

# V&A Dundee

National Lottery Heritage Fund  
Final Evaluation Report, August 2019

The logo for V&A Dundee, featuring a large, white, stylized serif font for the letters 'V' and 'A', with a smaller ampersand '&' in between. The logo is positioned in the lower-left corner of the image, overlaid on the water.

V&A

This evaluation report has been commissioned by  
Design Dundee Limited and Dundee City Council.

### Our founding partners



### Our key funders



# 1. Introduction



## On 15 September 2018, V&A Dundee officially opened to the public creating a new landmark building for Scotland and the nation's first design museum.

**The opening marked the culmination of over 11 years of planning to realise the new museum, and its contribution to the local community, Dundee's redevelopment, our understanding of design heritage and encouraging new creativity.**

Since opening, the museum has welcomed over half a million visitors through its doors<sup>1</sup>, significantly exceeding original estimates. This included welcoming a remarkable 100,000 people in its first three weeks of opening.

Scotland's first design museum has taken an important journey that provides a powerful example of the significance of funding from the National Lottery Heritage Fund, alongside other key funders, in supporting improved outcomes for heritage, people and communities, including the wider economic impact.

Standing at the centre of Dundee's waterfront transformation, it has been widely recognised for its contribution to the repositioning of the city as a great place to live, visit, study and invest in.

Inside it is home to Scotland's largest museum-standard changing exhibition galleries and permanent Scottish Design Galleries, featuring approximately 300 objects showcasing Scotland's rich design heritage – from the 15th century to the present day – and its significance worldwide. This includes the conservation, restoration and reconstruction of the truly remarkable Oak Room designed by Charles Rennie Mackintosh, in partnership with Glasgow Museums and Dundee City Council.

Taking years of careful planning, V&A Dundee has put people at the heart of its programming in the lead up to opening, engaging people in design through projects, events, talks, workshops and exhibitions across Dundee, Scotland and internationally.

V&A Dundee is committed to enriching lives through design, with the vision "To create an international centre for design, inspiring people and promoting the understanding of design." The museum opening demonstrated that vision through a vibrant programme which included a public festival, exhibitions, new design commissions and events.

The major capital funding programme, one of the most ambitious ever for a cultural project in Scotland<sup>2</sup>, offers funders and future National Lottery Heritage Fund projects the opportunity to learn from V&A Dundee's experience, together with the key lessons from opening a completely new cultural attraction and founding a new institution to run it.

This includes the innovative partnership approach of V&A Dundee's founders – the V&A, Dundee City Council, the University of Dundee, Abertay University and Scottish Enterprise – in successfully delivering this landmark project in the city of Dundee.

This report sets out to evaluate the V&A Dundee project from the National Lottery Heritage Fund second-round grant being awarded in January 2014 until the first six months of opening. Heritage Grants applications go through a two-round process, which allows applicants to apply for funding during the early stages of project planning and submit a more detailed second application after the development phase<sup>3</sup>.

V&A Dundee and Dundee City Council led the evaluation with support from an external consultant, Elaine Wilson, who also compiled the report. The report is based on the evaluation work undertaken by V&A Dundee as part of its Evaluation Action Plan; Quarterly Public Funder Updates and supporting appendices; case studies demonstrating V&A Dundee's impact on improved outcomes for different individuals; and a series of interviews and workshops with key figures involved with the project to capture key learning.

As well as the requirements set out by the National Lottery Heritage Fund, the evaluation report will evidence how the project has contributed to meeting the priorities and requirements set by other key funders.





V&A Dundee. Credit: Ross Fraser McLean

## 2. Realising V&A Dundee





Main entrance hall of V&A Dundee. Credit: ©Hufton+Crow



## 2.1 Project Origins And Timeline

V&A Dundee is the first ever design museum in the UK outside of London, Scotland's first design museum, and a new major cultural development for Dundee and its surrounding area, wider Scotland and the UK.

It is at the centre of Dundee's £1bn Waterfront development and is expected to provide a major boost to the local economy<sup>4</sup>, employment, civic pride and the overall profile of the city as a visitor destination and investment opportunity.

The project is one of the largest cultural projects to take place in Scotland for many years.

The idea for the project first came about in 2007, when the University of Dundee invited the V&A to informally explore the possibility of a partnership. With support from Dundee City Council and Scottish Enterprise, discussions developed around the concept of a dedicated building in Dundee with gallery space to display V&A's collections more widely across the UK, host V&A touring exhibitions and to play an important role in promoting the application of design.

In 2008, a feasibility study was undertaken to explore the concept in more detail, followed by the development of a business plan to consider how the concept might work in reality. Abertay University gave its support to the project, followed by public support from the Scottish Government for the project in principle in 2009.

By June 2010, a business case and business plan had been developed, which was approved by the Scottish Government and the project was subsequently awarded start-up funding to enable the capital project to progress to the first design stages. In that year, an international competition was launched to appoint an architectural practice to develop a landmark building on Dundee's Waterfront to be the home of V&A Dundee, and the Design Dundee Ltd Board was established. The appointment of the museum's Director followed in July 2011.

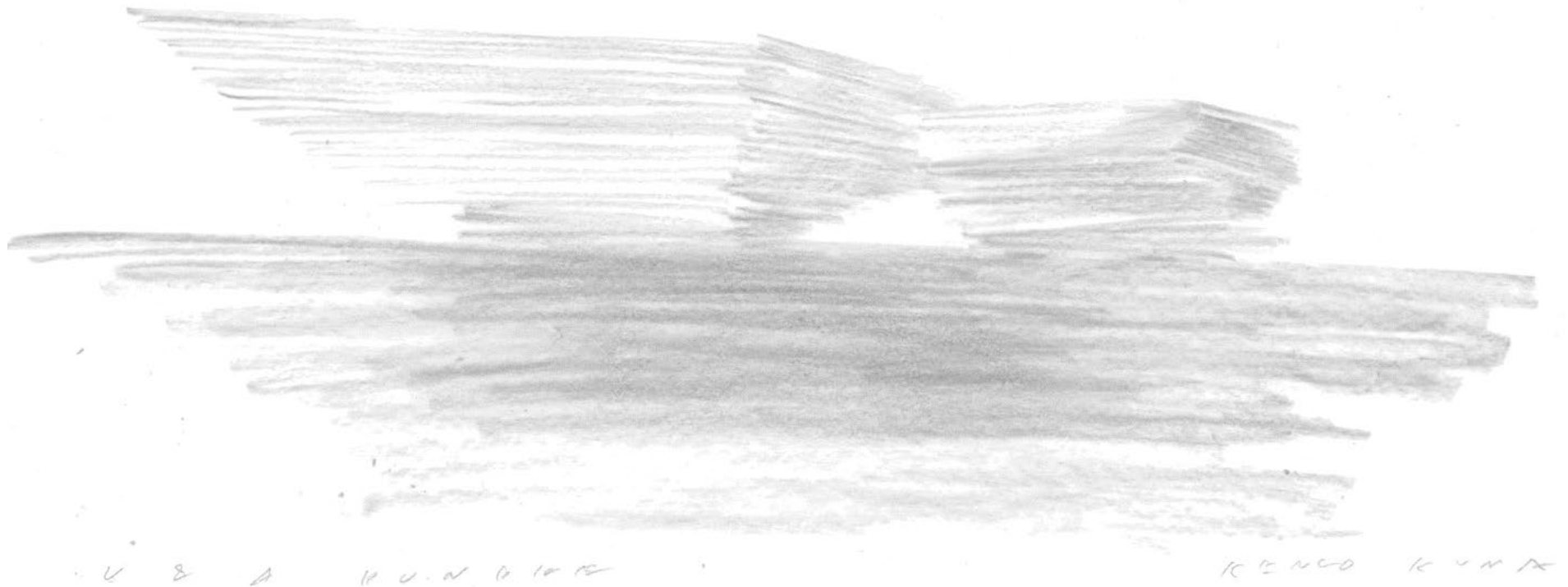
From over 120 international entries, a shortlist of six designs was selected and showcased in an exhibition to the public at Abertay University's library. Alongside a jury panel, the views of members of the public were taken into consideration through questionnaires and comments left from the over 15,000 people who visited the exhibition or viewed the designs online.

