



BACKGROUND

Digital adoption is evolving the archaeological ways of practice as emerging technologies are becoming more popular. Recently, digital focus areas of archaeology have included drones for surveying land, AI for quickly classifying different artefacts and Geographic Information Systems (GIS) for mapping and analysing data to assess locations and the distribution of historic artefacts.

Following a recent VEC campaign promoting the potential of digital heritage, the Garstang Museum wanted to explore how they could take advantage of emerging technologies for digitalising heritage assets for improving preservation and accessibility.

Based in Abercromby Square within central Liverpool, Garstang Museum is best known for its large Egyptian and Sudanese collections, including an Egyptian mummy at the heart of their Egyptian Afterlife gallery. However, in addition to these popular items, there are thousands of unique historical assets and artefacts, which are stored away safely due to spacing, and preservation needs.

To ensure the Museum can safely share more of these artefacts with an even wider audience, the teams worked with the VEC to investigate how they could utilise digital tools for safely capturing these intricate artefact details and then use them as promotional tools or learning resources.

SOLUTION

The VEC's Industrial Digitalisation team used light hand-held scanning devices for capturing unique data and imagery of numerous Egyptian artefacts, which meant no direct handling whilst capturing delicate details, colours and shapes of the artefacts.

The team captured a variety of items during the visit including figurines, pots and even impressive coffin lids.

The VEC then assessed this data, piecing the imagery together to form a life-like, 3D photo of each asset.



In addition to the specific artefacts, the VEC also used photogrammetry technology to scan the Museum itself including exhibition spaces and heritage assets on display. This enables the teams the capabilities for offering remote visitors a virtual tour of the museum with a 'walk-through' effect. Individual artefacts could be further explored in higher detail using 'Sketchfab'. This can improve inclusivity, enabling those who find it difficult to easily access the museum, the opportunity to have a realistic experience.

IMPACT

Garstang Museum was impressed with the work carried out by the VEC and is now looking to invest around £40k in similar scanning equipment to complete additional scans in-house for future exhibitions and additional artefacts.

Not only does this scanning technology support museums and galleries in virtually preserving and promoting heritage assets, but will enable more communities to gain access to these, whilst encouraging further support and visitors to the Garstang Museum. This engaging digital content offers greater interactivity than before, encouraging further functionality and engagement for improved learning whilst creating a unique and detailed record of current and previous artefacts the Museum has managed.

Using digital technologies for improving the preservation of heritage items can also result in hundreds of additional artefacts, which have previously been stored away, to be better shared and promoted. This will help Garstang Museum to remove restrictions of limited floor space for artefacts and future exhibitions.

"Digital engagement with our collections is an increasing focus of the work we do at the Garstang Museum, but creating 3D representations of our artefacts doesn't end there – it is also very useful for documentation, research, and conservation purposes."

"With our collections comprising of tens of thousands of artefacts, what this technology and the VEC team has done is to allow for us to create accurate 3D records of ancient artefacts in a fraction of the time it has taken us using other methods in the past."

- Dr Gina Criscenzo-Laycock - Curator of the Garstang Museum; Libraries, Museums and Galleries

The VEC continues to explore new and exciting ways to capture, visualise and interact with Culture, Arts & Heritage content. Whether this be through ownership of digital assets (NFTs) or embracing galleries virtually on digital devices.

See how our team can support your Digital Culture, Arts & Heritage journey...

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