monopolistic competition, or apps for phones that transmit data in this manner, including both those that replace other call methods and those that update software.

INTERNET CONNECTIVITY

The term "Internet connectivity" refers to the way people are hooked up to the Internet, and may include dial-up telephone lines, always-on broadband connections, and wireless devices. Among these, wireless access to the Internet is the newest and, as of the early 2000s, had only reached a small group of users.

INTERNET OF THINGS

The Internet of things (IoT) describes the network of physical objects—"things"—that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet.

The definition of the Internet of things has evolved due to the convergence of multiple technologies, real-time analytics, machine learning, commodity sensors, and embedded systems. Traditional fields of embedded systems, wireless sensor networks, control systems, automation (including home and building automation), and others all contribute to enabling the Internet of things.



The applications of IoT in media and advertising involve a customized experience in which the system analyzes and responds to the needs and interests of each customer. This includes their general behavior patterns, buying habits, preferences, culture, and other characteristics.



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SOCIALITITY

Sociality is the degree in which individuals tend to associate in social groups and form cooperative societies.

Sociality and Social media

Social media has had a tremendous impact on our culture, in business, on the world-at-large. Social media websites are some of the most popular haunts on the Internet. They have revolutionized the way people communicate and socialize on the Web.

Impact on Politics

Social websites have played an important role in many elections around the world, including in the U.S., Iran, and India. They have also served to rally people for a cause, and have inspired mass movements and political unrests in many countries.

Impact on Business

The companies are using social media to advertise their products, build customer loyalty and many other functions. Interactions and feedback from customers help businesses to understand the market, and fine-tune their products and strategies. Social media presence is a cheap and effective means to enhance brand image and popularity.

Effect on Socialization

Social networks offer the opportunity for people to re-connect with their old friends and acquaintances, make new friends, trade ideas, share content and pictures, and many other activities.

SOCIETY AND COMMUNITY IN THE AGE OF SOCIAL MEDIA

Society and community in the age of new media is the culture that has emerged, or is emerging, from the use of computer networks for communication, entertainment, and business. It is also the study of various social phenomena associated with the Internet and other new forms of the network communication, such as online communities, online multi-player gaming, wearable computing, social gaming, social media, mobile apps, augmented reality, and texting, and includes issues related to identity, privacy, and network formation.

This culture includes various human interactions mediated by computer networks. They can be activities, pursuits, games, places and metaphors, and include a diverse base of applications. Some are supported by specialized software and others work on commonly accepted web protocols.

NETWORKS AND SOCIALITY

Social networking sites are now available to cater to one's immediate social needs. These networking sites have made it possible for us to chat with friends who live in distant places as well as share with them pictures and videos of whatever we are up to instantly.

- The first social networking site was called BBS (Bulletin Board System) and it was one of the first ways that people used the internet to send messages and upload information. It was set up in the 1970s.
- Facemash was founded in 2003 by an American student called Mark Zuckerberg so that he could keep in touch with other students. In 2004 the site was renamed Facebook and it is now the biggest social networking site in the world.
- Twitter was established in 2005
- Today use social networking sites in order to pour out all their ideas and emotions. They would post or tweet anything that they have in mind as well as "like" or "share" posts, pictures or links which they think are interesting.
- It is also one way for sharing with others different knowledge which are not taught in school by sharing links, pictures or videos about details of a place, a thing, or a topic which has been overlooked during a discussion in class.
- Also, letting what's in their mind in a public area can serve as a remedy for timidity because it helps them get used to telling people what they think on a certain topic.
- The youth use these sites in order to communicate with other people. They are able to keep in touch with their friends without having to exert money and effort in meeting up with them at some place.

Benefits

• Social networking sites like Skype and Facebook are used to keep in touch with relatives or friends that live far away. The reason that these two sites are used the most is because on

Skype you can video chat and on Facebook you can post pictures and send quite long messages.

• Social networking sites are sometimes used to share work information or homework ideas. The most popular site for sharing work information is Drop box. Face book is probably the main site for sharing homework ideas because it appeals to teenagers and older children.

SOCIAL MEDIA ADVERTISING

Social network advertising is a group of terms that are used to describe forms of Online advertising that focus on social networking sites. One of the major benefits of advertising on a social networking site (e.g. Facebook, Myspace, Friendster, Bebo, Orkut, etc.) is that advertisers can take advantage of the users demographic information and target their ads appropriately.

Social media targeting combines current targeting options (like geotargeting, behavioral targeting, socio-psychographic targeting, etc.), to make detailed target group identification possible. With social media targeting, advertisements are distributed to users based on information gathered from target group profiles.

Social network advertising is not necessarily the same as social media advertising. Social media targeting is a method of optimizing social media advertising by using profile data to deliver advertisements directly to individual users. Social media targeting refers to the process of matching social network users to target groups that have been specified by the advertiser.

Social community users provide demographic information, interests, and images. This information is accessed by social media targeting software and enables advertisers to create display ads with characteristics that match those of social network users. The important component of social media targeting is the provision of the users' socio-demographic and interest information. By using this information, social media targeting makes it possible for users to see advertisements that might actually interest them. The availability of user data allows for detailed analysis and reporting, which is a big part of social media targeting and what makes it more effective than statistical projections alone.