The jury panel made the unanimous decision to select Kengo Kuma & Associates as the competition winner towards the end of 2010. V&A Dundee is Kengo Kuma's first building in the UK, joining other international buildings in his portfolio including the new National Stadium for the 2020 Tokyo Olympics.

Between 2011 and 2015, the cost of the project had been estimated at £49m – a building cost of £45m and a £4m contribution from the general Waterfront budget for forming the site. As of April 2011, the construction schedule provided a start date of August 2012 and completion planned for December 2014. This was then altered to completion at the end of December 2017.

Following the construction tender process, costs were revised to £80.11m and a programmed opening in 2018 was confirmed. This revised budget required significant additional funding to be secured. Dundee City Council also commissioned an independent review into the increase in construction costs, the McClelland Report.

From the point that construction started in 2015 the V&A Dundee project was successfully delivered on time and on budget due to the strength and commitment of the founding partners, its focused project management, and sheer determination of a dedicated expert team of staff to succeed. The museum opened its doors to the public on 15 September 2018 to great celebration.



Kengo Kuma's first sketch of V&A Dundee which demonstrates the simple and effective concept behind the design. Credit: Kengo Kuma & Associates

**PROJECT TIMELINE:****2007**

V&A Dundee first discussed by the University of Dundee and the V&A

**2008**

Feasibility study

**2009**

Scottish Government commits support in principle

**2010**

Design Dundee Ltd formed

**January 2010**

International architectural competition launched

**November 2010**

Kengo Kuma and Associates selected following architectural contest

**June 2011**

Dundee City Council's Policy and Resources Committee endorses that the Council adopt the construction element of the project

**July 2011**

Philip Long appointed as V&A Dundee Director and fundraising begins

**September 2011**

Following the 2011 Spending Review, the Scottish Government confirmed it was making £15m capital available to the V&A Dundee project

**2012**

Partnership agreement signed between Design Dundee Ltd and the V&A National Lottery Heritage Fund first-round pass awarded

**2013**

Planning consent provided by Dundee City Council

**August 2013**

Second-round National Lottery Heritage Fund funding application submitted, along with Stage E design report, Activity Plan, Business Plan and Interpretation Plan

**January 2014**

National Lottery Heritage Fund full grant awarded

**March 2014**

£4.5m capital grant awarded by Creative Scotland

**April 2014**

First outreach project launched, Living Room for the City

**January 2015**

Revised project cost of £80.11m announced

Scottish Government pledged an additional £10m towards the construction of V&A Dundee

Dundee City Council committed £6.5m to capital funding

National Lottery Heritage Fund grant increase of £4.5m awarded

**February 2015**

First national project launched, Design in Motion

**March 2015**

Ground-breaking on the construction site

**May 2015**

Cofferdam works completed

**July 2015**

Oak Room conservation project announced

**August 2015**

McClelland Report published

**February 2016**

Dundee City Council secures Growth Accelerator funding package of £63.8m, including £12.6m for the construction of V&A Dundee

**March 2016**

UK Government announces £5m contribution

**September 2016**

Heritage Portfolio announced as catering operator for V&A Dundee

**October 2016**

ZMMA appointed to design the Scottish Design Galleries

**March 2017**

Removal of red and yellow formwork around the building complete

Start of pre-cast panels being hung on the walls

**Summer 2017**

Cofferdam removal begins

**October 2017**

Cofferdam removal and installation of the pre-cast panels complete

**January 2018**

Building construction complete

V&A Dundee opening date and opening exhibition announced

**From February 2018**

Museum fit-out and galleries preparation

**18 May 2018**

Installation of the Oak Room completed

**Summer 2018**

Achieved fundraising target of £15m

**15 September 2018**

Museum opens to the public

**8 October 2018**

100,000th visitor to V&A Dundee

**29 January 2019**

V&A Dundee officially opened by Their Royal Highnesses the Duke and Duchess of Cambridge

**30 March 2019**

500,000th visitor to V&A Dundee recorded



## 2.2 Governance and founding partners

### Governance

A project group was established in 2008, with officers seconded by the partners and support from external consultants, to take forward the project, followed by the creation of the registered charity Design Dundee Ltd in early 2010 to develop and deliver V&A Dundee. It continues to act as V&A Dundee's operating company.

The Board of Design Dundee Ltd consists of representatives from V&A Dundee's founding partners, the V&A Dundee Director and a number of independent members, including an independent Chair. The Director of V&A Dundee, Philip Long, took up post in July 2011, bringing over 20 years' museum experience to the project.

The Board continues to be supported by the Senior Management Team, which is tasked with the day-to-day operation of Design Dundee Ltd and is led by Philip Long and heads of departments.



V&A Dundee Director, Philip Long. Credit: Julie Howden

**The objectives set out in Design Dundee Ltd's Articles of Association (Registered Charity no: SC041219) are:**

- To advance the arts, heritage, culture & science
- To advance education & research
- To advance citizenship & community development

**The Articles of Association state that Design Dundee Ltd will further these objectives through:**

- The establishment, building, construction and promotion of a museum and associated resources and facilities based in Dundee, together with associated infrastructure development and enhancement
- The operation, management and development of the museum and other resources and facilities which provide the public with access to collections of works of art and design
- The creation of a local, national and international centre for design and creative excellence based in Dundee
- The development and delivery of arts and cultural activities and events, workshops, artistic programmes, curatorial strategy and educational and research projects
- The establishment of a culture based provision to foster civic pride and regeneration in Dundee and beyond.

In 2011, the Building Sub-Committee and supporting Building Group were also formed to oversee the building element of the overall concept. The Building Group met monthly and consisted of design leads from the V&A, Design Dundee Ltd, Dundee City Council and the University of Dundee's Professor of Architecture. The group's membership was aimed at ensuring the building's development took fully into account the needs of the museum and its visitors.

It acted as a working group to deliver the building and took the project through the RIBA design stages. The Building Group also attended all design workshops and was tasked with ensuring that museum expertise was involved from the outset.

In the same year, Dundee Museums Foundation was created as a separate entity to Design Dundee Ltd to carry out fundraising.

**During the museum’s development, the governance structures have developed as the organisation required. In the immediate pre-opening period there were four sub-committees that reported to the Board, which each had their own levels of authority:**

- **The Museum Delivery Committee**
  - responsible for overseeing the detailed development of the capital project (including exhibition and all other fit-out) and the operational readiness of the museum. Practical delivery of the overall museum project has been developed through several groups, which report to this committee.
- **The Audit & Risk Committee**
  - responsible for overseeing audit and risk management.
- **The Finance Committee**
  - responsible for overseeing financial planning and management.
- **The Staffing and Remuneration Committee**
  - responsible for overseeing HR policy, staffing matters and remuneration.

A similar structure remains in place, with the Audit & Risk Committee now becoming the Finance & Risk Committee. The Development Committee has been formed to support the longer-term funding strategy for the museum and will be made up of individuals who will actively assist with fundraising cultivation and stewardship.

There are further plans to review governance structures during 2019, ensuring there is the opportunity for the new incoming Chair of the Board to inform their development.

Design Dundee Ltd continues to be supported by an Advisory Group, which was established to act as a sounding board and critical friend throughout the project and to act as advocates for V&A Dundee, both nationally and internationally. It features members with extensive experience of design, cultural organisations and museums from across the UK and internationally (see Appendix 4 for a full list of members).

## Founding Partners

The project has been guided by an innovative founding partnership of the V&A, Dundee City Council, the University of Dundee, Abertay University and Scottish Enterprise.

As founders of the Design Dundee Ltd Board, this partnership has helped to fund, inform and shape the project, each making a distinct contribution to V&A Dundee’s realisation and its ability to benefit the city as a whole.

