



VIRTUAL REALITY TOUR: A MEDIUM TO MAKE THE LIBRARY STUNNING

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ABSTRACT:

A virtual tour could be a simulation of an existing location, usually composed of a sequence of videos or still images. It can also use other multimedia elements like sound effects, music, narration, and text. The panoramic tour and "virtual tour" have mostly been related to virtual tours created employing a 360-degree camera. Such virtual tours are made from a variety of shots taken from one vantage. The camera and lens are rotated around what's brought up as a no parallax point 360 degree camera is employed to require the shot virtual tour. A 360-degree camera is accessible within the type of an app furthermore as hardware. e.g. Google Street View, Panorama 360 (apps) and Gopromax, Vecnosiqui (hardware). If the virtual tour of the library is formed then the library will become stunning and accessible. The Stack Room, Reference Section, Counter, Periodical Section, Library Rules and Regulation, and other facilities will be made visible and realized. With the assistance of virtual reality tour software, we can connect one panoramic picture and video with another one. We can move it to any angle. The kuula, Matterport software, etc are used to make the tour. This paper will describe the stages of a virtual tour and the technology to apply in the library.

Key words: - Virtual, Reality, Tour, library, software, Hardware, Technology, 360-Degree Camera

INTRODUCTION:

Virtual Reality (VR) is a computer technology that uses headsets to create an immersive, computer-generated simulation that allows end-users to experience, move about in, and interact with this virtual world, shutting out the real world. This is presented to the user in such a way that the user believes and accepts it as a real environment. It is primarily experienced through two of the five senses: sight and sound. The virtual reality technology we can use in virtual reality tour. A virtual tour is a digital solution that lets you walk around and explore particular location or area without visiting it in person. The VR tour are created and used in health, military, marketing, real estate. Why not we use it in library. With these ideas the paper is presented before you. Here the investigator is going to discuss about especially virtual reality tour creation. The tools, technique, apps and software are going to elaborate in this paper.

The investigator will try to serve the effective way before the professionals to make the library stunning.

OBJECTIVES:

The objectives of this study are

1. To introduce the process and significance of VR tours to library professionals.
2. To suggest to the library professionals that it is an effective way to orient the users.
3. To remotely visualize the place as it is and immerse ourselves in that virtual environment with the help of a VR headset.

METHODOLOGY:

The experimental research method has used by the investigator. She utilized free virtual reality tools and software for the study.

LITERATURE REVIEW:

According to Tereza G. Kirner, Andréa T. Matos, and Plácida L. Costa (2006) "LIBRARY IN VIRTUAL REALITY - An Innovative Way for Accessing, Disseminating, and Sharing

Information” They focuses on Virtual Reality (VR) as a very powerful technology that can be applied to the libraries, aiming at contributing to the activities of accessing, disseminating, and sharing information. The paper presents the VR concept and describes some libraries in virtual reality underutilization in different countries. In the final considerations, it is pointed out the use of virtual reality to develop libraries as collaborative virtual environments.

According to Lourdes Díaz-Lopez, Javier Tarango, and Claudia-Patricia Contreras(2019) “Strategies for inclusive and safe education using virtual reality: from the digital library perspective” The study revealed that the digital library works as something beyond a mere repository (in general terms, a place where open-access documents are stored), and also as an educational proposal of innovative services, incorporating virtual reality (VR) to influence both formal (through the provision of scientific content resources) and informal educational processes (through generating resources and services with a social focus for the general public). Under this perspective, digital libraries and VR are positioned as two key elements within a systemic work model.

Virtual Reality Tour:

Virtual tour is a digital solution that lets you walk around and explore a particular location or area without visiting it in person. As for the format of the tour, everyone has a different perception regarding this. The person can recreate and reconstruct the physical experience virtually.

Advantages of virtual tours:

The tourism, hospitality, and health care sector are looking toward an equal physical tour. But indeed, digital tours will not be never ever a replacement for physical tours. However, it is valuable and without reaching, you can realize that space.

Let’s examine some of the key virtual tour benefits:

- Enhance visibility of Services, Resources, and Facilities :

Readers can see the resources and facilities of each section with explanations in the form of audio, text as well as Video. The library can orient its users fully with the help of virtual tours.

