1. Introduction

According to Bangladesh Telecommunication and Regulatory Commission, The total number of internet subscribers reached 126.60 Million in November 2021. The current government of the country has taken a number of measures to create and develop the Digital Bangladesh project, which has led to a significant increase in the number of Internet users in the country.

There are two types of television broadcasting via the Internet - IPTV (Internet Protocol Television) and Internet television itself. IPTV is a service that users subscribe to and pay a subscription fee in order to watch TV broadcasts using ordinary TVs, connected to the Internet via a broadband connection. The difference between satellite, cable, and IP-TV is almost invisible to the viewer. IPTV is designed for a narrow audience. The term IPTV was first named in 1995 by the American company Precept Software. In 1998, Precept Software was acquired by Cisco Systems, one of the world's largest software vendors [1].

Global distribution and a global audience, real-time mode, convergence, horizontal and vertical links, textual basis, dynamics in the video image, multilingualism, unlimited information archive, long program life cycle,

parallel broadcast streams, arbitrary access time, unlimited number of repetitions, advertising as a supplement, low-cost technological chain, multichannel, and interactivity [2]: these are various characteristics of Internet TV.

What is Internet TV? The task of modern mass media is to satisfy the needs of consumers at a convenient time and in a convenient medium. Internet TV does not have a specific air time and is required to operate 24/7. Internet TV gives users a wide range of options for watching television content. It is an interactive and multimedia platform with unique ways of distributing audiovisual materials. Internet TV is a stream of television and video content publicly available for viewing on the Internet. Unlike traditional TV, Internet TV is sometimes distributed free of charge and is intended for a wide audience. It is a modern form of means of broadcasting and viewing video content over the Internet. Chinese researcher Wang Yue [3] gives the following definition: "Internet TV is a compact multimedia web page that broadcasts audio and video materials on the Internet and is the most modern combination of forms of presentation and distribution of mass information."

The American "ABC" channel was the first in the world to broadcast on the Internet. In 1994, the channel began broadcasting the World News program on the Internet. In 1998, the first professional Internet TV channel, Broadcast.com [4] was launched, owned by American businessman Mark Cuban.

INTERNET TELEVISION: PAST AND PRESENT

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Abstract: The development of digital technologies has radically changed the direction of the development of modern media. Professional producers of information – newspapers, radio broadcasting, and television – entered the Internet no more than fifteen years ago. The Internet is used by almost all types of media in the world as an additional channel for the transmission and distribution of content. Many media experts see a great future in the Internet media market. In Bangladesh, home to 160 million people, Internet media are already popular and growing rapidly.

Internet TV began to function at the beginning of the 21st century. It was created specifically for broadcasting on the network, which requires a high level of technical equipment from both the producer and the content provider and the consumer. Therefore, chronologically, television was the last type of media that entered the Internet.

In this report, we analyze the basic features of Internet Television that exists in contemporary Bangladesh and provide an account of the development trends. We analyzed Internet Television broadcasters in Bangladesh, like "ATN Music", "Popcorn Live".

This study is based on both primary and secondary sources of qualitative data to understand the ability of Internet TV to provide news, qualitive information, together with the challenges and opportunities of it to work in the ever-changing media landscape.

Keywords: Internet television, new media, Bangladesh, digital media, Internet TV.

In Bangladesh, the first experiments with Internet TV broadcasting date back to 2009 and are associated with the "Desh TV" satellite TV company. On the website of the TV channel, the heading "live broadcast" was created and television programs were broadcasted in real-time. Today, many of the country's TV channels are available for watching on the Internet. Five years later, in 2014, the first full-fledged Internet TV channel "ATN Music", owned by the TV channel of the same name, was created.

In 2015, another entertainment Internet TV channel, "Popcorn Live", was launched, owned by the famous director Redoan Roni. The channel achieved popularity in just a few months, using a variety of broadcast genres. By 2013, almost all traditional Bangladeshi television channels were broadcasting over the Internet.