Advantages

- Advertisers can reach users who are interested in their products
- Allows for detailed analysis and reporting (including Business Intelligence)
- The information gathered is real, not from statistical projections

- **Interest targeting:** Reach specific audiences by looking at their self-reported interests, activities, skills, pages/users they have engaged with, etc. Interest targeting is often related to keyword targeting, so some platforms will allow you to enter both.
- **Behavioral targeting:** With behavioral targeting, we can reach people based on purchase behaviors or intents and/or device usage.
- **Custom targeting:** Reach audiences by uploading a list of email addresses, phone numbers, users IDs, or usernames. Facebook calls its custom targeting Custom Audiences, while Twitter calls its own Tailored Audiences.
- Lookalike targeting: Lookalike targeting helps businesses extend their custom audiences to reach new, similar users.

INTEGRATED MARKETING STRATEGY

Integrated marketing strategies take advantage of a combination of communication tools and media to spread a message. By combining various tools, marketers are able to ensure that their audience is reached and can leverage the various tools in ways that are most effective. Integrated marketing draws upon the power of traditional advertising and public relations efforts, as well as the use of new, online communication tools that include social media.

Role Integrated marketing strategy

- **Planning** Building a social media marketing plan is essential. Consider keyword research and brainstorm content ideas that will interest our target audience.
- Content is King content reigns king when it comes to social media marketing. Make sure we
 are offering valuable information that your ideal customers will find interesting. Create a
 variety of content by implementing social media images, videos, and info graphics in
 addition to classic text-based content.
- Consistent Brand Image Using social media for marketing enables our business to project the brand image across a variety of different social media platforms. While each platform has its own unique environment and voice, business' core identity should stay consistent.
- Blog Blogging is a great social media marketing tool that lets you share a wide array of information and content with readers. Company blog can also serve as our social media marketing blog, in which you blog about your recent social media efforts, contests, and events.

- Links While using social media for marketing relies primarily on your business sharing its own unique, original content to gain followers, fans, and devotees, it's also great to link to outside articles as well. If other sources provide great, valuable information you think your target audience will enjoy, don't be shy about linking to them. Linking to outside sources improves trust and reliability, and you may even get some links in return.
- **Track Competitors** It's always important to keep an eye on competitors, they can provide valuable data for keyword research, where to get industry-related links, and other social media marketing insight. If your competitors are using a certain social media marketing technique that seems to be working for them, do the same thing, but do it better!
- Measure Success with Analytics To determine the success of your social media marketing strategies without tracking data. Google Analytics can be used as a great social media marketing tool that will help you measure your triumphant social media marketing techniques, as well as determine which strategies are better off abandoned. Attach tracking tags to your social media marketing campaigns so that you can properly monitor them.

OTT PLATFORM FOR NEW CINEMA BUSINESS

The emergence of OTT has disrupted the entertainment sector. It has made movie-watching convenient, accessible and affordable across a wider segment of the users. Anybody with a mobile phone and internet connection can catch-up with a movie sitting anywhere in the world.

What do you do when you cannot step outside to meet friends? Work is limited to laptops and PCs inside your home, and shopping means buying from one of the many apps that are offering home delivery services. Well, you binge-watch TV shows and movies.

At least that's what the statistics from Indian OTT subscribers are saying right now. The average time spent by each Indian subscriber has gone up from around 20 to 50 minutes to at least one hour during recent times. With over 40 OTT platforms to choose from, the Indian consumers can watch their favourite TV show or catch the latest movie on their mobile phones as long as they have an internet connection.

OTT: The need of the hour and a silver lining

With the extended lockdowns and the current state of the economy, OTT seems to be the next normal for the world of entertainment. For weeks now, films have been bearing the brunt of cinema complex/hall closures. Coupled with the numerous ongoing and new projects on hold, the film industry might be looking at losses around INR 30 billion. As the lights are going out on live events, shoots and movie premiers, the only silver lining amidst all this is the rise of the popularity of OTT. The halting of productions may have dried up the content line, but streaming hasn't stopped via the OTT platforms across the country. At the same time, ad-spends have gone down significantly due to a knock-on effect of the recessionary impact on financial services, e-commerce and automotive industries.

Merger of OTT platforms & film industry

Initially, there might be discomfort among the big players of the film industry regarding the new normalcy, but research shows that, even in a post-COVID19 world, OTT services will continue to dominate. Therefore, the need of the hour is for the key investors to think about the integration of technologies.

OTT can help content reach millions of potential consumers at the fraction of the cost of a formal release and traditional ad promotions. The launch of a new movie on DTH and OTT simultaneously can garner over billions of viewers across the globe. The production house could potentially make millions within the first weekend of release by monetizing their online ads. While cinemas can still see multi-million dollar releases, they can minimize the monetary risk by taking out a minimum guarantee deal for covering their production cost.

Release via OTT channels can eliminate the threat of piracy production houses currently face in India. In fact, the mass availability of content can eliminate the necessity of piracy altogether.



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<u>E – CONTENT DEFINITION</u>

E-content define as Digital text and images designed for display on web pages. Digital content that can be transmitted over a computer network such as the Internet.

E – CONTENT DESIGNING AND STRUCTURES



E – Learning repository can be carried out directly by using the authoring tool, given that the user has permission to upload. The method of content management in the repository is carried out from beginning to end with support on the Dublin Core metadata system, which means that data can be directly inserted with the learning authoring tool. Once the learning content is made available on the repository, it can be accessed from anywhere through the repository portal or by using the single address system handle that allows the "content objects" to be accessed from any other internet based system. In this way, the system will provide the link between the repository and the e – learning platform (LMS – Learning Management System). Thus, the trainer does not need to transport / upload his / her content onto each e – learning platform, but rather indicate the address of the content (handle) on the platform and content will be automatically included.