- No crowds or no limitation

Most of the time, a digital tour will be an independent experience, so you can get away from crowds, disturbances, and pressure, and focus only, on what you want to see. This experience can happen at any time and anywhere, as long as you have access to the necessary hardware and software

- A substantial marketing tour

Taking the time to create a digital tour is not easy or cheap, but is a great way to break ahead of the pack and attract the visitors in presentation value. You can give new visitors a good reason to visit your locations in person or provide their services online, as well as boost your virtual presence.

- Freedom of movement

Digital visitors are not constrained by time or physical ability – they can view the locations of a tour at their own pace and get an unprecedented level of detail. For example, they can also “approach” exhibits and objects up close, seeing them with a beautiful level of detail.

- Show more than physically possible

Not all digital tours are model after existing physical locations. Thus, you can create an experience (e.g. underwater, in space, in a fantasy world, in the human body) that users would not be able to get anywhere else, stimulating their senses, imagination, and state of awe.

Virtual tour features:

The features of a virtual tour are as follows,

- Rotate and zoom: In the picture and video, CW we can rotate and zoom for micro-observation and make special attention.
- Click and learn: One picture is linked to another one. When we click on that dotted points and pictures, we reach into other surroundings. By clicking, we can get the text message in the form of instruction as well as video.

- **Virtual interactions**

Sometimes, interactions are more elaborate than text showing up on a user's screen. For example, they might unlock animations showing some processes, or even handle objects – opening doors, picking up and moving items, etc.

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- **Teleportation:**

Some tours are designed for gradual movement that mimics walking, while others let you jump around different locations at a moment's notice. In some cases, users open a map and select the point that they want to be teleported to.

- **Virtual tour guide**

To fully mimic a traditional tour experience, some providers add a digital avatar or AI in the tour, guiding visitors and providing information through audio tracks.

Tools for Virtual Reality:

360 degree Camera :

We can visualize and experience a place as it is by virtual tour. But simple photograph and video we cannot use for virtual tour creation. For the same we have to catch the view from every angle by 360 degree camera. Many camera apps and hardware's are available in market. e.g. Google Street View, 360 Pro, Vizo 360, Panorama 360, Photaf Panorama, Cardboard . Camera etc apps are available. With this Insta360 One X2, GoPro Max, Ricoh Theta Z1, Vecnos Iqui, Samsung Gear 360 etc 360 camera devices are available for creating the tour.

Virtual Reality Tour Creation Software:

The digital technologies and virtualizations are allowing people to experience and virtualize from wherever they are. Some of the top Virtual Tour Software solutions are adopted by several segments, to provide exceptional and unbelievable experience to the patron. VR tour is a visual representation of a specific location in a panoramic and 360-degree view can be attained with virtual tour software. Without a physical presence, the users can visit the place with this tool.

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Features of Virtual Tour Software:

Following features, you will find in virtual tour software

- The photos in 360 degree you can Drag and Drop
- Your tour you can publish publicly immediately.

- You can create the hotspot from one space to another.
- You receive auto-response
- It can be used for professional photography
- Enlarge and Email Button
- Floor plan can be created and utilized it by map button
- Viewer Traffic Statics
- Google Street View Style
- Different View

Virtual Reality Tour Creation Software's are as follows:

Kuula :

It is virtual tour creation software. Some features are free hence we can utilize them. But for advanced features and to create the tour very professional then, you have to purchase it. Download your 360-degree images and upload in kuula software. You can create the hotspot and create the tour. You can add sound and video links but they are available in the pro version.

Matterport:

This is VR tour creation software. It is paid base. Matterport is the standard for 3D space capture. Our all-in-one platform transforms real-life spaces into immersive digital twin models. So much more than panoramic scans, Matterport empowers people to capture and connect rooms to create truly interactive 3D models of spaces.

Concept 3D:

Concept3D is a leader in creating immersive online experiences with 3D modeling, interactive maps and virtual tours. It uses to create the building renderings, interactive maps and virtual tours. Some features are free in Concept 3D.

Flow to Design and Development of Virtual Tour:

VR Headset:

VR Headset we can use to immerse and interact with virtual environment.

The Google Cardboard, Google Daydream, Gear VR, Oculus Rift, HTC Vive, Sony PSVR etc are the VR headset available in market.

