

Buswells Hotel

21<sup>st</sup> March 2018

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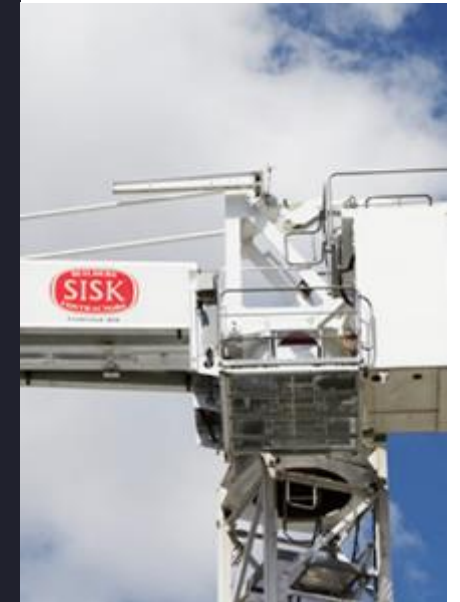
# AR & VR in Construction

CitA, Eastern BIM Region

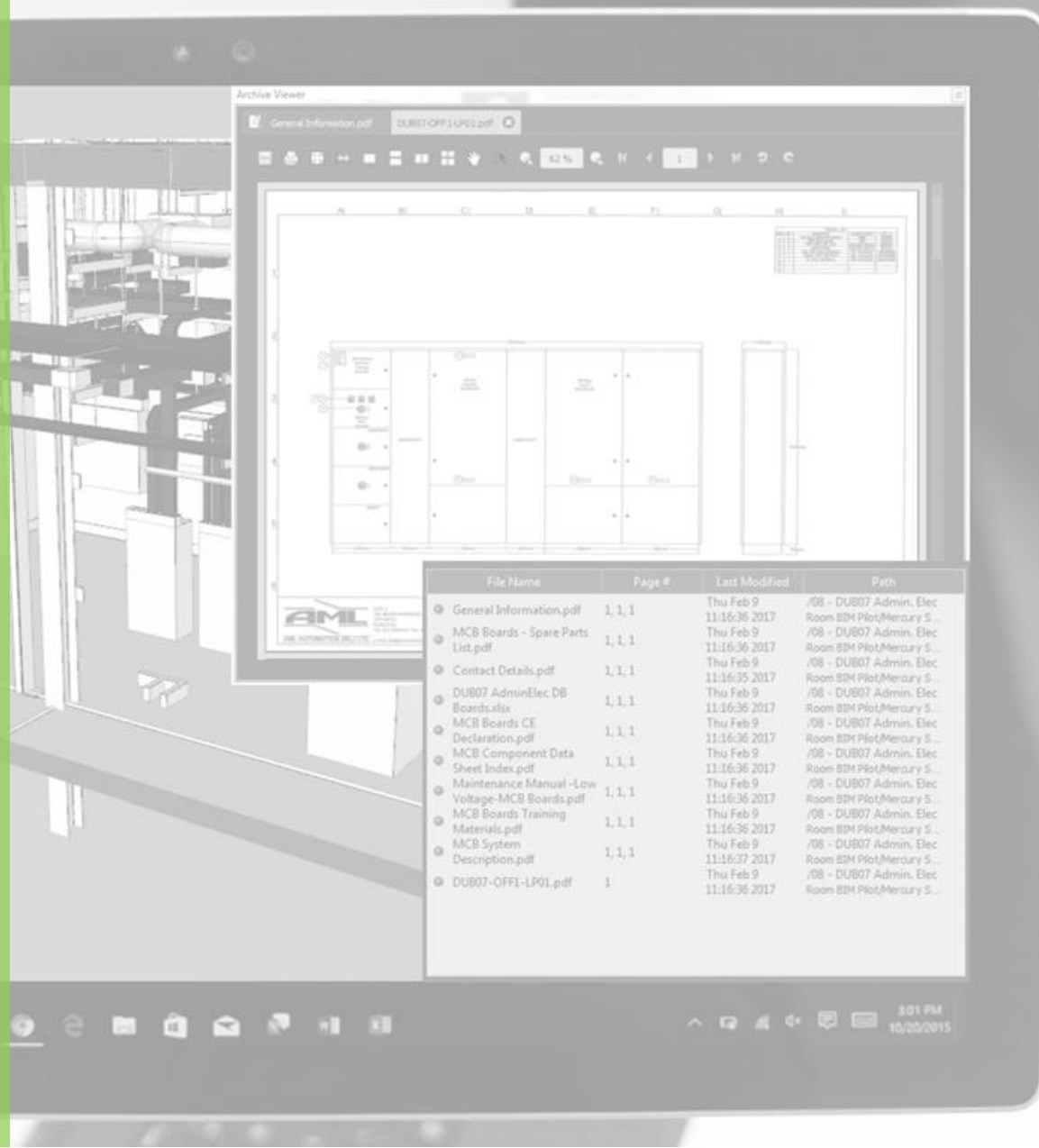
# AR & VR in Construction

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# AR & VR in Construction Introduction