Individual agreements are in place between Design Dundee Ltd and the founding partners, which set out Design Dundee Ltd’s obligations and how partners benefit from their involvement with V&A Dundee. Different partnership benefits include collaborative working for programme, exhibitions and research, use of the venue, tickets to exhibitions, acknowledgements and crediting rights, discounts, and meeting schedules.

### DUNDEE CITY COUNCIL – PARTNERSHIP AGREEMENT SIGNED 29 JUNE 2018

Dundee City Council has taken responsibility for the construction of the museum – as the only party able to underwrite the costs – in partnership with Design Dundee Ltd. The Council has been the contracting authority for the capital development period, leading on the building’s design and construction. Now the building is complete, Dundee City Council is its owner and Design Dundee Ltd the tenant, a relationship governed by a Lease and Maintenance Agreement.

The Council made a major financial contribution of £6.5m to the capital project. It has also committed revenue funding and in-kind contributions for 10 years from the point of opening, alongside making significant contributions during the development and construction phases. Dundee City Council and Scottish Enterprise also made a capital contribution of £4m early on in the project to support the city’s Waterfront regeneration programme, prior to the establishment of Design Dundee Ltd.

Dundee City Council has also played an integral role in helping secure key grants to fund the project. This included being the formal applicant to the National Lottery Heritage Fund and Creative Scotland.



Philip Long, V&A Dundee Director, and Tristram Hunt, Director of the V&A. Credit: Julie Howden

It was also responsible for securing Growth Accelerator funding from the Scottish Futures Trust. The Growth Accelerator funding totalled £63.8 million for Dundee Waterfront, with £12.6m for the construction of V&A Dundee.

The Council continues to play a supportive role in the future of V&A Dundee as the Waterfront develops and in driving the development of tourism, business growth and civic pride.

### THE V&A

#### — PARTNERSHIP AGREEMENT SIGNED 19 NOVEMBER 2012

The V&A is the museum partner in the project, providing access to its rich collections, historic name and esteemed international brand. The V&A has agreed an exclusive 25-year licence for Design Dundee Ltd to use the V&A Dundee brand and domain name, while major V&A exhibitions such as *Ocean Liners: Speed and Style* and *Videogames: Design/Play/Disrupt* will have travelled to V&A Dundee during its first year of opening<sup>5</sup>.

Approximately two-thirds of objects in the Scottish Design Galleries have been lent from the world-renowned V&A collections. Moira Gemmill, the late Director of Design at the V&A, was one of the original driving forces behind the development of V&A Dundee from the very start of the project.

The V&A has offered invaluable in-kind support throughout the project, including the provision of a Lead Curator recruited to develop the Scottish Design Galleries, curatorial and conservation support, and project leads to help deliver the galleries, alongside access to expert advice and support from other teams.

As the first V&A museum outside of London, V&A Dundee is an integral part of the V&A's national strategy to increase access to its collections and deepen the relevance of its collections to the UK creative and knowledge economy.

### THE UNIVERSITY OF DUNDEE AND ABERTAY UNIVERSITY — PARTNERSHIP AGREEMENTS SIGNED 18 DECEMBER 2014 AND 23 OCTOBER 2014 RESPECTIVELY

The idea for V&A Dundee originated from the strong relationship between the V&A and the University of Dundee, particularly its Duncan of Jordanstone College of Art and Design. It played a key role in establishing the project and supporting its staffing in the early years, a driving force alongside the V&A and Dundee City Council.



The University is one of the UK's leading universities, internationally recognised for its expertise across a range of disciplines, including the life sciences and in art and design.

Abertay University is a world leader in computer games education, having launched the world's first computer games degree in the 1990s. The university offers courses in a range of areas, including cyber security and science disciplines, placing a strong emphasis on widening access and preparation for work.

Together these two leading universities have provided knowledge, expertise and contacts that have helped shape V&A Dundee's programme and its ongoing activities.

They have both given valuable financial and in-kind support. As well as leading on the initial idea for the project, the University of Dundee has continued to provide valuable support throughout that has included a lead role in developing Design for Business, support for key staff roles and in-kind HR and Health and Safety support.

During the construction period, Abertay University provided crucial office space for parts of the V&A Dundee team and has offered a number of interns to help support the project. V&A Dundee and Abertay University continue to work closely on a number of projects together, including V&A Dundee's first videogames commission in 2019. The universities both still provide V&A Dundee with annual revenue funding and in-kind support.

## SCOTTISH ENTERPRISE

### – PARTNERSHIP AGREEMENT SIGNED 17 NOVEMBER 2015

As well as making a significant capital contribution of £8.3m to undertake Dundee Waterfront landscape works around the museum, Scottish Enterprise, Scotland's main economic development agency, has been a leading partner in V&A Dundee's Design for Business programme and offered essential office space for V&A Dundee staff during the development and construction periods.

Scottish Enterprise played a fundamental role in supporting the development of the project concept and feasibility, alongside managing support for the operational start-up of Design Dundee Ltd and seconding members of staff.

Scottish Enterprise has continued to play an important role in advising V&A Dundee during the project on the development of Design for Business and V&A Dundee's visitor market appraisal and subsequent business planning,

along with providing funding for different elements of the project, including V&A Dundee's Economic Impact Assessment.

Alongside cross-party political support, the shared vision and commitment of the founding partners has been integral to the success of establishing V&A Dundee, ensuring that the project encapsulates the wider benefits to creative industries, tourism, culture, education, business and wider civic pride.

## 2.3 Project funding

The capital build and establishment of V&A Dundee would not have been possible without the combined £80.11m of funding that has come from the Scottish Government, the National Lottery Heritage Fund, Dundee City Council, the UK Government, Creative Scotland, Scottish Enterprise, and many trusts, companies and private donors.

This report sets out to highlight how the project has contributed to many of these obligations and the objectives of the capital public funders.

Additional funding from the Scottish Government, Dundee City Council and the National Lottery Heritage Fund were of particular significance to the project after costs rose in 2014-15. This funding allowed construction to get underway and avoid any further unnecessary delays and rise in costs.

The most significant financial contributor to the project has been the Scottish Government, providing a £38m capital award (including Growth Accelerator funding – a funding mechanism for the delivery of public sector enabling infrastructure) that was fundamental to the construction of V&A Dundee.

In addition to the funding the Scottish Government has given to the project for construction and £5m in development funding up to 2017-18, it announced a package of support, worth £1 million a year in the first ten years of its operation, and an additional £611,000 funding to support V&A Dundee in its early period of operation.

Creative Scotland, the public body that supports the arts, screen and creative industries in Scotland and that administers funding on behalf of the Scottish Government and the National Lottery, awarded a £500,000 development grant to the project and contributed £4.5m of capital funding.

The National Lottery Heritage Fund has contributed funding totalling £14.1m (£200,000 development grant between Phase 1 and Phase 2, £1m of revenue funding to support development of the museum and a £12.9m award to the capital build and the Oak Room) over the course of the V&A Dundee project. This has also made it possible to establish a wide-ranging programme of activities that has engaged different parts of the community – locally and nationally – with the importance of design and heritage.

The UK Government has also been a key financial supporter of the project, contributing £5m to the project in 2016.

It is thanks to the long-term support of its founding partners, public funders and private supporters that V&A Dundee was able to establish the museum, successfully launch and plan for its future financial sustainability.

The ongoing support of founders and funders – both financial and in-kind – will be critical for V&A Dundee to operate and continue to deliver exhibitions and activities to a consistently high standard, and in developing itself as an international centre for design, inspiring people and promoting the understanding of design.

The ongoing business model is based on the continued support of founders and funders, alongside private fundraising and commercial activities. In-kind support for the operation of V&A Dundee from the founding partners is an important part of the museum's operating model and amounts in total to around £1.3m per annum. In addition, the museum is operated free of rent from Dundee City Council.

