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INNOVATION

THE DIGITAL BRICKS: WORLD'S HIGHEST RESOLUTION INTERACTIVE DISPLAY

The Digital Bricks at the entrance to Science Gallery Melbourne fuse technology and architecture with Australia's indigenous culture and offer an innovative interactive canvas to Melbourne's urban audience.

WHO?

- ▶ Susie Anderson, Digital Experiences Manager, Science Gallery Melbourne
- ▶ Dr Niels Wouters, Head of Research, Science Gallery Melbourne
- ▶ Melbourne Connect
- ▶ University of Melbourne
- ▶ Science Gallery Melbourne



Dr Niels Wouters, Head of Research and Susie Anderson, Digital Experiences Manager at the entrance to Science Gallery Melbourne (photo: Toby Welch, 2021)

WHAT?

Science Gallery Melbourne presented its award-winning *The Digital Bricks*, featuring 226 high-definition LED screens embedded into the clay brick ground floor structure of the Melbourne Connect Building. The transparent bricks are also touchscreens, creating unique interactive visual experiences that welcomes visitors into Science Gallery Melbourne.

The technology behind *The Digital Bricks* was specifically designed for the building and is a result of [design research](#) led by Science Gallery Melbourne and Melbourne Connect, in partnership with the [School of Computing and Information Systems](#). Research and development for the project took three years and brought together an interdisciplinary collective including construction professionals, graphic designers, electronics engineers and lighting design teams.

The Digital Bricks is curated to engage visitors with multiple historic and cultural stories of the local area. Inspired by the theme, 'If these walls could talk', the unique and ever-changing project has won the international Media Architecture Award for Animated Architecture with its debut content program *The Digital Birthing Tree*.

The First Peoples-led content program drew on the University's vast archives and collection of materials with the aim of connecting the knowledge of Australia's First Peoples and the colonial history of the local area. The story provided an opportunity to honour Aboriginal women and pay homage to the Royal Women's Hospital, which formerly occupied the site. Future projects for the bricks will expand their potential and, throughout the year, feature a rotating program of content related to Science Gallery Melbourne's annual exhibition program.

WHAT THEY SAID?

“Emerging economic and demographic trends stimulate universities across the globe to promote better connections with industry, governments and communities. Architecture is crucial in driving their success by providing spaces that encourage convergence, connectivity and proximity. I have designed and acquired funding for The Digital Bricks, a world-first and award-winning architecturally integrated media façade. (...) The media façade will provide Science Gallery Melbourne and its partners with opportunities to strengthen their pioneering role in terms of architectural design, urban technology, human-computer interaction, and public engagement”

- Dr Niels Wouters, Head of Research, Science Gallery Melbourne

“It was a challenge having the digital platform drive the project, rather than the story. Though through the project partners we knew we could use the framing of place – Royal Women’s Hospital – as the initial content piece. There was fantastic research done and consultation begun with an Indigenous Narratives advisory group from within the University. We chose to create the content piece this time and use all of the bricks together like a canvas, so it can be viewed as a whole from a distance. We look forward to experimenting further with different content types.”

- Susie Anderson, Digital Experiences Manager, Science Gallery Melbourne



The Digital Bricks at the entrance to Science Gallery Melbourne. (photo (Peter Casamento, 2021)



The Digital Bricks at the entrance to Science Gallery Melbourne. (photo: Toby Welch/Arup, 2021)

LINKS

Learn more about the Digital Bricks at:

<https://melbourne.sciencegallery.com/digital-bricks>

<https://pursuit.unimelb.edu.au/articles/if-these-walls-could-talk>

Video: If These Walls Could Talk

<https://www.youtube.com/watch?v=hFtS1-BI3K8>

WHAT WERE THE BENEFITS AND IMPACTS?

- ▶ Interdisciplinary collaboration
- ▶ Public Engagement
- ▶ Employee Engagement
- ▶ Engagement with real research

Sources: Susie Anderson, Digital Experiences Manager Science Gallery Melbourne

Compiled by: Jahitza Balaniuk, Science Gallery International in 2021

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