# BIM Regions

## Purpose of BIM regions...

The BIM Regions are a **collaboration** of **specialist interest groups** who will champion BIM in their respective specialist areas. Their purpose is to raise **awareness of BIM**, promoting a shared understanding of the value proposition and issues affecting the implementation of BIM in their respective areas of interests.

The BIM Regions will seek to develop consistency of messaging in a clear and concise manner to support both new and existing professionals in their respective BIM journeys.

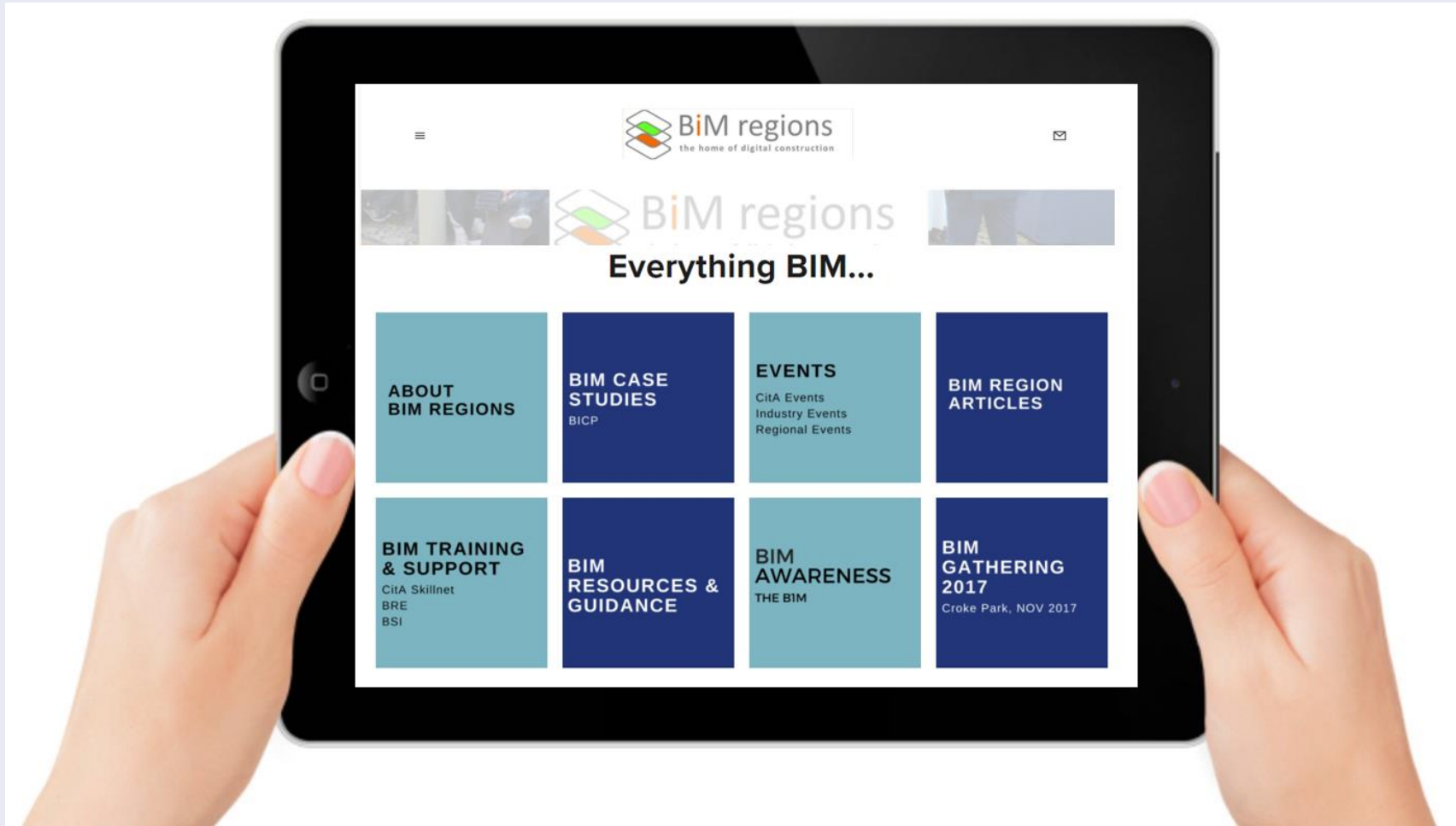
# BIM Regions Website

<https://www.bimregions.ie/>



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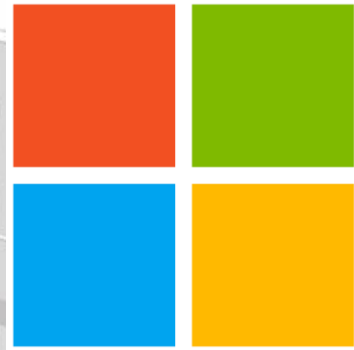
# AR & VR in Construction

## Section Two



AR & VR in Construction

# Section Three



# Microsoft HoloLens



AR & VR in Construction  
Section Four  
Sisk 4D VR  
The Curragh Racecourse



**Established 1859**

**THE CURRAGH**  
WHERE CHAMPIONS ARE MADE

# Our Vision

To be the Best at Creating Value for our  
Customers, Shareholders and Our People

# INNOVATION

- Utilise relevant cutting edge technology as part of our project delivery
- Listen to feed back from our projects
- Research the best solutions available to deliver our project's
- Deliver Innovation to maximise our time and minimise rework