The technology developed within this project was tested by different groups of teachers/trainers from various higher institutions, namely the University of Port, the Open University, the polytechnic institute of port and the University of minho. The course design of e - content for e - learning". the specialized course on e - content design was developed within this project and will allow, on the one hand, to profile the e - trainer/ e - author of content in both academia and professional training and, on the other hand, to foster the development of high quality learning and training material. The implementation of the course will be based on two components, one will be in class training and the other will be distance learning (online learning). The face – to – face environment will make use of the relevant technology involved in the preparation of content for e - learning (namely MOODLE, the e - learning Authoring tool and the open educational resources tool). In the distance learning part the students will use these tools autonomously and will use the experiment with different strategies supported by pedagogical choices inherent to specific e - learning stations.

The course is structured around the following modules:

- 1. Learning processes and context
- 2. Management of e content production (project)
- 3. Design e courses and e content
- 4. Learning objects
- 5. Content creation tools.
- 6. Online learning evaluation

A face - to - face session for the course opening is set to present the course methodology, its objectives, activity schedule and the e - learning platform. The learning desugn of the course follows a project based learning model, where the students must develop their own e - content project. The students will have an area on the e - learning platform where they will be able to upload their own project and carry out various learning activities, this will allow them to develop their own content throughout the course.

At the end of the course the students will present online the resulting projects. The learning methodologies to be adopted by this course are based on proven constructivist approaches with special emphasis on active pedagogical models. In particular, emphasis on the use of project based

learning techniques throughout the training project, allowing students to develop their own e-course project and respective learning content from the beginning, so that the results can be transferred immediately to the current professional context. Typically the learning context designer is a trainer/ teacher capable of creating and designing a training e – course and of deploying the respective learning content. At the end of the training program the students (trainer/teacher) will have valuable competencies, not only to design the course for a specific learning context, but also to produce the adequate learning content, using the tools supplied and following the international standards.

- Planning the learning content to be developed
- Producing learning content according to international standards
- Creating, integrating and exploring the learning content in the LMS
- Building/selecting instruments to evaluate the learning content produced.

E-CONTENT PLANNING AND PRODUCTION TECHNIQUES

A content workflow



1. Research

Writer gets briefed by the Senior Editor or Content Strategist on the page's communication goals. Then review existing content, third party sources and consults the subject experts to pull together the info, facts, quotes, and materials to write the page.

2. Write

The Writer now has what they need to produce the actual content. It takes time to develop the structure and apply the body copy, headings, descriptions, snippets, captions, call to action labels, and links. The content team may also need to produce images and other media at this stage.

3. Review

Subject Expert / Senior Editor

Content reviews are an important and often difficult stage in the process. Depending on the project you may want to break this stage up into multiple steps. Typically Subject experts will be asked to check the content is factually accurate, on message, and complete. The Senior Editor (role) then checks the content is well written, consistent with other content, and applies the style guide and house rules.

4. Revise

Writer

The Writer interprets the reviewer's feedback, updates the copy, and reissues a new version. The Writer may need to speak with the Reviewer for clarification to avoid the risk of the content getting stuck in a loop.

5. Approve

Subject Expert

The reissued content is reviewed for approval / sign-off. It's then ready to be uploaded to the CMS (content management system).

6. Upload to CMS

CMS Editor

Populate the CMS page with the approved content, adding links, images, files, feature content, and Meta data (taxonomy labels and descriptions). Only at this stage can you see how well the content works in its website template. A good Digital Producer or Site editor will adjust and format the content to work best.

7. Web page review / sign-off Subject Expert / Senior Editor

The Subject Expert or Project Owner who will want to be satisfied the content achieves its brief. The content is then ready to be published.

8. Publish CMS Editor

Web pages in a project are usually published when the entire site is deployed (launched). Publishing is just day one Ensure there is a plan for maintaining the site's content after the project finishes. In the hurry to publish content for a new site, this critical planning is often overlooked and the site soon deteriorates.

E-CONTENTLIFECYCLE

The **E-content lifecycle** is the multi-disciplinary and often complex process that web content undergoes as it is managed through various publishing stages.



<u>E – Content characteristics</u>

- Allows personal improvement, acquiring new abilities, developing practical skills, while ensuring an optimal transfer of knowledge.
- It is developed and customized taking into account the different types of trainees and specific learning objectives.
- It is customized for different learning styles visual and auditory.
- Transforms complex training themes into simple modules(learning objects) that can be reused, shared, modified and adapted.
- It is developed by using the latest and the most flexible technologies: Adobe Flash, CSS, XML, HTML, and JavaScript.

Effectiveness of E-Content

- Informative are generally used to present and explain concepts, ideas, practical and etc. They aim at achieving basic objectives concerning acquiring knowledge and understanding (according to Bloom's taxonomy). The intensity of the interactive moments is reduced and includes images, movies, 2D animations, etc.
- Interactive are very complex learning elements that put a focus on experiments, educational games and 3D objects and aim at achieving the superior objectives according to Bloom's taxonomy –applying, analyzing, evaluating and creating.
- Assessment used for evaluating the students and for analyzing if the planned learning objectives were met. The tests include various types of questions (single choice, multiple choice, fill in the blanks, matching, true/false items, etc.).

