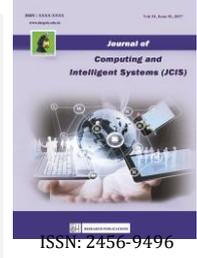




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## SURVEY ON VIRTUAL MEETING TOOLS

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**Abstract** — This paper deals with comparisons of online virtual meeting tools available to use it through online for various purposes such as meeting the clients, teaching virtually to the students and learning group etc. The presentations in virtual environments are described in detail. The idea of this research is to capture and simulate meetings. One of the motive is to have real-time transformation of activities occurring during a meeting – including presentations, group discussions, teaching that are equivalent to events occurring in a virtual conference room. Another goal is to compare the tools with various features provided by the each virtual tool including cost involved, number of participants, video and audio etc.

**Keywords** - online, Virtual, Meeting tools, Analysis

### I. INTRODUCTION

In recent decades, Internet technologies have advanced fast and are now sophisticated enough to provide low-cost, real-time communication services. These Advancements have actually altered how individuals meet and interact to create Choices. New Internet-based collaboration and conferencing platforms are becoming Ubiquitous tools for many people and businesses all over the world. A Web meeting system is a network technology that provides a virtual environment for remote meetings and collaborative work among geographically separated participants, and it may be used to reduce travel costs and time required for face-to-face meetings. Voice and video collaboration, slide show presentation sharing, screen sharing, and text-based communication are all common features of web meeting systems.

### II. RELATED WORKS

Several virtual tools have been developed, and they produce more secure and easy-to-access results. All virtual tools have many features, and many of these tools have access to cameras and microphones containing sensitive user information. Identifying the main purpose of each virtual tool and its best access controls and all possible features. Every tool has a presentation option, and active people identify all the features and allow access controls.

Many efforts were made to develop virtual platforms for content creators, with the bulk of these technologies concentrating on enhancing the interaction between members of the landscape design team. Several organizations

have created virtual meeting tools in which developers generate geometrical models and behaviors for the things in the locations, and designers use a scripting language to choose the objects and trigger the behaviors. While these technologies provide the scene creator considerable control over the design stage, they have the following shortcomings.

Initially, because the user has limited command over the items, they are not free to explore all of the technological possibilities. For example, if a user wishes to alter a behavior slightly, they must describe the change to the user but then stand in line for the user to make the modifications. Exploration is discouraged by the considerable turnaround time. Furthermore, because the user's activities are focused on particular things and events inside those objects, it is harder to store the code that they generate. Our approach encourages programmers to write more general code that may be utilised by multiple objects in a variety of settings.

### III. DESCRIPTION OF MEETING TOOLS

#### 3.1 Zoom

Zoom is among the most famous video conferencing tools for organizations. It is content, with several options based on company size and demands. Rates range from simple for teamwork meetings to \$19.99/quarter (with a total of 90 hosts) for large companies. Many of Zoom global users enjoy the free plan, but if you need something more comprehensive for your remote teams, the corporate membership provides up to 200 meeting attendees, free amazon ec2, bespoke mails, a fake meeting URL, and much more. The following fig 3.1 is zoom source.

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Fig- 3.1 Zoom source

### 3.2 Skype for business

Microsoft's famous Skype system has been upgraded to include an organisation video conferencing feature. It offers various commercial features, including the ability to have meetings with up to 250 people, connect with the other Skype users, and also use online white boarding. Yet there are certain drawbacks, such as the loss of an embedded dial-in audio conferencing function and operating systems with online- only subscriptions. The free app of Skype is a useful tool for teams with less than ten people since it allows you to make free video conferences from your desktop, mobile, or iPad. The following fig 3.2 skype for business source.

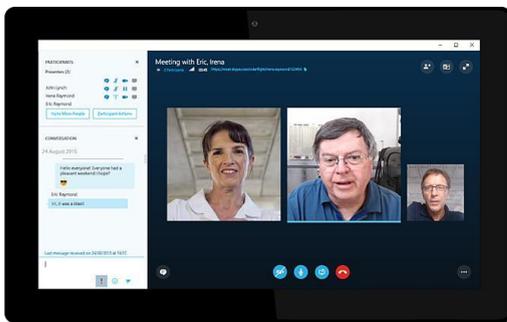


Fig- 3.2 Skype for business

### 3.3. Slack

Slack, a wildly popular communication application used in enterprises all around the world, now includes video conferencing functionality. Deploying Slack for video conferencing makes little sense if your firm isn't already using it. However, if you already use Slack, it is a convenient method to make fast calls. Video conferencing is an incorporate to Slack's capability and may be an excellent tool for merging mixed teams. Slack's free account shows one-on-one video chat, and you may slack with up to 15 people if you start a call from a channel, but for bigger meetings, bespoke corporate billing is required, and which needs a tailored estimate.

The following fig 3.3 slack source.