### CAPITAL FUNDING BREAKDOWN:

<b>Scottish Government</b>	<b>£25.00m</b>
<b>Growth Accelerator Funding</b>	<b>£12.61m</b>
<b>National Lottery Heritage Fund</b>	<b>£12.50m</b>
<b>Dundee City Council</b>	<b>£6.50m</b>
<b>UK Government</b>	<b>£5.00m</b>
<b>Creative Scotland</b>	<b>£4.50m</b>
<b>Waterfront Dundee</b>	<b>£4.00m</b>
<b>Contribution from fundraising campaign</b>	<b>£10.00m</b>
<b>Total Construction Delivery</b>	<b>£80.11m</b>



L-R: Councillor John Alexander, Leader of Dundee City Council; Fiona Hyslop, Cabinet Secretary for Culture, Tourism and External Affairs; and Philip Long, V&A Dundee Director. Credit: Alan Richardson



## 2.4 Project vision, aims and objectives

The project vision, aims and objectives have continued to evolve, develop and become more focused throughout key points of the project – including the project initiation, the development of Design Dundee Ltd, the appointment of its Director and the development of its staff.

As part of the development of the business plan in 2013 – set out by the Director late in 2012 and approved by the Board – the vision for V&A Dundee was:

**V&A at Dundee will be an international centre of design for Scotland. It will celebrate Scotland's historic importance in design and host major exhibitions of outstanding international design that will appeal to the widest public and help develop understanding of our own and others' cultural heritage.**

**V&A at Dundee will become indispensable to makers, teachers and industry nationwide as a place for the cultivation and exchange of knowledge, opportunity and design innovation. It will develop opportunities for diverse communities to engage with, learn from and enjoy design creativity of the past, present and future.**

**V&A at Dundee will play a vital role in Dundee's ambitious plans for regeneration, symbolising the city's high cultural and economic aspirations.**

**It set out the following project aims, to create:**

- Galleries showing major world-class exhibitions of innovative design from across history developed in collaboration with the V&A, as well as exhibitions originated by V&A Dundee itself in collaboration with other local, national and international partners. The Exhibitions programme will be both national and international in nature, providing a broad context for the understanding of Scotland's design heritage and for new design activity, inspiring creativity and curiosity across the widest variety of audiences.
- Further galleries dedicated to longer term displays celebrating Scotland's design heritage from at least as early as the 18th century to today, telling cohesively, for the first time, a story that has long been untold. Integrated within will be displays devoted to contemporary and future-looking design, demonstrating Scotland's continuing international excellence in design innovation.

- Free learning resources which will actively encourage audiences to engage and interact with design creativity. These will provide traditional and digital access to resources on design and design heritage, with content tailored to our current exhibitions, displays and learning and engagement activities.
- A programme of inspirational and exciting activities, reflecting our ambition to nurture, explain, promote and embody creative design and its benefits to creative professionals, practitioners, industry, enterprise and the widest public. These activities will take place throughout V&A Dundee and as part of our broader engagement and partnership programme.
- A dedicated suite of spaces for lectures, demonstrations, events, displays, workshops and residencies providing opportunities for all communities to engage with, learn about, be inspired by and enjoy our design heritage, past, present and future.

### CURRENT MISSION STATEMENT, VISION AND STRATEGIC OBJECTIVES

As the project developed and Design Dundee Ltd took shape, further work was undertaken to develop and refine the vision, mission and set out strategic objectives and deliverables in response to this.

**In 2016, V&A Dundee adopted the mission statement:**

**“Enriching lives through design”**

**And the vision:**

**“To create an international centre for design, inspiring people and promoting the understanding of design.”**

**Based on its mission statement and vision, V&A Dundee's is guided by the following strategic objectives:**

1. To champion past, present and future design in a Scottish and global context.
2. To be a leader in design education, inspiring creativity and developing future skills for design and business innovation.
3. To create a world-class, must-see, sustainable cultural attraction.
4. To play an integral role in developing Dundee and the region, generating civic pride and supporting regeneration.

## 2.5 National Lottery Heritage Fund Approved Purposes and other funding criteria

When the second-round grant was awarded by the National Lottery Heritage Fund in January 2014 towards the creation of V&A Dundee, the following Approved Purposes were established to monitor progress:

- Construction of a new V&A museum, a signature building at the heart of Dundee's Waterfront Regeneration providing gallery, learning and public facilities.
- Creation of two galleries dedicated to Scotland's design heritage, exhibiting collections from the V&A and from other collections, secured on loan. Charles Rennie Mackintosh's Oak Room from the Ingram Street Tearooms to be restored to form the centrepiece of the design heritage gallery.
- Delivery of a wide-ranging programme of exhibitions and activities as set out in the Activity Plan submitted with the second-round application.

As part of the National Lottery Heritage Fund application, a Stage E design report, Activity Plan, Business Plan and Interpretation Plan were also submitted.

This evaluation report will also take into consideration the priorities and requirements set by other key capital funders, including the Scottish Government, Creative Scotland, and Scottish Enterprise.

The priorities and requirements of these funders are referenced in Appendix 1 and are mapped against the evidence used to demonstrate how V&A Dundee has met the National Lottery Heritage Fund Outcomes for Heritage, People and Communities.

Progress towards meeting these Approved Purposes and other public funder requirements have been regularly reported throughout the project in the Quarterly Public Funders Reports.

## 2.6 Achievement of Approved Purposes

Following the revision of the project budget and timeline in January 2015, the V&A Dundee project was successfully delivered on time and to the approved budget, opening its doors on 15 September 2018. As set out in the National Lottery Heritage Fund Approved Purposes, the project successfully delivered:

Approved Purpose	Completed
Construction of a new V&A museum	Practical Completion was achieved on 5 July 2018
Creation of two galleries dedicated to Scotland's design heritage, exhibiting collections from the V&A and from other collections, secured on loan	Scottish Design Galleries (three thematic gallery sections) were completed 1 September 2018
Charles Rennie Mackintosh's Oak Room from the Ingram Street Tearooms to be restored to form the centrepiece of the design heritage gallery	Oak Room was completed 18 May 2018
Delivery of a wide-ranging programme of exhibitions and activities as set out in the Activity Plan submitted with the second-round application	See revised Activity Plan in Appendix 2 and Section 4 on Outcomes

## KEY ACHIEVEMENTS INCLUDE:

Construction and fit-out took 3.5 years to complete	First building in the UK designed by Kengo Kuma	611 local people worked on the construction	£15m raised from private and charitable sources during fundraising campaign – the biggest philanthropic contribution ever made to date in Scotland for a project of this kind
More than 600 objects were included in V&A Dundee's galleries and displays at opening	Oldest object in the Scottish Design Galleries is Book of Hours from around 1480	The newest objects includes BAFTA award-winning videogame Beckett, completed in 2018	Charles Rennie Mackintosh's Oak Room is on display after nearly 50 years in storage
2,429 pre-cast concrete panels hang on the museum's curving walls – if laid end-to-end this would stretch to 8,787 metres	Over 100,000 people in Scotland, the UK and overseas engaged in V&A Dundee's pre-opening programme	340 Scottish businesses had already engaged with workshops run by the Design for Business programme before opening	Around 300 journalists, bloggers and vloggers from across the world attended press previews days
2,155 local people were welcomed into the museum for a special 'sneak peek' tour on Dundee Day	Almost 96,000 people purchased admission to see the opening exhibition <i>Ocean Liners</i>	380,000 visitors to the Scottish Design Galleries by 30 March 2019	500,000 visitors to the museum reached on 30 March 2019 – hugely exceeding visitor projections
Over 10,000 people have taken part in free family workshops since the museum opened	Over 22,600 people attended the 3D Festival during the opening weekend	100,000 people visited the museum in the first three weeks	There have been over 2,500 engagements with schools through tours and workshops since opening



# **3. Museum development, construction and opening**

## 3.1 Construction phase

### PROCUREMENT

In the very early stages of the project the Building Group agreed to follow a single-stage procurement, retaining control with the client and ensuring quality throughout the process. Potential risk of costs rising further were managed by full-time project management and robust change control procedures<sup>6</sup> helped to avert these risks.

Following the selection of Kengo Kuma's design for the V&A Dundee building, Invitations to Tender (ITT) for the building construction were issued to four contractors on 18 December 2013. Following a vigorous pre-qualification questionnaires stage, final tenders were to be submitted by April 2014.