SCORM



SCORM is a set of technical standards for e-learning software products. SCORM tells programmers how to write their code so that it can "play well" with other e-learning software. It is the de fact

industry standard for e-learning interoperability. Specifically, SCORM governs how online learning content and Learning Management Systems (LMSs) communicate with each other. SCORM does not speak to instructional design or any other pedagogical concern; it is purely a technical standard.

EXAMPLE

Let's take DVDs for example. When you buy a new movie on DVD we don't need to check to see if it works with your brand of DVD player. A regular DVD will play on a Toshiba the same as it will on a Panasonic. That's because DVD movies are produced using a set of standards. Without these standards a studio releasing a new movie on DVD would have a big problem. They would need to make differently formatted DVDs for each brand of DVD player. This is how online learning used to be before SCORM was created.

The SCORM standard makes sure that all e-learning content and LMSs can work with each other, just like the DVD standard makes sure that all DVDs will play in all DVD players. If an LMS is SCORM conformant, it can play any content that is SCORM conformant, and any SCORM conformant content can play in any SCORM conformant LMS.

SCORM stands for "Sharable Content Object Reference Model":

"Sharable Content Object" indicates that SCORM is all about creating units of online training material that can be shared across systems. SCORM defines how to create "sharable content objects" or "SCOs" that can be reused in different systems and contexts.

"Reference Model" reflects the fact that SCORM isn't actually a standard. ADL didn't write SCORM from the ground up. Instead, they noticed that the industry already had many standards that solved part of the problem. SCORM simply references these existing standards and tells developers how to properly use them together.

SCORM is produced by ADL, a research group sponsored by the United States Department of Defense (DoD). Rustici Software is an independent company that specializes in helping other companies become SCORM conformant.

Future of SCORM:

The next generation of SCORM is happening right now. It's called the **Tin Can API**. We've been working closely with ADL, imparting our decade of SCORM knowledge to make sure that the Tin Can API is a huge leap forward for the e-learning community. And we know what's nice? All of products already include Tin Can API support whether our you want a hosted or installed Learning Record Store (LRS), or you just want to send Tin Can activity from your content to an LRS.

<u>E – PUBLISHING PROCESS</u>

Electronic publishing includes the digital publication of e-books, digital magazines, and thedevelopmentofdigitallibrariesandcatalogues.

Process:



Step 1) The first need to know what it is that you know a content about. Take a moment to think ofseveraltopicsthatyouknowwell.

Step 2) Now make a simply list of your topic and all the things that you know about that topic. The better your list, the more effective your writing process will be.

Step 3) Take a moment to organize your list into an outline based on categories. Step 4) we will now list everything we know about each sub-category we listed. Again, try to be as detailed as we can. we will be providing these details to our readers.

Step 5) Now we created a list of your main topic, several sub-topics, and hopefully some text aboutwhat you know about each topic. During this step you will simply expand on this by writing out afewparagraphsaboutyourtopicsandsub-topics.

Step 6) Proofreading. This is an essential part of our product. Make sure that you take the time toreadit,andre-readitforerrorsandcontext

Step 7) Now all you have left to do is to put it all together. And now have our product topics, some content, and it has been written and proofed. Now you need to get it published through a publisher, convert it to a PDF File, or record it as necessary.

Advantages of E-publishing:

- Greater willingness of publishers to accept new writers.
- Less risk trying non-traditional niches publishing areas.
- Faster publishing time for accepted manuscripts.
- Greater flexibility within the writer/publisher relationship.
- The ability for authors to Self-Publish.
- Writers can update text easily at virtually no cost.
- EPublishing offers greater longevity for works with slower sales.
- E-book writers normally retain all other rights to the work.

<u>E – CONTENT FOR INDUSTRIES</u>

1. Healthcare

Trying to meet the diverse needs of an aging population has created an even greater demand for nurses, physical therapists, doctors, and other healthcare specialists to be well-trained in emerging technology. An outlook by the Bureau of Labor Statistics reports that more than half of the occupations within the healthcare industry are projected to increase 38% by 2024. As one of the most dynamic sectors of the economy, the healthcare industry has continuously used eLearning to

train its professionals with relevant and effective materials and information. eLearning allows medical professionals to learn without disrupting their already demanding schedules. Information about diseases, treatment methods, using new medical technology, and administering helpful drugs is easily and quickly updated.

2. Computer and Information Technology

The Bureau of Labor Statistics reports that employment in the computer and information technology (IT) industry is expected to increase 13% within the next decade. This means that over 500,000 new positions including computer programmers, network administrators, and security analysts will need to be filled. The Computer and Information Technology industry contributes to the economic growth and advances in every industry. Therefore, the training and development of current and future professionals within this sector must be seamless to accomplish a number of financial, political, and social objectives. Computer and IT professionals use eLearning platforms to stay ahead of current technology and to create tomorrow's technology. eLearning not only increases their accessibility to new concepts and designs but also allows professionals within this industry to collaborate with other computer and IT professionals around the world.

3. Retail And eCommerce

The National Retail Federation (NRF) has reported that retail sales have averaged a 3.8% increase in 2017. Online retail sales for this year have grown even more at a rate of approximately 12%. Based on information released by the Census Bureau, thousands of online and in-store retail professionals are needed to fill management positions and inform customers about new products. The biggest challenge that retail businesses have used eLearning to solve is the skill development of employees. The retail industry is competitive, and retail professionals who are technologically savvy and well-informed about products help their businesses exceed their financial goals. eLearning has helped the retail industry effectively instruct employees how to use inventory management software, coach them about security compliance, and discreetly inform employees about product changes while they are engaged with customers.