On-site BIM Hub



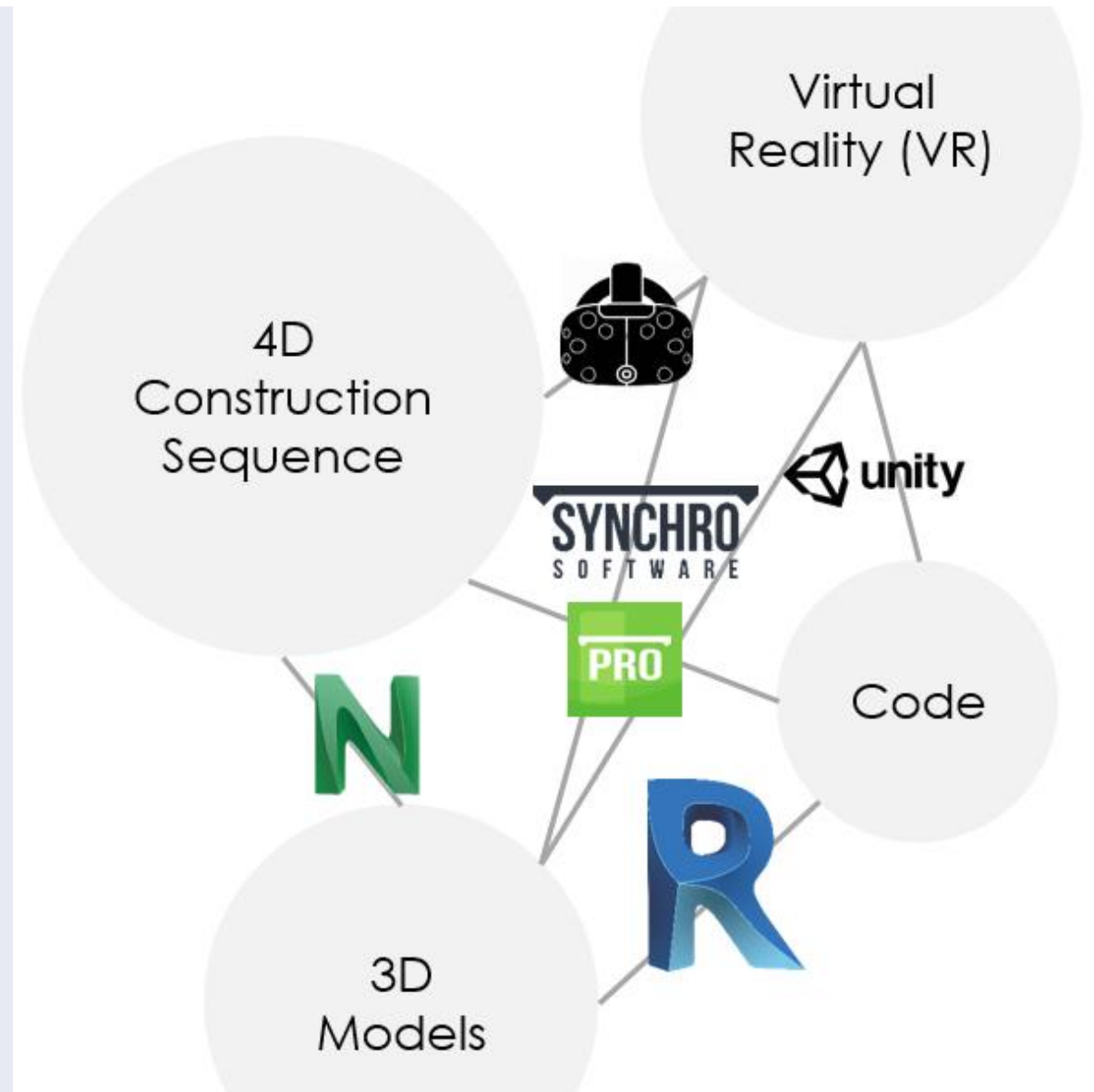
On-site Mobile BIM Hub



Aerial Drone Footage

# 4D VR BIM

- The Oculus Rift Headset allows us to view 4D Construction sequence “Synchro model” of The Curragh Racecourse re-development in a first person, virtual reality environment in which you can walk the site and see the construction sequence right before your eyes.



## 4D VR on The Curragh Racecourse

- Irelands First Interactive 4D VR (Virtual Reality) Construction Sequence has been established on the Curragh Racecourse.
- *"It allows you to attend site, virtually, at any point in the future"*

### INNOVATION

Irelands First VR interactive 4D Construction Sequence

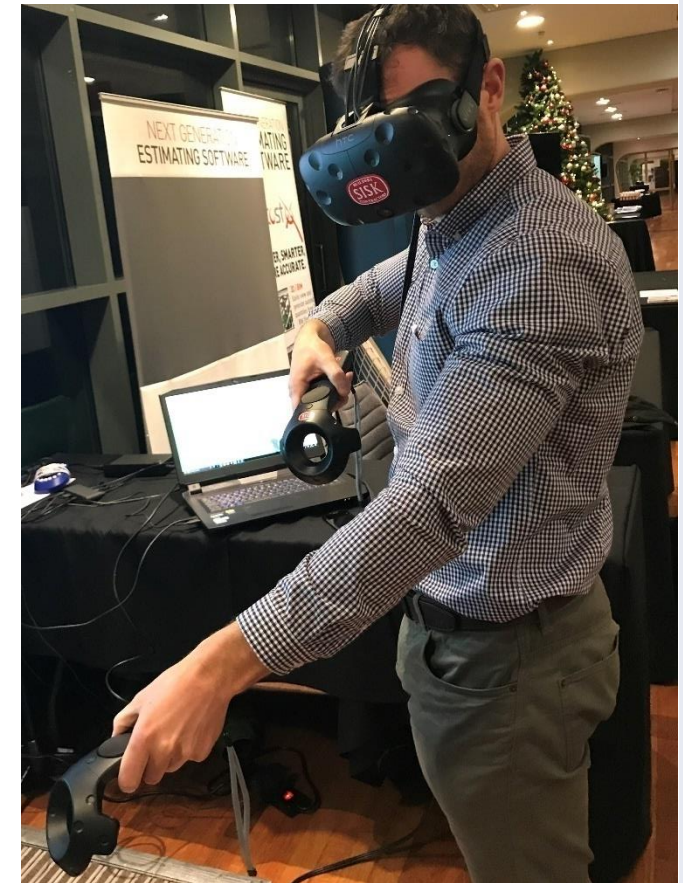


# INNOVATION

Ireland's First Interactive 4D VR (Virtual Reality) Construction Sequence



4D VR using the HTC Vive & Oculus Rift



## 4D VR & S5 Risk Focus Areas

- Sisk are also linking the 4D VR experience to the S5 Risk Focus Areas for the identification of risks through the first person VR environment during the construction stage of a project.
- The S5 items are placed in the 4D VR model environment.
- A traffic light system is used to identify the risk. A circle beside the S5 goes:
  - **Red** when a real risk arises,
  - **Amber** when a low risk is possible and
  - **Green** when there is no risk.



# INNOVATION



## 4D VIRTUAL REALITY



**Ireland's First**  
Interactive 4D VR  
(Virtual Reality) Construction Sequence.





# AR & VR in Construction

# Section Five



AR & VR in Construction

Section Six

Q&A

Thank You



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