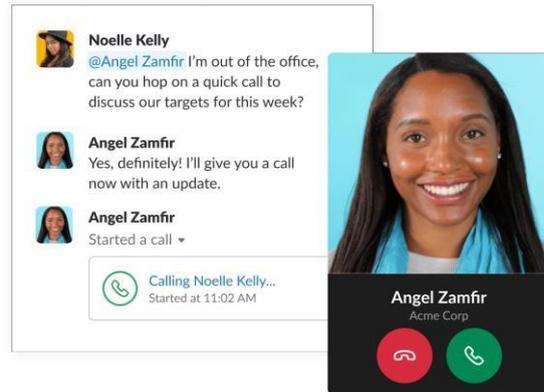


Fig- 3.3 Slack source

### 3.4. Big Blue Button

The open-source Big Blue Button has whiteboard functionality for meeting efficiency and was designed primarily for education and online learning. As both a freeware application, there are several add- ons and interfaces available from third- party builders that enable for personalised web calling services, including a link with Learning Technologies for a smoother student and instructor interface.

Big Blue Button services:

- Audio and video screen sharing
- The possibility to record sessions for later replay
- Separate rooms
- Collaboration tools such as whiteboards, sharing notes, and polls.

The following fig 3.4 Big Blue Button source

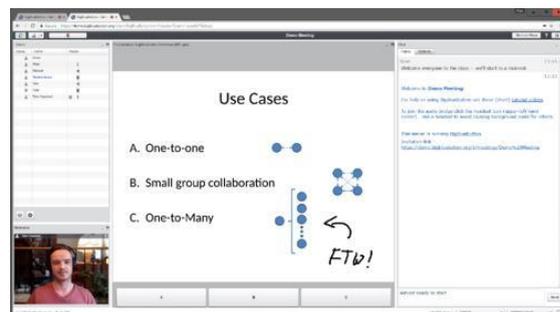


Fig- 3.4 Big Blue Button

### 3.5 Blue Jeans

Blue Jeans is a complete videoconferencing proven solution in tandem with collaborative tools. In comparison to some of the more sophisticated systems supplied by rivals, Blue jeans use a network of discussions, spaces, and happenings

to permit video call everywhere. Only with ability to induce meetings out of a browser, no software can help. In addition, the tool allows you to easily see all video conference activity in your firm. For business teams, plans begin at \$16.65/quarter. The following fig 3.5 Blue jeans source.



Fig- 3.5 Blue Jeans

3.6 Whereby

The above video chat service is excellent for smaller companies looking for a simple ability to link teammates. Because of its simplified design, it provides quick response. By which (previously Appear.in) does not involve an apps installation or login; instead, users just publish their web meeting with others, who may participate in-browser. By which begins for free, but organizations will need to pay \$59.99/period for many members and managers. The following fig3.6 whereby source.

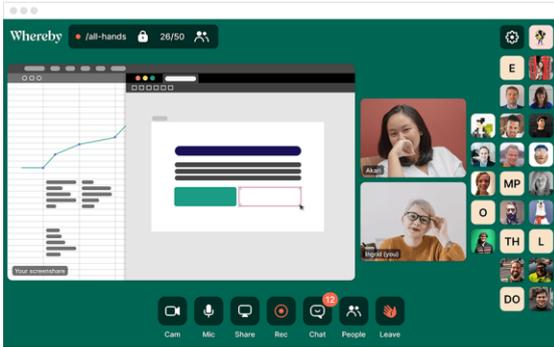


Fig- 3.6 Whereby

3.7. GoToMeeting

Pricing for GoToMeetings starts at \$14/month for groups of up to 10 meeting attendees and rises to \$29/month for workgroups of 150 people. This teleconference tool is well worth the money because it offers capabilities such as:

- Desktop, tablet, or smartphone screen sharing.
- High-definition video conferencing
- The Smart Meeting Assistant records meetings & provides fully automatic transcript.
- A computer package that includes user-friendly collaboration software. With the click of a button,

- professional chat may change from a chat window to a video call.

The following fig:3.7 GoToMeeting source.

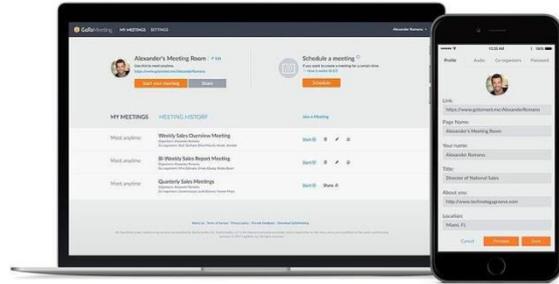


Fig- 3.7 GoToMeeting

3.8 Cisco WebEx

Cisco's WebEx video conferencing service works as a hybrid of web conferencing and voice calling services, allowing the person to join sessions online or over the phone, according on their position and capabilities at the moment. Pricing begins at \$13 per host/month. The following fig 3.8 Cisco WebEx source.