4. Education

The education industry has changed dramatically since the introduction of technology in the classroom. Obtaining an education can be done in the comfort of one's home. Opportunities to learn through online academies, MOOCs, podcasts, and live streaming lectures have forever transformed the way students learn and instructors teach. Investing in educational learning platforms and

software technology has become the new norm. The education industry is expected to grow 7.2% in the next few years, and the introduction of eLearning has allowed this industry to become a commercial enterprise set to reach \$325 billion per year by 2025.

5. Construction

Construction is one of the fastest growing industries using eLearning due to the rising need for engineers and contractors to access information in external environments and remote locations. The complexity of the construction industry has increased due to architectural design changes, environmental considerations, government regulations, and national building codes. eLearning has allowed construction professionals to cost-effectively increase their knowledge base while exceeding the client's expectations.

CLOUD COMPUTING

Cloud computing is the delivery of computing services including servers, storage, databases, networking, software, analytics, and intelligence over the Internet ("the cloud") to offer faster innovation, flexible resources, and economies of scale. You typically pay only for cloud services you use, helping lower your operating costs, run your infrastructure more efficiently and scale as your business needs change.

Benefits of cloud computing

Cost

Cloud computing eliminates the capital expense of buying hardware and software and setting up and running on-site datacenters the racks of servers, the round-the-clock electricity for power and cooling, the IT experts for managing the infrastructure. It adds up fast.

Speed

Most cloud computing services are provided self service and on demand, so even vast amounts of computing resources can be provisioned in minutes, typically with just a few mouse clicks, giving businesses a lot of flexibility and taking the pressure off capacity planning.

Global scale

The benefits of cloud computing services include the ability to scale elastically. In cloud speak, that means delivering the right amount of IT resources—for example, more or less computing power, storage, bandwidth—right when it is needed and from the right geographic location.

Productivity

On-site datacenters typically require a lot of "racking and stacking"—hardware setup, software patching, and other time-consuming IT management chores. Cloud computing removes the need for many of these tasks, so IT teams can spend time on achieving more important business goals.

Performance

The biggest cloud computing services run on a worldwide network of secure datacenters, which are regularly upgraded to the latest generation of fast and efficient computing hardware. This offers several benefits over a single corporate datacenter, including reduced network latency for applications and greater economies of scale.

Reliability

Cloud computing makes data backup, disaster recovery and business continuity easier and less expensive because data can be mirrored at multiple redundant sites on the cloud provider's network.

Security

Many cloud providers offer a broad set of policies, technologies and controls that strengthen your security posture overall, helping protect your data, apps and infrastructure from potential threats.

DATA STORAGE

Data storage is the collective methods and technologies that capture and retain digital information on electromagnetic, optical or silicon-based storage media.

EDGE SERVER

Edge servers are powerful computers put at the "edge" of a given network where data computation needs to happen. They are physically close to the systems or applications that are creating the data being stored on, or used by, the server.

E-AUTHOR

Author-e is a Document Management System (DMS) with integrated collaborative authoring functionalities. To integrate document storage and authoring, we have created our own document format. These Author-e documents can be edited simultaneously by multiple authors within the system.

E- EDITING

E-Editing is the process of correction, condensation, organization, and many other modifications performed with an intention of producing a correct, consistent, accurate and complete work through electronic software.



SCHOOL OF SCIENCE AND HUMANTIES

DEPARTMENT OF VISUAL COMMUNICATION

UNIT – V – Introduction to Social Media – SVCA1303

MOBILE MEDIA

Old school cell phones can call and text. While this can get your message across, smartphones allow you multiple ways of communicating. Not only can they call, text and IM, they give you access to email, video calling and video conferencing. You can also remain connected through social networking sites like Twitter, Facebook and LinkedIn.The late twentieth-century saw an explosion of computer applications. The early twenty-first century brings hundreds of thousands of smartphone apps.The sensors built into the smartphone as well as its portability and programmability have made it a device with almost limitless applications. Beyond the tons of games and productivity apps available, health and fitness apps track the miles you've run, the calories you've consumed and even your current heart rate. Internet radio and podcasting apps put you in touch with whole new worlds of audio. Compass apps, leveling apps and flashlights provide handheld utilities. Apps that let you paint, modify photos or create music tap into your creativity.

In brief, the survey found that the top 5 activities for smartphones users are:

- 1. Accessing local information
- 2. Searching for information
- 3. Participating on social media/networking sites
- 4. Reading news and entertainment
- 5. Finding local services

With tablets in hand, people tend to do the same things in a slightly different order of preference:

- 1. Reading news and entertainment
- 2. Searching for information
- 3. Watching videos
- 4. Accessing local information
- 5. Participating on social media/networking sites

EVOLUTION OF MOBILE MEDIA

Intro

Smartphones can help you find local and destination information, allowing you to check the weather, track your location via GPS, find restaurants and events in your area, and even use services like Google Maps to get directions to where you're headed. You can also find apps to keep you up to date from your favorite news site, track your stocks and handle your banking.

- Manage your personal info including notes, calendar and to-do lists
- Communicate with laptop or desktop computers
- Sync data with applications like Microsoft Outlook and Apple's iCal calendar programs
- Host applications such as word processing programs or video games
- Scan a receipt
- Cash a check
- Replace your wallet. A smartphone can store credit card information and discount or membership card info
- Pay bills by downloading apps such as PayPal and CardStar
- Allow you to create a WiFi network that multiple devices can use simultaneously. That means you can access the Internet from your iPad or laptop without a router or another peripheral device.