The ITT set out detailed conditions for subcontractors to be tied in from the very start, which would not normally be the case. This was done as the construction project would mainly need subcontractors to deliver the building, including concrete, structural steelwork, precast, maritime, and mechanical engineering services.

The Project Manager was keen to ensure that the successful contractor could demonstrate that subcontractors were already committed and that the tender submitted could be judged as a whole team.

BAM Construct UK, who had previously been involved in the construction of Riverside Museum in Glasgow, was endorsed by Dundee City Council's Policy and Resources Committee as the recommended contractor in September 2014.

In January 2015 the project was re-approved by the Policy and Resources Committee with a new budget of £80.11m, including a building contract cost of £60.8m.

### MCCLELLAND REPORT

The increase in overall construction project costs and the revised timeline following contractor appointment were reviewed independently by procurement expert John McClelland.

The review was commissioned by Dundee City councillors to consider the reasons for the increase in the estimated construction costs of the project and identify any key learning from the development of V&A Dundee, including making any recommendations to ensure the successful delivery of the building.

The McClelland report concluded that the largest single cause of the increase in the budget for V&A Dundee was an underestimate of the original budget.

McClelland's recommendations included the need for a full-time in-house Project Manager for the V&A Dundee building, with full accountability and responsibility for delivering the project on schedule and within the new budget.

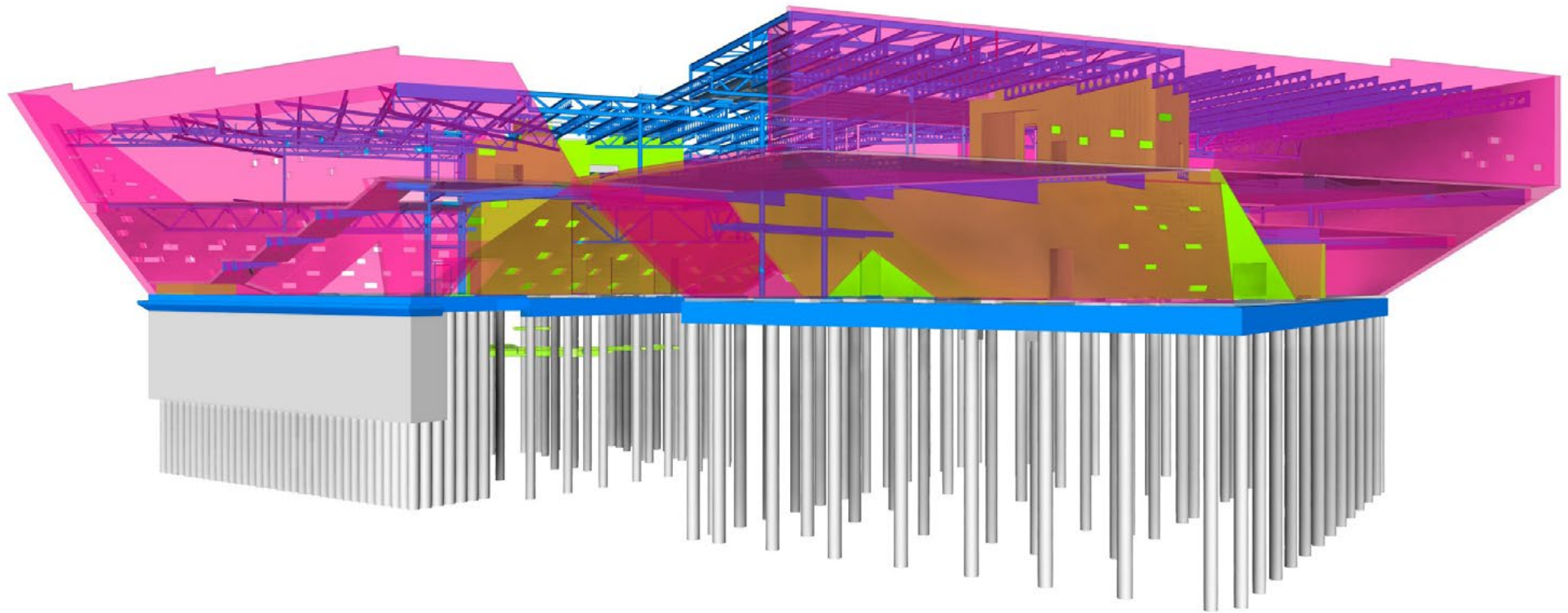
Construction of the building and fit-out was led by Dundee City Council, with project management provided by Turner & Townsend. A Project Manager was initially appointed part-time for just the building construction stage in July 2011, with the fit-out originally planned to be managed separately by Design Dundee Ltd.

Following the McClelland Report, the Project Manager was appointed full-time to deliver both the capital build and the fit-out, seconded to Dundee City Council from Turner & Townsend. As part of the key learning exercise carried out for the National Lottery Heritage Fund evaluation report, this decision has been credited as one of the key reasons why the project was delivered on time and on budget.

The McClelland Report also recommended that Dundee City Council should fully adopt and integrate the V&A Dundee project into its existing structures for managing construction projects and fully allocate accountability and responsibility across appropriate Council functions and departments.

As a result, the Dundee City Council Project Management Group was established to monitor the procurement and financial management of the capital project delivery.

The Council also established a Project Board to ensure that elected members and senior officers within the Council could oversee the construction phase. The Project Board was chaired by Dundee City's Council's Chief Executive and included eight elected officials, the Director of City Development and the Director of Corporate Services.



Arup structural model image of V&A Dundee. Credit: Arup

The McClelland report also highlighted the need for the project to have a full-time Cost Manager to support the Project Manager concerning cost, including the use of remaining contingencies. As a result of the recommendation, Cost Managers were appointed on both the Building and Museum Delivery Groups.

## CONTINGENCY

When construction began, procedures were in place for managing the Working Construction Contingency, ensuring a robust cost assessment process was established which guaranteed there was no adverse impact on the build programme.

The Working Construction Contingency was split into monthly allocations relative to the anticipated cash flow, to allow regular monitoring. V&A Dundee's contingency level was set at 10% due to the unique challenges of the build, rather than the normal level of 4% for a conventional build.

Both a Reserve Contingency and Working Contingency were established, with the ability to make payments from the Working Contingency to fix problems quickly without having to get prior approval and risk potential delays.

The Reserve Contingency was used for non-material elements, for example to address programme slippage in the early stages of constructing the building's complex curvature walls that coincided with disruption caused by bad weather during that winter.

The contingency was also used to take the special step of having full-time resident designers onsite to work with contractors on a daily basis to fix emerging problems, since a project of this scale and complexity meant design questions regularly arose. This has been cited by the Project Manager as the single biggest contributing factor to the capital project being delivered on time and on budget.

## DESIGN AND ENGINEERING

Kengo Kuma set out a vision for V&A Dundee to become a 'living room for the city' – where everyone who came to visit would feel welcome – and to reconnect the city with the historic River Tay waterfront.

Inspired by the location of the building, Kengo Kuma explained:

**“The uniqueness of this project for us is in the position between the water and the city – it is very different from a normal site as it sits in between land and water.**

“As we started thinking about the project one of my colleagues showed me a picture of the cliffs of north-eastern Scotland – it's as if the earth and water had a long conversation and finally created this stunning shape. The design of V&A Dundee attempts to translate this geographical uniqueness into the building by creating an artificial cliff.”<sup>7</sup>

To create Kengo Kuma's ambitious vision of a natural, organic façade, engineering firm Arup was involved early on in the project to consider how to turn this vision into a reality and developed advanced digital technology to model the complex double curvature walls and to test the different stresses throughout the building's structure.

Arup created an integrated digital 3D model of the whole building to test and analyse various forms for the building to achieve the craggy rock face effect that gives the appearance of the building being eroded by the elements.