In November 2021, the Ministry of Information and Broadcast of Bangladesh was approved the registration of 14 IPTV to broadcast online [5]. In the same year, 59 unregistered and illegal IPTVs were shut down by the BTRC as they broke the existing rules and regulations regarding the IPTV and National Broadcast Policy. To conduct their operations the approved IPTVs must follow the National Broadcast

Policy, 2014, National Online Mass Media Policy, 2017 and other policies and guidelines. While delivering a statement on broadcast policy in the early of 2022, the minister of Information and Broadcast Hasan Mahmud said that the news items will be no longer allowed to broadcast via IPTV and YouTube channels. On the other hand, newspapers cannot broadcast news or talk shows online or via YouTube [6].

The aim of the study was to analyze the existing stage of the development of Internet Television in Bangladesh and to point out the perspectives this new media channel has.

2. Methods

This study is based on both primary and secondary sources of qualitative data to understand the genres of channels of Internet TV in Bangladesh, to see the challenges and opportunities of Internet TV in the country. Based on the purposive sampling, "Popcorn Live", "ATN Music" Internet TV channels were selected for the study to see the features of it. Several types of research related materials were reviewed to understand the development trends of genres and features of Internet TV in Bangladesh context.

3. Result

In Bangladesh, there are three types of broadcasters, broadcasting video over the Internet: terrestrial Internet channels,

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Internet TV channels, video content collectors, and video hosting. It is assumed, that in the next 5-10 years, the traffic of Internet TV channels in Bangladesh will grow due to low tariffs for mobile Internet, 4G Internet connection, and the availability of mobile applications.

3. 1. Internet TV channel "Popcorn Live"

The entertainment Internet TV channel "Popcorn Live" officially began broadcasting on June 1, 2015 but due to lack of investment the channel was shut down in 2017. It belonged to "Popcorn Media". From the very beginning, the site had stable high traffic and was developed by a professional team. It was then the only Internet TV channel in the country that created various genre entertainment programs for young people over 16 years old. The website "www.popcornlive.tv" had programs available for viewing on request. The target audience of the channel were young people who actively use the Internet. Many entertainment programs had been created specifically for this age group, which has moved away from traditional TV channels.

With an interview with the founder of the Popcorn Live TV Redoan Roni it was found, that the channel was operational only for two years. According to him, "to run an OTT platform requires a solid technical infrastructures and huge investment where were unavailable to us in that time. Moreover, the subscription market and the audience mindset to watch premium content were also not prepared. And these were the main reasons to shut down the activities of Popcorn Live."

3. 2. Internet TV channel "ATN Music"

This channel is part of the largest media holding "Multi-Media Production group". On June 3, 2014, the channel began broadcasting on the Internet and became the first Internet music channel in Bangladesh. The website of the channel "www. atnmusic.tv" broadcasts music videos, documentaries about famous cultural persons, talk shows, interviews with stars, and other music programs around the clock. "ATN Music" was the first TV channel in the country to broadcast a music content on the Internet.

According to the website of ATN Music, this is the first 24/7 online Bangla Musical TV channel, owned by ATN Group. The channel broadcasts mostly music-related programming, focusing on music video and interview series. ATN music TV represents Bangla music and Bengali culture in Europe USA, Middle East and rest of the parts of the world.

The ATN Music channel produce only entertainment programs, they have no news material. News stories are mostly the genre of traditional TV channels.

