

The Uses of Broadcasting in
Information Technology and Future Developments

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1. INTRODUCTION

In this section, I will explain what my paper is about and a brief history of Broadcasting. By that I mean that I will explain what broadcasting is in Information Technology (IT). I will also, explain some history about broadcasting like how it started to get popular over time.

2. USES OF BROADCASTING

Broadcasting happen every day all around us, it's an important tool that been used since it was created. But how was it created and what is its original purpose. In this section, I will show where and when broadcasting is used and how it's used.

3. SECURITY

Security is very important in all matters of Information Technology. Security helps protect your privacy against all who would want to spy or hack your devices. In this section, I will explain what type of security is used in broadcasting and how it is useful.

4. ETHICAL AND SOCIAL IMPLICATIONS

In the current year and time technology has a major effect on everyday life. Broadcasting is one of the many tools used for everyday whether we know it or not. In this section, I will show how broadcasting is used in daily life.

5. FUTUTRE USES

The Future is an unknown mystery; no man can tell what will happen. Though, anyone can make an educated guess in what's going to happen in the future. That is what this section is about, I will show and explain how Broadcasting is used in the possible future and conclude the paper.

REFERENCE PAGE

REVIEW: Data broadcasting; merging digital broadcasting with the internet -- revised edition.

(2001). Telecomworldwire, , 1. Retrieved from

<http://search.proquest.com/docview/190923404?accountid=14541>

TELECOMWORLDWIRE-21 August 2001-REVIEW: Data Broadcasting; Merging Digital Broadcasting with the Internet -- Revised Edition (C)1994- 2001 M2

COMMUNICATIONS LTD <http://www.m2.com> Data broadcasting is a combination of video, audio, software programs, streaming data, or other digital/multimedia content which is transmitted continuously to intelligent devices such as PCs, digital set top boxes and hand- held devices. As the rate at which new technology is introduced increases, the definition and concepts surrounding data broadcasting will alter too. Lars Tvede, Peter Pircher and Jens Bodenkamp have produced a revised edition of their book 'Data Broadcasting; Merging Digital broadcasting with the Internet' allowing the reader to keep up to date with the new advances surrounding this concept. The book begins with a chapter on broadcasting - one of the two main concepts that make up data broadcasting. It details the evolution of broadcasting, covering radio, television, satellite and cable.

Singh, M., & Singh, S. (2000). Network security (security in large networks) Retrieved from <http://search.proquest.com/docview/27637785?accountid=14541>

It is common that users or hosts in a large network are partitioned and organized as a hierarchical tree where children of the same parent form a group. Secure broadcasting intends to provide a secure communication channel from a sending principal to a group of legal receiving principals. Only legal receiving principals can decrypt the message, and

illegal receiving principals cannot acquire any information from the broad casted message. In this paper, we propose a secure broadcasting protocol in which only one packet is transmitted for every broadcast, and the size of the broadcasted packet is small.

Ashworth, S. (2016, 02). NAB gives wings to PILOT. *TV Technology*, 34, 1-1,16,18. Retrieved from <http://search.proquest.com/docview/1767363546?accountid=14541>

No broadcaster left behind could be the moniker of the National Association of Broadcasters' newly renamed investment arm, a move that recognizes that this association of broadcasters can no longer just be about broadcasting. Three years ago, the NAB debuted an internal program that would look outside broadcasting to find the types of technology that would continue to drive broadcasting forward. But the NAB has capitulated to the fact that broadcasting is no longer just about sending signals over the air. The solution is to take a deeper dive into the digital world as it relates to new multiplatform digital business for NAB members, which means mobile, streaming, virtual reality and the like. The then-NAB Labs made investments in a number of startups that were developing technologies that would be beneficial for broadcast.

Elma, C., Kesten, A., Dicle, A. N., & Uzun, E. M. (2010). Media literacy education in turkey: An evaluation of media processes and ethical codes. *Kuram Ve Uygulamada Egitim Bilimleri*,

10(3), 1439-1458. Retrieved from

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Global 3D & 4D technology market expected to be worth \$314.17 billion by 2022 - the future of graphic content for broadcasting. (2016, Apr 27). M2 Presswire Retrieved from

<http://search.proquest.com/docview/1784565410?accountid=14541>

APAC is the fastest-growing market for 3D technology and it holds a tremendous market potential for 3D applications in the near future. Major countries which have a huge potential for 3D technology applications in the APAC region are developing economies such as India and China. Another major market for the 3D technology in the APAC region is Japan. Some of the major drivers, which are responsible for spurring demand of 3D technology in APAC include rising income levels, lifestyle changes, and need for faster manufacturing technology.