Architects, engineers and contractors were then able to use this digital version of the building to help inform them during the build, accessing the model on site via tablets. BAM Construct UK said the digital technology “helped to ensure that each element of the building frame was set out to millimetre-perfect tolerances.”<sup>8</sup>

The digital models could also be used to test a number of project scenarios, helping to anticipate problems rather than risk delays and increased costs from having to later resolve them on site.

The end result was a unique structure similar to a shell that creates its strength by interconnecting the roof, walls and flooring. The building consists of two separate parts joined at the upper floor, where huge steel beams connect the exterior walls to two cores, providing support. The largest tension in a single beam is the equivalent of supporting around 40 double-decker buses.





Top left: June 2015, Installation of the cofferdam. Credit: David Martin

Top right: March 2016, Building core, main hall and exterior walls begin work beside RRS Discovery. Credit: Ross Fraser McLean

Bottom left: Dec 2016, Formwork and falsework surrounding the building. Credit: Ross Fraser McLean

Bottom right: Feb 2017, River-facing walls, viewed from temporary cofferdam, before cast stone panels were hung from the walls. Credit: Ross Fraser McLean



## CONSTRUCTION

### Cofferdam

Once funding was secured from National Lottery Heritage Fund, a ceremonial ground-breaking ceremony attended by Kengo Kuma took place on the 5 March 2015.

The construction began with the creation of a temporary cofferdam, consisting of 12,500 tonnes of stone. A water-resistant enclosure was created after water was pumped out, creating a dry working environment to allow construction work below the waterline to be undertaken.

Part of the riverbed was reclaimed and a construction access road established on the cofferdam. A section of V&A Dundee was also built on the reclaimed land, resulting in a corner of the building jutting out on the River Tay when the cofferdam was removed.

The completion of the cofferdam in May 2015 was a major milestone for the project and the physical construction of the museum could then begin. The work was also successfully completed ahead of the three-month seal breeding season, due to begin in June, which could have significantly delayed the building's construction and added to costs.

### Temporary structure

The foundation was installed next, which was followed by the creation of two separate cores linked to the interior walls that were designed to support the outward leaning exterior walls.

A design team of 20 people worked on the temporary structure, which was manufactured in five different locations, while off-site over 50 joiners were involved in its fabrication and another 30 joiners were involved on-site.

A temporary falsework framework structure was developed to hold up the exterior walls until the roof steelwork was complete – temporary structures are used to support a permanent structure until it can support itself. This supported the formwork – the mould into which concrete is poured – which allowed the concrete to dry and harden, creating the exterior walls. Digitally controlled machines, using information from the original 3D model, cut the formwork.

As more concrete was poured, the temporary structure continued to develop – with more falsework added to the lower levels of the building and the higher levels as the new formwork was constructed.

Once the roof and floors of the museum were in place, the distinctive red and yellow formwork around the building was removed.

### Concrete structure

One of the major challenges faced during the design and construction of V&A Dundee was the concrete façade structure. The construction included the challenge of creating curved concrete walls – the building has no straight external walls – to hold the pre-cast concrete panels, weighing up to 3,000 kilograms each and measuring up to four metres in length. Overall, there are 21 unique wall structures.

2,429 pre-cast concrete panels were lifted into place to complete the exterior walls – varying in size, depth, shape and placement to fulfil Kengo Kuma's unique cliff-inspired vision.

The panels were attached to the building using brackets fixed into channels, which had been cast in advance into the exterior walls. This complex process of lifting and fixing all of the pre-cast concrete panels took around seven months to complete, with bespoke lifting equipment designed for lower level sections due to the panels being suspended from the underside of the building.

The separation of the structure at the lower levels creates an outside walkway through the centre of the building, creating an archway joining the river to the city. It has been described by V&A Dundee's Director as a fitting tribute to the demolished Royal Arch, originally built on Dundee's Waterfront to commemorate Queen Victoria and Prince Albert's visit to Dundee in 1844.

The cofferdam removal began in summer 2017 and was completed in October 2017, finished at the same time as the installation of the pre-cast panels.

The building's practical completion and external works had both been achieved by 26 January 2018.



Architect Kengo Kuma visiting the construction site to see the completed building for the first time (February 2018). Credit: Alan Richardson



## 3.2 Fit-out phase

From February 2018, the museum fit-out and galleries preparation got underway. Members of the Design Dundee Ltd team had ownership for different fit-out packages.

### MAIN HALL TIMBER PANELS

One of the key features of the building is the sloping walls that line the main hall, which have been tilted to create a texture that reflects the external pre-cast concrete cladding. This involved the installation of 1,238 European oak-veneered timber panels, each measuring 18mm thick, which were cut to different lengths and set at a range of angles.

Each panel had to be fixed to two square-shaped metal tubular structures fitted with flat plates, which were adjustable and were locked into a final agreed position. The brackets were bolted to the concrete walls.

The timber finish was used to create a warmer environment and for better acoustics, while at the same time reflecting the effect of the external cladding. The panels stand out in contrast to the dark Carlow Irish Blue limestone flooring of the main hall and staircase, featuring fossilised coral that are over 300 million years old.

### INSTALLATION OF SCOTTISH DESIGN GALLERIES AND OCEAN LINERS

One of the more challenging aspects of the fit-out was the installation of both the Scottish Design Galleries and *Ocean Liners* exhibition simultaneously. During the installation period, approximately 700 objects entered the museum within just five weeks – with each object needing transported, uncrated and unpacked, condition checked and then installed in the galleries. There was little room for error or delay to meet the exhibition ready date of 8 September 2018.

There was also the added challenge that a single lift was used for both installations and other works like the restaurant kitchen, as well as deliveries of furniture for the Inches Carr Trust Resource Centre and retail units.

The installation plan was integral during this period, with the *Ocean Liners* and Scottish Design Galleries master object installation schedule drafted by May 2018. Developed in close discussion with the V&A and V&A Dundee across all departments, it took into account transport, crating and packing, couriers, conservation and back of house spaces.

This was a huge piece of planning and subject to change, which was managed by the Gallery Manager and Exhibitions team, who were critical to its success. A shared install schedule across V&A Dundee meant that activity in the back of house areas was clear at all times.

To ensure there would be availability of skilled freelance technicians for the installations, technicians were invited to visit the museum for a tour in early 2018 and recruitment was targeted in the Glasgow and Edinburgh areas.

Due to the long hours needed to complete both installations, V&A Dundee arranged the provision of university accommodation at a reasonable rate to minimise the risk of losing staff during this period. The recruitment of technicians to support the installation began in April 2018, with contracts issued by 25 May.

Up to three technicians were used to manage the schedule of deliveries, unloading into the galleries and taking away of empty crates weekly. The same transport agent was used for both installations and a temporary Assistant Gallery Manager was appointed to manage day-to-day running of back of house areas and assist transport agents, couriers and conservators to ensure the crucial sequencing of deliveries took place.

A Collections Assistant was recruited on a six-month contract to implement and maintain the Collections Management System, which was central to the planning process.

All V&A Dundee exhibitions staff received updated training on condition checking, unpacking and other key skills in the weeks prior to the object installation, to ensure that they were all working to the same methodology. The success of the installation is attributed to excellent teamwork led by V&A Dundee with the V&A and freelance technicians, and the strong working relationship with other museums and galleries lending to the museum.

The relationship with Peabody Essex Museum, who collaborated with the V&A on the *Ocean Liners* exhibition, was also critical to the success of the installation. V&A Dundee exhibitions staff had spent time on *Ocean Liners* installation in South Kensington, as well as with the V&A's technical services and conservation staff to ensure that this process was informed by the experience of colleagues delivering the London exhibition.