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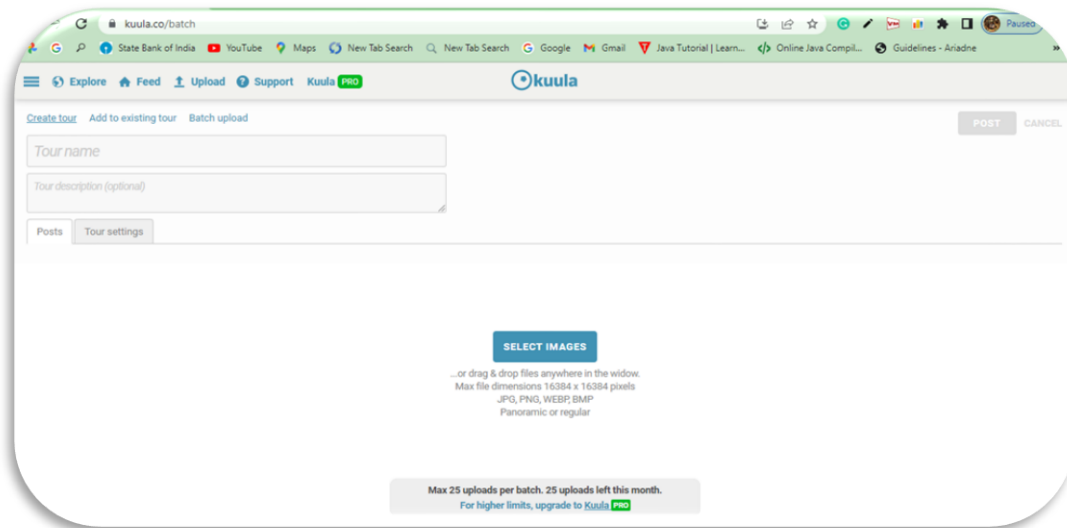