Anderson, A. T. (2004). Shortwave broadcasting in a new world order: An historical examination of the influences of satellite radio and internet radio on shortwave broadcasting since the end of the cold war (Order No. 3128839). Available From ProQuest Dissertations & Theses Global. (305141622). Retrieved from

<http://search.proquest.com/docview/305141622?accountid=14541>

From the application of shortwave frequencies to broadcasting in the 1920s until the last decade of the 20th century, international broadcasting was synonymous with shortwave broadcasting by state-run radio stations. For the bulk of this history of international broadcasting, such cross-border communication was developed, sustained, and refined in war—first the radio propaganda wars preceding World War II, then World War II, and finally the Cold War which dominated

geopolitics for the better part of 40 years. With the emergence of other international communication media such as satellite broadcasting beginning in the 1960s, and the internet in the 1990s, the potential for the monopoly in practice and name of shortwave on international broadcasting has been ever present. Additionally, at the termination of the Cold War conflict, the social/political framework that had governed international broadcasting for nearly half a century was removed, thus creating the potential for additional revisions and mutations in the realm of international broadcasting. This project examines the first decade of state-sponsored international broadcasting following the end of the Cold War in order to document the changes that have taken place in international broadcasting. Specific attention is paid to the emergence of newer international broadcasting media through which international broadcasting has begun to be carried and received since 1991. Additionally, changes made, and challenges faced, by the state-run international broadcasters are examined and documented in order to better understand the evolution of international broadcasting at a time in history that may well mark the beginning of the decline of the nation state in the face of such changes in international broadcasting. It will be illustrated that with the advent of additional electronic media for international broadcasting which is increasingly becoming commercially driven, the nation state that emerged on the heels of the advent of the printing press is in the process of mutation and possible decline.

Stephens, Mitchell. (2000). *History of Television*. Retrieved from

<https://www.nyu.edu/classes/stephens/History%20of%20Television%20page.htm>

Voice broadcasting. (2016, July 12). In Wikipedia, The Free Encyclopedia. Retrieved 20:45,

October 4, 2016, from

https://en.wikipedia.org/w/index.php?title=Voice_broadcasting&oldid=729512504

The page on the website talks about many things in Broadcasting. The page talks about the history of broadcasting and its uses. The page also talks about how it's used in society. The page is made by many people and many different sources all together. The website itself is very trust worth and useful to all.

Rupley, S. (2005, Oct 04). Net video for the masses; broadcasting on the web hits prime time. PC Magazine, 24, 1-23. Retrieved from

<http://search.proquest.com/docview/203776804?accountid=14541>

Better technology, widespread broadband adoption, and buy-in from broadcasters are creating a much bigger audience for internet-based video and internet TV. Several television broadcasters are revamping their internet territory to attract viewers who would rather watch online.

The Uses of Broadcasting in Information Technology and Future Developments

In life mankind has used many forms of technology for the greater good of society or for commercial uses. One form of technology that is used for commercial uses is, broadcasting which is the viewing of video and/or audio through different devices. Broadcasting is a device that is used by society very often and I plan to present and explain that broadcasting this paper. I will show the history, the uses, the security, and the social and ethical aspects of Broadcasting in this entire paper, along with Broadcasting's future uses. To start I will give a brief history about Broadcasting and how it grew in popularity over time.

Broadcasting started close to the 1920 and has proven to be useful in many ways. Broadcasting started with a shortwave signal of the first portable shortwave receiver in the early 1920's. It was used by Frank Conrad of Westinghouse when he was traveling to Europe. He only used the shortwave receiver to listen to the baseball score in the U.S. while he was away (Anderson, 2004, pg. 1). This was the first time a broadcasting device was used, for commercial use of entertainment and knowledge for different sport events. Thus, began the commercial use of broadcasting audio, the first form of broadcasting. This was the start of a new revolutionary form of communication. Shortwave has been identified as the most cost effective medium through which a country can send messages to the largest possible audience over great distances, making it one of the most significant media of international communication" (Anderson, 2004, pg.1). In a short period of time shortwave broadcasting became very popular, it was the best way to send messages over to different countries and it was well notice by the other countries as well. The device that was used to hear the shortwaves broadcasting was the radio. With everything going well with shortwave broadcasting the technology was only going to improve to point that no one would expect. After the broadcasting of audio was being used all over the world, seven

years a new form of broadcasting had been created it was called video broadcasting. “Electronic television was first successfully demonstrated in San Francisco on Sept. 7, 1927. The system was designed by Philo Taylor Farnsworth, ... Farnsworth had begun to conceive of a system that could capture moving images in a form that could be coded onto radio waves and then transformed back into a picture on a screen” (Stephen, 2000). Philo Taylor Farnsworth created the first television aka TV by use the method of radio waves that could create motion pictures onto a TV screen. Television was not able to produce sound in the 1920’s even so, it became popular for commercial use more than the radio. This is how broadcasting started in our society, with the radio and television and broadcasting is still being used today.