Fig- 3.8 Cisco WebEx

3.9 Google Meet

Google meet is a product developed by Google. It's an improved version of Google Hangouts designed for groups. Google Meet is centred on planned video meetings among teammates, and it includes Zoom- look like capabilities such as calendar integration, meeting rooms scheduling, and a more refined user experience.

To take use of all the features Google Meet has to offer, such as limitless conferences up to 300 hours long, 250 guests, the ability to live-stream to up to 100,000 viewers, and 27/7 online support, you'll need to contact the G Suite sales team for a personalised price. The following Fig 3.9 Google meet source.



Fig- 3.9 Google Meet

### 3.10 Blackboard collaborate

Professors like the video conferencing programme Blackboard Connect. This tool's mobility flexibility allows educators to engage with learners using computers, tablets, or cell phones. Classroom licences start at \$300 per year for universities, schools, and colleges, and departments start at \$9000 per year for universities, schools, and colleges, with commercial models available at bespoke prices. Blackboard Collaborate Hyper is a video conference solution that connects employees, learners, and outside guests. Courses are accessed using a web page and do not require extra software. It's simple to use — once set up, a Collaborate Room may be viewed via a Blackboard class or an opening address. The following Fig 3.10 Blackboard collaborate.



Fig- 3.10 Blackboard collaborate

### 4. Comparison Table

The following Table: - 4.1 and 4.2

Comparison table for online meeting tool

### 5. CONCLUSION

Virtual meeting tools are more commonly used for interacting with people and transferring data with them. Some tools are paid versions and other basic versions are free of cost. All tools provide video conferencing and structure limitations in the tools. Video conferencing is one of the finest ways for big companies to interact since it provides a quick and dependable mechanism for the whole organization to connect, discuss, and

cooperate. Paid versions are much better than basic free virtual tools because paid versions have many more features

compared to the basic level of tools. Most of the virtual tools mainly used for educational purposes can be easily handled by learners.

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Meeting tool name/Categories	1. Zoom	2. Skype for business	3. Slack	4. Big Blue Button	5. Blue Jeans
<b>Feature key function</b>	Video Conferencing tool	Video Conferencing tool	Video Conferencing tool	Video Conferencing tool	Video Conferencing tool
<b>Screen Sharing</b>	Yes	Yes	Yes	Yes	Yes
<b>Maximum attendee numbers</b>	1000	250	No limit	150	25 to 200
<b>Maximum length of the meeting</b>	24 hours	24 hours	15 to 30 Minutes	1 hours	No limit
<b>Other limitation</b>	Up to 1,000 with large meeting add-on.	Each person can have maximum of 1,000 conferences	Member can send unlimited messages.	Only one person can share web cam in 100 members	The meeting will continue until the moderator ends the meeting.
<b>Mobile App</b>	Yes	Yes	Yes	Yes	Yes
<b>Mobile version needed for meeting tools</b>	Android version 4.0	Android version 4.0	Android version 8	Android version 6.0+	Android version 8.1
<b>PC</b>	Web based	Web based	Web based	Web based	Web based
<b>Business</b>	Yes	Yes	Yes	Yes	Yes
<b>Pricing</b>	Basic free/ Pro version \$14.99 per month,	2\$ per month	Free	12\$ per month	Standard \$9.99 per month

Table: 4.1 Comparison virtual meeting tool

<b>Meeting tool name/Categories</b>	<b>6. Whereby</b>	<b>7.GoToMeeting</b>	<b>8. Cisco WebEx</b>	<b>9. Google Meet</b>	<b>10. Black board collaborate</b>
<b>Feature key function</b>	Video Conferencing tool	Video Conferencing tool	Video Conferencing tool	Video Conferencing tool	Video Conferencing tool
<b>Screen Sharing</b>	Yes	Yes	Yes	Yes	Yes
<b>Maximum attendee numbers</b>	50	150	1,000	500	500
<b>Maximum length of the meeting</b>	45 Minutes	24 hours	24 hours	60 minutes	420 Minutes
<b>Other limitation</b>	The free plan has a 45 minutes time limit for each meeting	GoToMeeting can potentially handle up to 250 attendees in session.	Up to 10,000 participants and 500 host, co-hosts, and panellists.	User to hold one-on-one for group calls 24 hours.	No limitation is available
<b>Mobile App</b>	Yes	Yes	Yes	Yes	Yes Chrome only
<b>Mobile version needed for meeting tools</b>	It will open Chrome only.	Android OS 5	Android 12	Android 5.0	Android 9+
<b>PC</b>	Web based	Web based	Web based	Web based	Web based
<b>Business</b>	Yes	Yes	Yes	Yes	Yes
<b>Pricing</b>	Basic free/ Pro \$6.99 per month	\$12 per month	Basic free/ Meet plan \$13.50per month	Free, also paid version available	\$300 -\$9,000

Table: 4.2 Comparison virtual meeting tool