Figure-1. Screenshot of Kuula Software

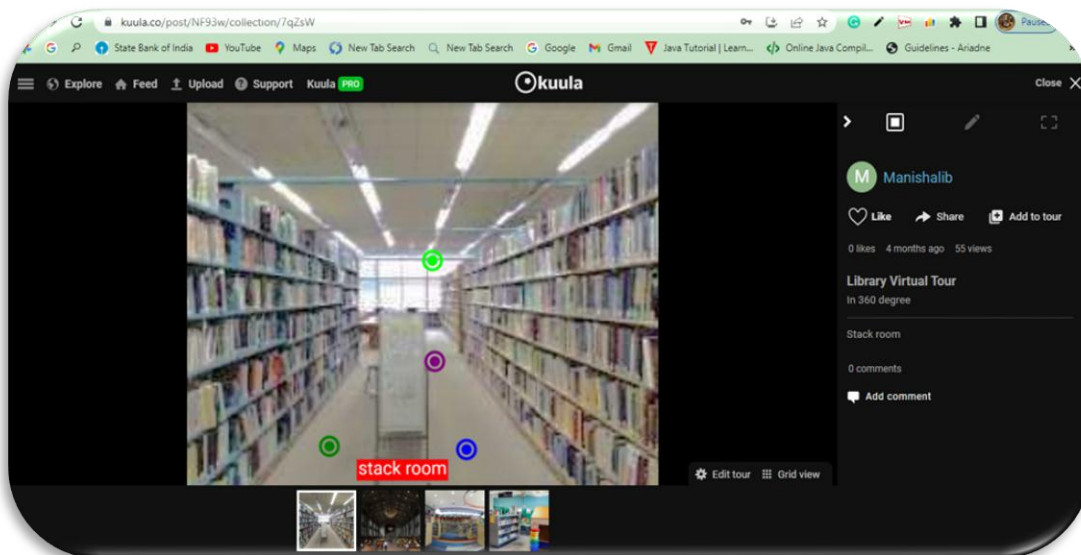


Figure-2 Library Virtual Tour Screenshot of Kuula software

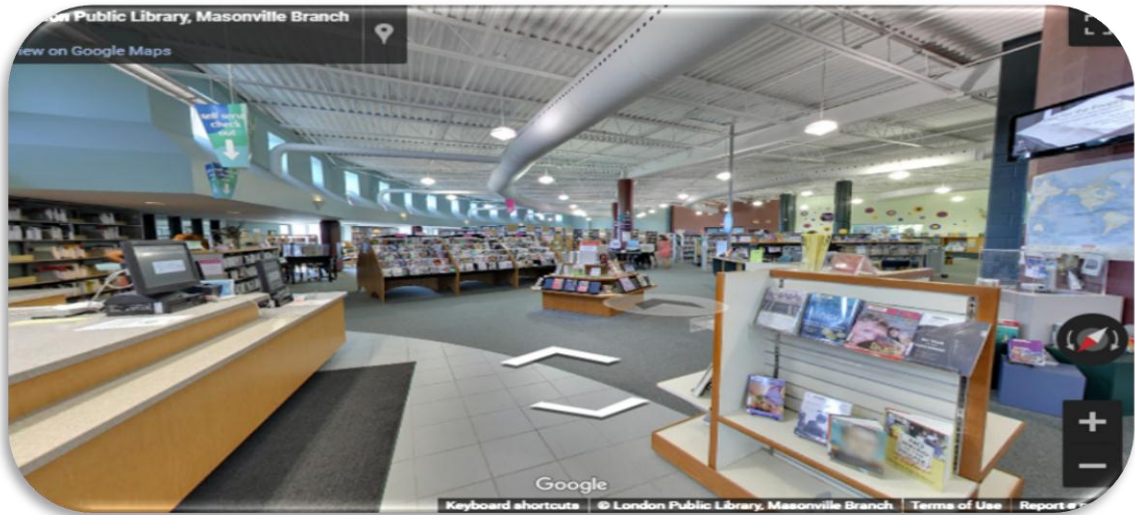


Figure 3 Screenshot of Library Virtual Tour of Matterport Software

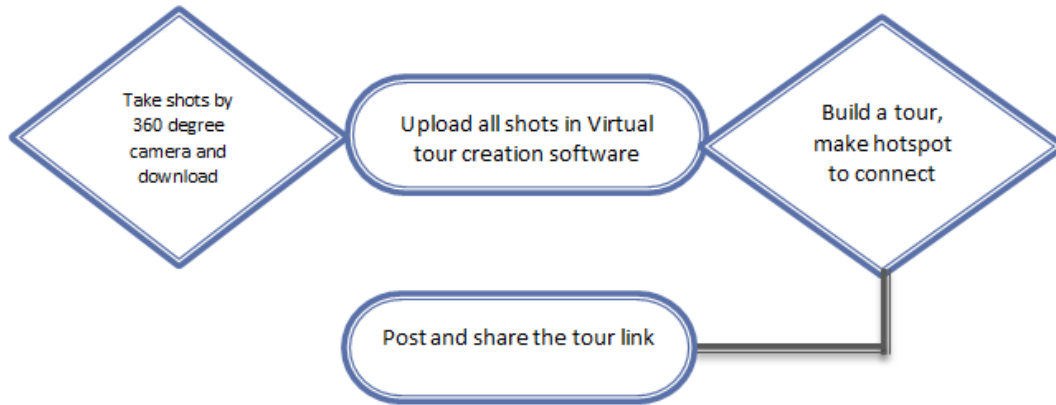


Figure 4 Flow of Virtual Tour Creation

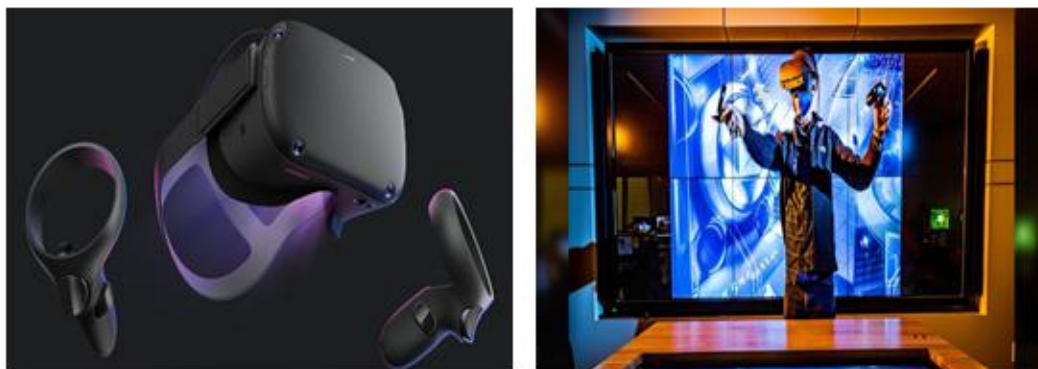


Figure 5 VR Headset