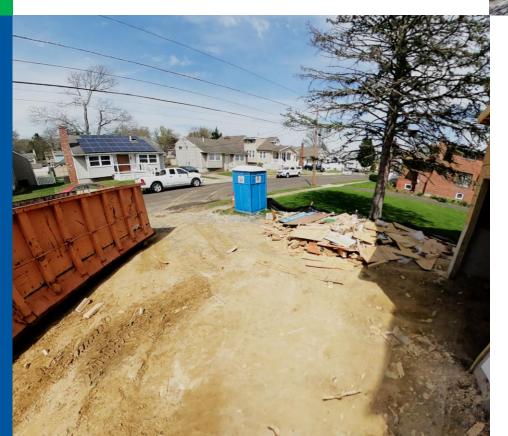


solutions that transform





## 360° Experiences

Jayant Mathur, *Sr. Program Specialist*NextGen Training Consortium | September 4, 2024



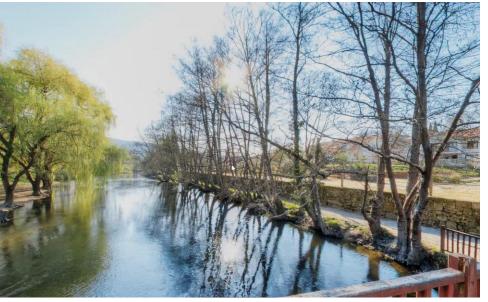
### Meeting Agenda

- Introduction to 360° experiences
  - Benefits of the technology and Use cases
  - Features and capabilities: Demonstration of a 360° experience
- Collecting, processing, and producing 360° content
  - Hardware and equipment required
  - Best on-site practices during filming
  - Recommendations on post-processing
  - Development and distribution
- Open forum and warp-up

# **ENERGY**

### Introduction to 360° Experiences





"Digital media that present a panoramic or spherical perspective of a scene in all directions from a central viewpoint" - offering a heightened sense of immersion, presence, and engagement.

Traditional media display a limited field of view; 360° media allows visualization in any direction.

# **ENERGY**

### Benefits of the Technology and Use Cases



Real Estate



**Tourism** 



**Education and Training** 

360° experiences promote spatial perception, reasoning, and memory recall.



### Benefits of the Technology and Use Cases

#### **Panel with Connor Wells (NJNG)**

- When and how did you first learn about 360° experiences?
- For your role, what do you find different and useful about the technology compared to others you've used in the past?
- How have you (or plan to) leveraged 360° experiences to enhance your training and workforce development programs?







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### Features and Capabilities

Live demonstration of a template 360° Experience created using Articulate Storyline

**Link:** https://demo.dsjqay5o4smfn.amplifyapp.com/



### Collecting, Processing, and Developing Content

Key considerations on capturing and editing raw footage and developing 360° experiences for distribution



### Collecting 360° Images: Equipment & Accessories

#### Hardware and equipment required

- GoPro Max w/Battery
- Battery Charger + 2 Additional Batteries
- 60" Tri-Pod w/weight
- 10' Extension Selfie Stick
- MicroSD Card
- Portable Charger Power Bank
- Portable Hard Drive
- Travel Case
- Other Attachments as Required (e.g., mounts)





### Collecting 360° Images: Shooting Footage

#### **Best on-site practices during filming**

- Clean Lens for Each New Shot
- Plan Your Shots
  - Take several shots of the same subject/object from different positions
  - Consider the environment
  - Stay clear of clutter
  - Storytelling
- Stabilize the Camera
  - Use a Tripod or Monopod
  - Gimbal or Stabilizer

- Positioning the Camera
  - Eye Level
  - Mount Creatively
  - Invisible Stitching (GoPro)
- Control Lighting
  - Avoid harsh contrasts
  - Golden hour (early morning/late afternoon)
  - Avoid direct sunlight
  - Storytelling



### Collecting 360° Images: Shooting Footage

#### **Best on-site practices during filming**

- Mind Your Footage Stitching
  - Keep objects of interest out of stitching line
  - Keep subjects 2-3 feet away to avoid warping
- Audio Capture
  - Use external microphones
- Postproduction
  - Utilize GoPro's software like GoPro Player to process RAW files

- Be Aware of Yourself
  - Behind cover
  - In an area to be cropped out
- Use Time Lapse or Hyperlapse
  - For long, dynamic scenes or motion



### Example of Blending In

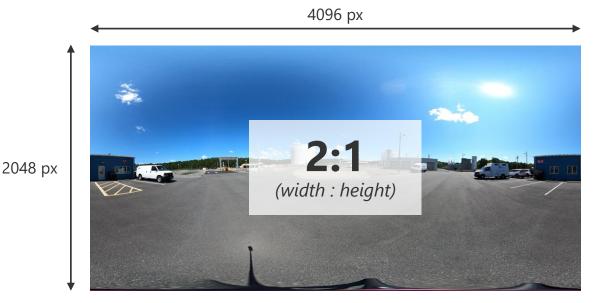




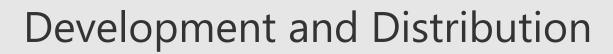
### Processing 360° Images

#### **Recommendations on post-processing**

- Images captured in 360° when flattened <u>must</u> be in a 2:1 aspect ratio
- Adobe Photoshop (or similar programs) is well suited to editing the 360° images
- Editing images in 360° produces better results than editing the flattened image
- **USE CAUTION** with Al-powered image editors. The content generated may be inaccurate









#### **Experiences well-suited to deliver in 360°**

- Tours of Facilities
  - Training center
  - LNG plant
  - Take station
- Tour of Jobsite
  - Traffic control
  - Excavations
  - Material
  - Equipment

- Pre-Trip Inspection of Vehicle
- Heavy Equipment Operation
- Meter Set Configurations
  - Residential
  - Commercial
  - Industrial
- Tapping and Stopping
- Damage Prevention Activities
- Construction Inspection Activities

### Development and Distribution



#### **Estimates for one 360° experience**

- 1-5 hours for collecting and processing raw footage
- 8-20 hours in developing the experience with training material
- Costs ~\$1500 \$2500\* \*range from third-party averages







Development using Storyline's 360° features produces SCORM-wrapped experiences for an LMS







## Thank you. Questions?

#### Or share a little about these:

- Was this your first time learning about 360° Experiences for training?
- Did you notice any technology limitations that would make you hesitate to use it at your organization?
- What was something new or interesting in today's demonstration?