1. Augmented Reality (AR)

The term 'augmented reality' or AR when used in the context of computer technology refers to what we perceive through our senses (usually sight) enhanced through the use of computergenerated sensory input such as sound, video, graphics and GPS data. Simply put, AR makes available more information for us users by combining computer data to what we see in real life. Using the camera on your phone, you can **point it somewhere 'live' to get an information overlay** of where you can find the nearest cafes or dining places.

2. Flexible Screens

It may soon be the case where smartphones are able provide a large screen to watch and play your favorite movies and games while maintaining a pocketable size. Screens can be folded and unfolded, all thanks to Organic Light-Emitting Diode (OLED) technology. This paper-thin screen can even project future-features-smart-phones/ from both sides of the screen, so you can show pictures or videos to your friend on one side while using the other as a control.

3. In-Built Projector

If flexible screens are not enough to compensate for the small screens on smartphones why not integrate a projector within? Samsung Galaxy Beam was released back in the second half of 2010. It features a built-in DLP (Digital Light Projection) WVGA projector that is able to project future-features-smart-phones/ at up to 50 inches in size at 15 lumens. What good will this do? Well, for

one thing, future smartphones can actually be turned into an interactive gaming consoles without a need for a TV screen; all you'll need is a flat surface. Instead of a physical controller, you can use your body or your voice. Similar to Kinect, a smart camera and a voice control function can capture your movements and voice commands to let you interact with objects and future-features-smart-phones/ on the projected screen.

4. Seamless Voice Control

Voice control has been receiving much attention since Siri made headlines. Voice control has existed in many earlier mobile phones even though the voice recognition function was crude at best. Research has been made to advance the development of voice control, but it has proved to be a paramount task.

5. 3D Screens & Holograms

Smartphones may have already reached the peak for their screen resolution with Apple's 'Retina Display', which actually provides a resolution that is sharper than what the human eye can perceive. Yet, even then, we still want more. Mobile companies are now **moving from 2D future-features-smart-phones/ to 3D future-features-smart-phones/ for the smartphone screen**. At present, we have a couple of 3D smartphones in the market, such as the LG Optimus 3D, the Motorola MT810 as well as the very first Samsung AMOLED 3D.

MOBILE IN LEARNING

RecordingLectures:The"Flipped"ClassroomMany teachers are structuring their lessons in what is being coined "Flipped Classroom". These
teachers are recording their "lectures" using video or audio and students are listening to that outside
of class as the homework and in class they are completing the practice and the teacher serves as a
guide, re-teaching as needed. On most cell phones with a data plan students can watch a video of a
previous lesson of an appropriate clip on You Tube.

UseCellPhonesasYourStudentResponseSystemUsing www.polleverywhere.com and your students' cell phones, you can track instant answersfrom all your students. It's free for classrooms of 30 people or less.

Gina Hartman an eMINTS Instructional Specialist at Francis Howell School District in Missouri shared a fantastic new Web 2.0 site named http://wiffiti.com. The teacher creates a wiffiti screen and students can text in their opinions.

One teacher used this to summarize Act 1, Scene 1 from Romeo and Juliet. They texted in the short summary and it showed up on the screen. In another classroom the students had think about the time period that Andrew Johnson was in office and text something into the wiffiti screen that would have been something he would have tweeted back then. I love this example, talk about engaging students.

Delivering

Materials

As more curriculum materials are delivered digitally creative teachers are delivering materials directly to students on their personal cell phones. One such platform is School Town. This learning platform makes it possible for teachers and students to collaborate in discussion areas and chat with each other making blended learning a real possibility.

Awesome Teacher Apps

Dropbox: One of my most beloved apps is dropbox. Dropbox allows all my computers and my phone to interact together. So the photo I take on my cell phone can be put in my Dropbox app and now it is available on all my devices, love it!

Evernote: Next in line of cool apps for the classroom is Evernote. This handy app lets you type a text note, or clip a web page. If your phone has a camera you can snap a photo, and now you can also grab a screenshot. Like dropbox it doesn't matter what device you are on, they all sync together.

Solving Common Problems Using Cell Phones in Class

StudentswithoutCellPhones/SmartPhonesOther issues arise because not every student has a cell phone. The easiest way to work around thisis to have students working in groups, collaborating and solving problems together. Now we onlyneed one cell phone to report out the group work. If we get creative, any problem can be solved.

Wireless

Access

Wireless access might be another problem. Smart phone users will usually try and find a wireless network instead of going through the provider signal. With all these added devices your network may be burdened. Also cell phone reception is an issue in many schools. If this is the case, you may want to focus more of the group work or homework-related cell phone strategies.

KeepingCellPhoneUseAppropriateThinking about using cell phone in the classroom we need to make sure we involve our students in
the conversation. Let them teach us about how to reduce the fear of theft or inappropriate use.Every student should be reminded every day about appropriate technology use, and what to do if
the rules are broken. We need to help students understand the ramifications of things like
cyberbullying ,sexting and posting things to social networking sites.

MOBILE MAPPING

Mapping with a Smartphone

- GPS which will probably be more accurate than your mobile phone,
- Field Papers, a method of taking a printed map you can write on, then upload & trace from, or
- Your mobile phone. There are many apps available for navigating using OSM data, and many apps to help you carry out your survey. Just a few are listed here but this list is growing daily, and some Aid Organisations are designing their own apps to gather specific data.