Uses of Broadcasting

Broadcasting is used every day in modern society for all of its many uses. One of the uses of broadcasting radio and TV is to obtain get important information. For example, to know what the weather is going to be like a radio or a TV can give provide the news on the weather and what’s it expected to be like. Also, if when on the road and if there’s traffic anywhere you can use a radio. The radio broadcast will show where the traffic is, a car accident, or any other obstacles that will get in the way on the road. That’s just a few ways of how Broadcasting is used to get information that will be needed. Broadcasting doesn’t end at the TV and radio, there are other devices that use broadcasting as well. A great example is the telephone; the telephone broadcast our voice to the another caller to communicate with. Another form of telephone broadcasting voice messages, also known as voice broadcasting. Voice broadcasting is a mass communication technique, it began in the 1990s, the broadcasts telephone messages to hundreds or thousands of call recipients at once (Wikipedia, Broadcasting page). The telephone or cellphone message that is send or used to contact other are a part of broadcast as well. These

types of message are sent by tons of different companies and commercial groups to try to sell different products through these messages. The internet is also involved with broadcasting as well. At first broadcasting stream videos on the internet wasn't popular but, after different live-online broadcast like the July 2 Live 8 concert on AOL Music boosted its popularity (Rupley, 2004 Oct. 4, pg. 23). This lead for many videos from America to other countries to broadcast different videos all over the internet. Now society uses the broadcast that can be found on internet to find entertainment, information, and more. The uses of Broadcasting are very broad indeed but, it has also proven to be very useful in day to day life. With its many uses it can also have many risk as well; that is why there are security measures for Broadcasting.

Security

Security is a very important matter in technology, if the proper precautions aren't met some devices can get hacked, catch a virus, or stop functioning completely. The question is what type of security is used on a broadcasting system? The answer is with a secure broadcasting protocol. In the protocol, the sending principal broadcasts an encrypted message in a computer network, and only legal receiving principals can decrypt the message. Illegal receiving principals can decrypt the message (Singh, M. & Singh, S., 2000, pg.88). Basically, the security of broadcasting is sending an encrypted message to the network that can't be hacked by hackers and the legal receiver would get the decrypt message safely to his device. With the message decrypted the broadcasted as on the device its being transmitted to the desired receiver and no other receiver can get to it. This is the broadcastings method of security to protect your devices from being hacked.

Social and Ethical Implications

Technology has been very useful to mankind for years now. Although, no one realizes that technology has made a great impact on social life and its morals. Broadcasting holds a large part on this social impact as well. The main effect that Broadcasting has in social life is the dissemination in the communication of people. Dissemination focuses on the message being relayed from one main source to one large audience without the exchange of dialogue in between (Wikipedia, Broadcasting page). When broadcasting on a TV, radio, and the internet a user cannot really say anything to the person broadcasting all of the things they show on the website and stations. In short, dissemination is broadcasting many things to different people without sending a reply to the sender. Because dissemination is this way the information or items that are broadcasted are free for other to enjoy or ignore on their own. Though, one thing that has the most effect on society and its ethics/moral is the media. The media is broadcast to many people all over the world whether it's important to one self or one's society. Transmitting true and complete news to influence public opinion is a basic code of media ethics [...] Media's first priority is to inform the public truthfully about what is going on in society. In other words, media ethics include broadcasting news truthfully and objectively (Elma, C., Kesten, A., Dicle, A. N., & Uzun, E. M., 2010). In short, the broadcasting of media is an important tool to know the truth about what's happening in society. Also, the knowledge broadcasted by the media can greatly influence the public's opinion on certain matters like press conferences or public speeches. Broadcasting allow users to communicate with and without dissemination in society to socialize. With the code of media ethics, broadcast news on important true facts can be learned in the public. Broadcasting can do so many things now so, in the future broadcasting can probably do more.

Future Uses

Technology is improving every year, the newest phone, the newest laptop, and the newest electronic device is being made or out in stores right now. Technology is always improving for the betterment of mankind no matter what form of technology it is. Which begs the question, how is broadcasting going to improve in the future? NAB Labs, is trying to make an, augmented and virtual reality and “Hybrid TV,” which enables a TV receiver to customize the viewing experience through voluntary collection of user data and preferences (Ashworth, S., 2016). The future of television broadcasting looks bright; by adding virtual reality and make a “Hybrid TV” the viewing process of television will more enjoyable to a viewing audience. Plus, with this voluntary collection of user data and preferences you can find all the shows that a viewer would like or new show that a viewer has never heard of before to watch. Another future advancement in television broadcasting is 3D television broadcasting, this will bring out a new graphic content that has never be done before outside a movie theatre (Global, 2016, April 27). There are still many possibilities that can be made on the future of broadcasting but, no one can really say what will be made next.

In conclusion, broadcasting started with a desire to hear who would win in baseball game from a faraway distance, was a spark for a brand new form of technology. Broadcasting has many use to our modern society and our way of life, from entertainment to getting information broadcasting has been proven to be very useful. Like many other devices in our world a broadcasting systems has the security to protect itself from hackers. Providing truthful information to the public shows the social and ethnic implications of broadcasting. Finally, the future of broadcasting has great possibilities for entertainment and more, only time can tell what more broadcasting can give us. Broadcasting hold a great connection to many forms of information technology and has proven its usefulness.