Work underway on the inside of V&A Dundee (September 2017). Credit: Ross Fraser McLean



**THE MAIN AREAS OF THE FIT-OUT WERE:**

- Scottish Design Galleries (Lead: Director of Exhibitions)
- Exhibition Galleries (Lead: Director of Exhibitions)
- Digital/IT/AV (non-gallery) (Lead: Director of Audiences and Media)
- Restaurant/Café/Retail (Lead: Director of Visitor Experience and Operations)
- Wayfinding (Lead: Director of Audiences and Media)
- Kitchen/Serveries (Lead: Director of Visitor Experience and Operations)
- Office FF&E (Lead: Office Manager)
- Main Hall FF&E including Michelin Design Gallery and Ciara Phillips commission (Lead: Director of Exhibitions and Director of Visitor Experience and Operations)
- Auditorium (Lead: Director of Learning and Innovation)
- Learning Suite (Learning Rooms 1&2, Design Studio, Picnic Room) (Lead: Director of Learning and Innovation)
- Project Space (Michelin Design Gallery) (Lead: Director of Exhibitions)
- Gallery Back of House (Lead: V&A Project Coordinator for V&A Dundee)
- Equipment / Shelving (Lead: V&A Project Coordinator for V&A Dundee)
- Museum Services Digital / IT (Lead: Director of Audiences and Media)
- Object Transport (Lead: V&A Project Coordinator for V&A Dundee)

Practical completion of the fit-out works was achieved by 2 July 2018 and Design Dundee Ltd commenced occupation shortly afterwards.

**KEY CONSTRUCTION MILESTONES:**

- Ceremonial ground-breaking ceremony in March 2015
- Building practical completion by January 2018
- External works practical completion by January 2018
- The fit-out works were completed by July 2018
- Making Good Defects period for the Building and External Works completed in January 2019
- The Final Account for the BAM Contract (building, external works and fit-out) was signed off in January 2019
- The Making Good Defects period for the fit-out is due for completion in July 2019

**V&A DUNDEE BUILDING COSTS:**

Building cost	£60,839,372
FF&E	£4,800,000
Professional Fees (incl DT prolongation fee 120/143 wks)	£7,719,000
Client Contingency (approx. 3% of Construction Cost)	£1,800,000
Construction Contingency (approx 8% of Construction Cost)	£4,951,628
<b>Total Building Costs</b>	<b>£80,110,000</b>



### 3.3 Development of Design Dundee Ltd

The Design Dundee Ltd Project team was initially made up of secondments from Dundee City Council, the V&A, Scottish Enterprise and the University of Dundee, alongside consultancy support from Turner & Townsend. A number of these secondees have continued to work on the project and have played an integral role in the development of V&A Dundee.

Following the appointment of Philip Long as V&A Dundee Director in 2011, Design Dundee Ltd started to take further shape as key head roles began to be recruited. During the same year, the first role to be recruited was Development Director to lead on securing private funding for the capital project.

The full management team were in post by summer 2017 – 14 months before the museum opened.

The recruitment of the key posts that have formed Design Dundee Ltd brought to the project a wealth of experience from the arts and culture sector, alongside involvement in delivering a number of major projects.

## 3.4 Creation of the Scottish Design Galleries and Oak Room

### OAK ROOM

The Oak Room is the masterpiece of the Scottish Design Galleries. Sitting in storage for nearly 50 years, it has been conserved, restored and reconstructed piece by piece to recreate the original interiors designed by Charles Rennie Mackintosh for Miss Cranston's Ingram Street Tearooms in Glasgow in 1907.

Over the years, the interiors of the Oak Room were altered several times, including being painted over with an imitation wood-grain finish. By 1971 the majority of the furniture and furnishings were lost, although around 90% of the original Mackintosh interiors survived, including oak panelling, coloured glass inserts and some light fittings.

When the tearoom interiors were removed in 1971 and put into storage in Glasgow City Council's museum collections, each room was numbered, with each wall given a reference and each piece of panelling coded in order. Plans and elevations were also drawn-up by Keppie Henderson architects to provide a record of the rooms.

Enabled by Scottish Government and National Lottery Heritage Fund funding grants to continue to research, care for, conserve and restore the internationally significant tearoom interiors, further work began in 2004 to support Glasgow Museums in documenting all of the surviving Oak Room panelling, which came to around 700 original parts. This in turn helped make it possible nearly a decade later to begin the process of bringing the Oak Room back to life.

In 2013, the V&A Dundee Director initiated a partnership with Dundee City Council and Glasgow Museums that resulted in a £1.3m conservation, restoration and reconstruction project that brought together the expertise of architects, curators, conservators and craftsmen – mainly based in Scotland – in order to research, reassemble and display this lasting legacy of Mackintosh's brilliance (further details under Outcomes section).

The tearoom has been restored to the original design and visitors to V&A Dundee can now walk around the room and experience it as Mackintosh intended. The room is displayed unfurnished, as there is no known documentation of the majority of the furniture that would have featured in the room on its original completion.

The project was made possible by a long-term loan from the collections of Glasgow City Council, and funding from the National Lottery Heritage Fund, Art Fund, Scottish Government and other donors.

The Chair of Glasgow Life and Depute Leader of Glasgow City Council, Councillor David McDonald, has described the Oak Room's new home in V&A Dundee's Scottish Design Galleries as "a unique opportunity to showcase and celebrate the incredible legacy and creative genius of Glasgow's greatest cultural icon, Charles Rennie Mackintosh."

He described the conservation project as "a giant 13.5 metre long, three-dimensional jigsaw, which has breathed new life into the largest interior of the Ingram Street Tearooms."

"We are in awe of the finished result, now on show to the world as the stunning new V&A Dundee opens. Visitors to the Oak Room can marvel at his exacting design and attention to detail, the more you look the more you see, that is his gift. It is incredibly important that we treasure and protect Mackintosh's legacy to allow future generations the opportunity to experience his spaces, his ideas and his brilliance."<sup>9</sup>

Charles Rennie Mackintosh's restored Oak Room was the first part of the galleries to be installed, with its structural frame put in place to also support the inspiration wall in section one of the galleries. It was successfully completed on time on 18 May 2018.



Top left: Model of the Oak Room, with Joanna Norman, V&A, and Alison Brown, Glasgow Museums. Credit: Robert Perry

Top right: Trial assembly of the Oak Room, prior to conservation and restoration works. Credit: Robert Perry

Bottom right: The completed Oak Room, V&A Dundee. Credit: ©Hufton+Crow



## SCOTTISH DESIGN GALLERIES

The creation of the Scottish Design Galleries was integral in fulfilling the project's vision set out by V&A Dundee's Director in 2012 of establishing an international centre of design that would celebrate Scotland's distinctive design heritage.

Over 300 objects in the galleries tell the extraordinary story of Scottish design, spanning over 500 years, ranging from architecture to fashion, healthcare to furniture and engineering to videogame design. This fascinating and relatively unknown story took several years of research and has brought together a unique collection of objects. Further information on the three thematic parts of the galleries can be found in the report's Outcomes for Heritage section.

The project has involved sourcing objects from the V&A's world-famous collections and securing objects on loan from other museums, private collections and designers across Scotland and internationally. It has made Scottish heritage more visible, alongside developing relationships among the museums sector in Scotland and building awareness of their collections.

The galleries are the result of curatorial, conservation and learning collaboration between the V&A and V&A Dundee. This work has ensured that numerous objects have been conserved for visitors to enjoy (including objects from other museum and gallery collections, such as textile designs from Paisley Museum and Art Gallery), experience and be inspired by – and with many objects on display for the first time in generations.

## THE STORY OF SCOTTISH DESIGN

To accompany the Scottish Design Galleries, a major publication was produced on the history of Scottish design. The Story of Scottish Design is the first ever comprehensive survey of the subject and was published to coincide with the museum launch. This was co-edited by V&A Dundee's Director and the V&A Lead Curator for the galleries, Joanna Norman. The production of the book was a collaboration between V&A Dundee, V&A publishing and Thames & Hudson.

### Design of the galleries

The Scottish Design Galleries were designed by award-winning architectural and exhibition design practice ZMMA, creating three distinct display spaces using different lighting, materials and colour to engage visitors and guide them through the galleries.

ZMMA worked closely with the V&A and the wider V&A Dundee team to ensure the design of the galleries was tailored to the objects and that there was the potential to accommodate the rotation of objects over time.