More and more smartphones today include a radio chip that allows them to receive signals from satellite navigation systems and determine their location. The most common chips receive signals from the U.S. GPS frequencies, while higher end models may include chips that can read frequencies from the Russian GLONASS satellites at the same time.

The quality of the chips used in smartphones may vary, and data accuracy and performance could vary as well.

Devices with GPS chips can work autonomously, off the grid, and without an Internet connection, while devices marked with "A-GPS only" (Assisted GPS) require a network data connection (and a mobile signal from a telecommunications company) to work correctly. A-GPS data can help autonomous GPS chips perform better by pre-caching data for better performance.

For most mapping applications to work as expected, the user is assumed to have a smartphone with an autonomous GPS chip. Check your device specifications to confirm whether your device uses an autonomous chip, or is A-GPS only device.

There are a lot of mapping applications available (for free or paid) for most smartphones in the market. Each app has its own advantages and disadvantages.

In choosing a mapping application for mapping in OpenStreetMap, you need to consider the following features.

- Easy to learn; immediately usable
- With GPX support (create waypoints, customizable log intervals)
- Allows OSM contribution (add, edit, upload data)
- Able to load OSM data offline
- Able to geo-tag multimedia files (notes, photos, videos)
- In active development

Try several applications that are compatible with your phone to get familiar with the interface and choose the best app based on your personal preference and mapping approach.

The next sections will guide you through the installation and use of specific applications for you to contribute to OpenStreetMap using your smartphones.

POLITICS AND MOBILE MEDIA

Uprisings driven by social media

The Arab Spring, which started in December 2010, heralded the dawn of a new political landscape, but it was powered by young activists who used the Internet and social media to communicate without being censored by the government.

Large demonstrations, like those in Egypt, were also largely coordinated using social media, particularly Facebook and Twitter. People used them to organise and rally support, as well as acting like a kind of digital document of activities, complete with video footage and eyewitness accounts.

Time magazine noted several years ago that "Facebook is now the third largest country on earth and surely has more information about its citizens than any government does", and that "Zuckerberg, a Harvard dropout, is its T-shirt-wearing head of state."

The Internet enabled ordinary people around the world to follow all the action via text messages, photos and videos, which provided a real view of the happenings on the street, at least compared to the traditional media outlets.

Revolution in Hong Kong

More recently, the pro-democracy movement in Hong Kong highlighted the power of smartphones and social media. But it wasn't just those tools which fired the protests – some of the items in the 'protestor's kit' included an umbrella, a towel, shorts, and even Post-It notes.

In the Admiralty business district, which saw the biggest protests, there were walls of colourful Post-It notes pinned up, plastered with statements such as "why are we here?".

But the smartphone allowed them to attempt to avoid interference with social media, through the use of apps. For example, more than 100,000 people in Hong Kong downloaded the FireChat app which lets phones connect through Bluetooth, meaning that communication is still possible without Wi-Fi and cellular connections.

Tunisians spread the word online

Tunisia has around 10 million permanent residents and 2 million expats. Many of these use technology on a daily basis. It's estimated that more than 85% of the populace owns a cell phone (but only 5% smartphones) and more than 2 million use Facebook. Twitter had just a tiny amount of users when the revolution occurred, at around 500 people.

The pro-democracy movement became a viral phenomenon almost overnight, and as more people gathered most of the online action took place on Facebook (which is much more popular in Tunisia than Twitter). Facebook allowed for photos and videos posted that quickly spread and encouraged others to make a stance and join the protests. But as the government attempted to counter using its own media channels, the Internet still allowed the population to get stories out through the cracks.

As the government broadcast protests in favour of then-President Ben Ali, the activists responded with their own videos of the same event showing that few people had showed up. Of course, the government had strategically places cameras to make it appear like a much larger rally than the reality.

MOBILE AUDIENCE: THINKING CONTRADICTIONS

1. Website traffic

Whether you monitor your website with free tools, such as Google Analytics, or paid tools, such as Adobe/Omniture and Webtrends, you have access to a wealth of data.

2. Surveys, focus groups, and interviews

While automated tools are excellent for delivering consumer insights, there is no substitute for actually asking people about what they actually think or want. The easiest and quickest way to do this is via a short multiple-choice survey on the website or mailed to the opt-in email or SMS database.



EVOLUTION ON MOBILE PHONES

1. Mobile devices allow for more hybrid journalism

The debate of the past few years has been bloggers and "citizen journalists" vs. professional reporters, editors and photographers. The reality lies somewhere in between, and mobile devices are starting to reveal the potential hybrid news gathering methods of the future.

Organizations like CNN have jumped on board in recent years with efforts likeiReport, but mobile technology allows highly networked collaboration between journalists and citizens to be even more fluid.

Let's face it: the people formerly known as the audience outnumber professional journalists, and increasingly they have smart phones and other mobile news gathering devices. These tools allow people to become ad hoc news publishers or startup, digital-only independent media outlets. But they also let traditional media organizations expand their outreach efforts and allow anyone in the community to become a correspondent-for-a-day.

Related examples:

- iPhone 4 offers new tools for journalists
- Former newspaper photographer becomes mobile, social journalist
- iPhone user provides proof of NYC urban legend

2. Everyone is looking for ways to make money off mobile

With everyone from Rupert Murdoch on down looking for mobile devices to "save" journalism, the need to make money on these new platforms is not going to get the 10-years-to-profit grace period that the Web got.