The Internet, as a set of public telecommunication networks, needs regulation and control from possible abuse of the freedom of mass information. Bangladesh's Mass Media Law does not provide any specific legal regulation for Internet television. There is a standard law for all types of Internet media (newspapers, radio, and television). When registering online media with the Ministry of Information, journalists receive accreditation and support from the Government. Registration is free of charge and mandatory. In case of violation of the law, they receive administrative penalties in the form of a warning or a fine from the registering authority and can be closed by a court decision. It is noted that, in September 2020, the government approved the draft of the amended 'National Online Mass Media Policy, 2017' [7]

Internet TV in Bangladesh is still far from the final stage of development. Several factors that influence the further development of Internet television are highlighted below:

- 1. Access to the Internet in rural areas: The Internet is used both for sending letters and for buying bus tickets. Bangladesh is a country where a very large percentage of the population lives below the poverty line and lives in rural areas, where the Internet is still a dream for them.
- 2. Lack of professional staff: Personnel issues can be considered one of the main challenges in the Internet TV industry in Bangladesh. Due to the low-level knowledge of modern information technologies, the editorial staff of many central TV channels still do not use the Web 2.0 journalism strategy. According to Shakil Ahamed, Head of Output of the Ekattor TV channel [8], "the proposed journalism courses in universities should be updated taking into account the requirements of modern media editors. The TV channel lacks employees with knowledge of modern technologies".
- 3. Insufficient preparation of sites: All Internet TV sites, including those of terrestrial TV channels, must comply with the requirements of modern Internet TV. More than half of the country's traditional TV channel sites have only text descriptions of programs and almost no multimedia content. Streaming video of Internet TV is of poor quality due to slow Internet speed. You have to wait a few minutes for buffering, which affects the mood of the audience.
- 4. Difficulties with technical support: Another issue is the presence of different formats of video players on TV channel sites. A video, distributed in different formats, requires certain Flash players [9] or multimedia programs, the absence of which creates additional difficulties for users. The audience is using different platforms to access the Internet. For the development of Internet television, measures are required for planning and researching consumer interests.

4. Discussion

Video content is only gaining momentum, and more and more Internet media are starting to create their own video studios and programs. The reason is simple: the modern viewer wants to see, in addition to the text, faces, emotions, plots, situations. Therefore, when preparing the broadcasting network, the editors of Internet television should pay special attention to this.

Most Internet TV channels operate in the Video-on-demand format [9]. The viewer can watch any program, plot, or video clip at a convenient time and an unlimited number of times. The key specificity of Internet television is that each viewer has the opportunity to create his/her own broadcasting schedule. One of the main properties of Internet television is a decrease in the distance between TV product producers and viewers, which affects the genre preferences of the authors of programs. Internet television is aimed not at the mass, but at the individual viewer.

Internet TV in Bangladesh is at an early stage of its development path, and there is an increase in viewers' interest in watching videos on the Internet. The sites of traditional TV channels, broadcasting video on the network, are developing.

An important factor in the development of Internet TV is a large number of mobile phone users: all mobile companies in Bangladesh offer mobile TV services for 4G subscribers, smartphone users can pay for all terrestrial TV channels, smartphones from Bangladeshi manufacturers are sold at an affordable price, and mobile operators offer favorable tariffs for Internet access.

We illustrated the existing stage of the development of Internet TV in Bangladesh, pointed out two, the most prospect, channels and the expected benefits of the development of this new media channel with two case studies of Internet TV channel "Popcorn Live" and Internet TV channel "ATN Music". We recognize that this report has its limitations to just two case

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studies, more Internet TV Channels should be analyzed, more interviews and content analysis of other Internet TV Channels should be added in the next research.

5. Conclusion

In the competition for viewers, traditional TV channels are switching to broadcasting on the Internet on different platforms and will be forced to adopt a strategy and principles of interaction with the audience. In many ways, all this creates favorable conditions for the development of Internet television in Bangladesh.

Not all of the country's population has the opportunity to take advantage of modern technologies. Basically, Internet users are wealthy city dwellers. This is one of the reasons for the slow development of Internet TV in Bangladesh.

In Bangladesh, the Internet TV audience is growing at a fairly rapid pace, and the number of viewers increases with the number of Internet users. According to various estimates, Internet users in Bangladesh watch videos online at least once a week, so there is definitely a huge perspective in developing Internet TV.

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