According to analysts, the money is out there. Mobile ads alone are worth \$600 million, up 50 percent from 2009. That is why Apple and Google paid a total of \$1 billion dollars for their respective mobile ad network purchases earlier this year.

But while Apple and Google may be two of the biggest players on the block, they are not the only threats to local ad revenues. Yelp, Facebook, Foursquare and others have their eye on location-specific, hyper-local advertising revenues. Legacy media organizations that are still struggling to refine their Web ad sales strategies are in for a fight.

Murdoch's paid mobile strategy, which mirrors his Web pay wall approach, has gained some favor since the launch of the iPad. So far, consumers have shown more willingness to pay for mobile apps than they have for desktop Web content. But until those approaches can be refined to allow true in-app subscriptions and unified print-Web-mobile subscriptions, success in that arena may be limited to larger publications.

Related examples:

- The iPad threatens newspaper insert revenues
- Consumers balk at media app pricing
- Facebook launches Places, targets local businesses

3. Geolocation a defining feature of mobile content

It sounds obvious, but place is the defining feature of mobile content. As cell phones continue to evolve into mini-computers, the ability to pinpoint location enables a slew of services, some obvious and others still to be discovered.

Easy-to-use publishing tools and free distribution on the Web made blogs, YouTube, Flickr and even Craigslist possible and popular. Journalists now need to be thinking about mobile devices and how the ability to develop context around location changes how newsrooms need to do business.

If you are creating content for handheld devices and are not taking advantage of location capabilities, you are missing an opportunity to truly engage your mobile audience.

Related examples:

- Media working to find best uses for location services
- Location is the new SEO
- Eight uses of Foursquare for journalism

4. iPhone vs. Android and Web vs. apps debate

Aside from making for great copy in the trade press, the battle of mobile platforms has significant short and long-term implications for journalism, depending on who ask.

Apple's iPhone set a new standard for smart phones when it was released in 2007. In response, Google decided to give away its Android OS to compete. The move is paying off. There have been more than 60 Android-based smart phones released so far, and in aggregate they are now outselling the iOS-based iPhone. While Apple's growing pains in dealing with content creators (see below) have been well-documented, app developers are going to need to support both operating systems for the foreseeable future.

The other ongoing dilemma, mobile websites vs. device-native apps, is closely related to the iPhone vs. Android debate. With Apple's banning of cross-platform development tools earlier this year, building apps to support both Android and iOS devices (not to mention Windows Mobile, Palm and BlackBerry phones) will be a major undertaking, especially for smaller organizations.

Developing an HTML5 mobile website, on the other hand, can be significantly cheaper; and the site can be accessed by most mobile browsers. But there are some trade-offs. Some functions, such as the camera, compass and accelerometer, are only available to native apps.

DIFFUSION OF INNOVATION

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product, acquire and perform a new behavior, etc.). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible.

Adoption of a new idea, behavior, or product (i.e., "innovation") does not happen simultaneously in a social system; rather it is a process whereby some people are more apt to adopt the innovation than others. Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation. There are five established adopter categories, and while the majority of the general population tends to fall in the middle categories, it is still necessary to understand the characteristics of the target population, there are different strategies used to appeal to the different adopter categories.

DIFFUSION OF INNOVATION MODEL



Innovators - These are people who want to be the first to try the innovation. They are venturesome and interested in new ideas. These people are very willing to take risks, and are often the first to develop new ideas. Very little, if anything, needs to be done to appeal to this population.

Early Adopters - These are people who represent opinion leaders. They enjoy leadership roles, and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. Strategies to appeal to this population include how-to manuals and information sheets on implementation. They do not need information to convince them to change.

Early Majority - These people are rarely leaders, but they do adopt new ideas before the average person. That said, they typically need to see evidence that the innovation works before they are willing to adopt it. Strategies to appeal to this population include success stories and evidence of the innovation's effectiveness.

Late Majority - These people are skeptical of change, and will only adopt an innovation after it has been tried by the majority. Strategies to appeal to this population include information on how many other people have tried the innovation and have adopted it successfully.

Laggards - These people are bound by tradition and very conservative. They are very skeptical of change and are the hardest group to bring on board. Strategies to appeal to this population include statistics, fear appeals, and pressure from people in the other adopter groups.

YOUTUBE LEARNING

YouTube is introducing a new education feature called Learning Playlists that will offer dedicated landing pages for educational videos on a variety of topics, including math, science, music, and language. The playlists will have organizational features, like chapters around key concepts, ordered from beginner to advanced lessons. The pages will also be notably free from recommended videos, letting viewers focus on their lessons without distractions.

YouTube has come under fire for its algorithm-driven recommended videos that can sometimes lead viewers toward radicalizing or other troubling content. Though the company has been reluctant to turn off recommendations in the past because it would drive less traffic to other videos, removing recommended videos from Learning Playlists shows that YouTube isn't taking any chances when it comes to getting educational content right. Videos won't autoplay at the end of a playlist either, so there's no chance you'll fall asleep during chemistry lessons and wake up to videos about conspiracy theories.

The platform has been working with creators and educational organizations to expand educational content in the past year. Last October, YouTube announced that it was investing \$20 million toward these creators and resources through a Learning Fund initiative. YouTube says it will begin by putting trusted partners in the Learning Playlists, like Khan Academy and TED-Ed.