The curatorial and design development included the creation of the gallery-wide structure, the testing and mock-ups of each individual case, and the creation of object mounts which was done in close consultation with the V&A.

ZMMA also worked on the integration of the Oak Room with the rest of the galleries and, in collaboration with Arup, helped to restore the original lighting scheme in the Mackintosh room.

## COMMUNITY CONSULTATION

V&A Dundee's Learning team ran 12 focused consultation sessions across local communities on the galleries, reaching over 100 people. A focused testing day was also held at The McManus: Dundee's Art Gallery and Museum to consult on the content of one of the Scottish Design Galleries interactives.

A day of digital interactive testing was later held at Abertay University for a range of audiences, including individuals living with additional support needs, people living with sensory impairments and young people.

During the pre-opening programme of community talks delivered by V&A Dundee, informal consultation was also carried out about the galleries, and feedback and questions asked at the talks gathered. The presentation given at these talks included themes within the Scottish Design Galleries.

## AUDIENCE RESEARCH

The development and design brief of the Scottish Design Galleries was informed by independent Audience Research commissioned by V&A Dundee.<sup>10</sup> Conducted by ScotInform between November 2015 and February 2016, the research included:

- Five questions asked as part of the Scottish Omnibus, which provides feedback from 1,000 Scottish residents representative of the Scottish population.
- A survey conducted in person with 374 members of the public in Dundee, Aberdeen and Edinburgh.
- In-depth telephone interviews with 30 representatives of the design community and 20 representatives of Dundee-based community groups.





Inspiration wall in the Scottish Design Galleries. Credit: Ruth Clark

As part of the research, members of the public surveyed were shown four different 'mood boards' featuring Scottish design objects to gain feedback on proposed V&A Dundee gallery and exhibition themes. Representatives from the design community and community groups were emailed the four mood boards.

The four mood board design themes were: Design Process and Inspiration; Design for the Inspiration; Local and Global; and Design and Society.

People questioned as part of the Omnibus Survey were given a list of 12 different design themes and asked to choose which one they were most interested in.





The first (and largest) section of the Scottish Design Galleries, The Story of Scottish Design. Credit: Ruth Clark

### THE AUDIENCE RESEARCH FOUND:

- The majority of participants in the Omnibus Survey were most interested in 'How Scottish design has been shaped by history, education, politics and the economy' (28%).
- People interviewed face-to-face were most interested in 'Design Process and Inspiration' (32%). There was a particular interest in this theme from those categorised as having limited interest in design (47%), aged 25-34 (45%) and Dundee residents (44%).
- Nearly half of respondents expressed an interest in all of themes presented.
- Survey participants were also asked how they most enjoyed finding out about museum and gallery content. 90% said browsing, followed by 28% preferred a talk by an expert, 27% liked reading texts and labels, 24% said touching materials/handling objects, 21% wanted catwalk footage, and 20% said films on design process/techniques.
- Design community participants interviewed felt that each of the mood boards had a place or role and were unable to select just one. Amongst the small number who did select a mood board, 'Design and Society' tended to be selected.
- Most community participants chose 'Design for the Imagination'.

The final version of the Scottish Design Galleries shows the influence that the Audience Research has had on its development, with the intention of providing a broad appeal to members of the public from across different parts of Scotland, the design community and Dundee-based community groups.



Top: Design Unwrapped interactive tables featured in the Scottish Design Galleries. Credit: ©Hufton+Crow

Bottom: Design and Imagination section of the Scottish Design Galleries. Credit: Ruth Clark



## PEER REVIEW

The design of the Scottish Design Galleries by ZMMA was done in parallel with the development of the interactive and activity proposals for the galleries, with the design process being informed by focus group testing.

**The concept designs by ZMMA were presented to a group of peers and stakeholders at two events facilitated by service design company Open Change in February 2017:**

- An event at the Hannah Maclure Centre, Dundee that included around 40 representatives from the museum and education sectors, as well as independent art and design historians from across Scotland.
- An event at the V&A in London attended by V&A Dundee's Advisory Committee and V&A staff.

The Peer Reviews were aimed at providing an update on the progress of the Scottish Design Galleries; gaining feedback on plans around designs and narrative; and consulting participants about audience engagement and opportunities for collaboration or partnerships. This included testing with the groups the titles of the sections of the galleries.

## EXHIBITION GALLERY

The exhibition space is planned to be home to two major exhibitions each year and will feature V&A touring exhibitions, exhibitions from international partner venues and V&A Dundee-curated projects. The exhibition gallery was planned as a flexible space, which can be divided for different exhibition uses in the future.

The decision to open with *Ocean Liners* was made in spring 2017 after the business case for it was approved by the Board. *Ocean Liners* was agreed to be the most appropriate opening exhibition, as it covered a wealth of design disciplines, as well as placing Scottish engineering at the heart of the exhibition.

The opening exhibition *Ocean Liners: Speed and Style*, supported by players of People's Postcode Lottery and investment managers Baillie Gifford, was the first exhibition to reveal the design and cultural impact of the ocean liner across the world. It was organised by the V&A and the Peabody Essex Museum in Salem, Massachusetts, with additional curatorial input from V&A Dundee.

The Director was involved in the initiation of the idea for *Ocean Liners*, and V&A Dundee continued to be involved in the development of the exhibition. It was considered especially important for the museum because the subject was felt to be of broad interest; explored a vital part of the world's cultural and design heritage of the last century; encompassed a diverse range of design material; and represented a history in which Scottish design, craft and engineering had played a vital role.

The Exhibitions programme has been developed to fulfil the museum's mission of enriching lives through design and deliver on its vision to inspire people and promote a greater understanding of design, including reaching wider and diverse audiences. The programme places Scottish design in an international context, as well as presenting the very best of design practice globally.

## MICHELIN DESIGN GALLERY

The Michelin Design Gallery is located in an open space on the upper floor of the museum and is free to visit. It will feature a responsive programme of dynamic and challenging projects, ranging from national projects to small-scale displays responding to current design issues.

The first exhibition featured V&A Dundee's pre-opening national project, the Scottish Design Relay, presenting design prototypes created by young people in communities across Scotland from Orkney to Govan.

The second exhibition in the Michelin Design Gallery, *Rules of Play*, featured the work of Glasgow-based designer Gabriella Marcella, founder of RISOTTO Studio, who created an installation exploring the principles of learning through play.



V&A Dundee's first major exhibition – *Ocean Liners: Speed and Style*. Credit: Ruth Clark





V&A Dundee's latest major exhibition – *Videogames: Design/Play/Disrupt*,  
Credit: Michael McGurk





Rules of Play exhibition in the Michelin Design Gallery. Credit: Julie Howden

## 3.5 Pre-opening learning activities

Before the museum had walls, V&A Dundee's Learning team was already very active in communities across Scotland.

In March 2018, V&A Dundee announced that it had engaged with more than 100,000 people during the pre-opening programme through talks, events, projects and exhibitions.

This engagement was achieved through:

56,902	Exhibitions, from the Schools Design Challenge in Dundee's Overgate Shopping Centre to the international Milan Design Triennale
23,945	Staff talks logged, including to ethnic minority community groups in Dundee, care homes, mental health groups and military veterans
11,956	The Design in Motion travelling exhibition, in collaboration with the Travelling Gallery, which visited 84 locations across Scotland and ended outside the V&A in London
10,540	Public events, from the Edinburgh International Book Festival to the Oban Winter Festival
TOTAL: 103,343 people	



100,000 people engaged announcement at the Scottish Parliament. Credit: Michael McGurk

It would not have been possible to deliver the same level of learning and outreach activities without the vital support of V&A Dundee's funders and founders, trusts and private donations. This includes funding support from players of People's Postcode Lottery, The Rank Foundation, The Mathew Trust and William Grant Foundation that supported many of these projects to go ahead.

**The main pre-opening activities delivered were:**

- Living Room for the City, June – August 2014
- Design in Motion, February – June 2015
- Community Garden Project, summer 2015 – ongoing (volunteers continue to work on maintaining the garden)
- Schools Design Challenge, October 2015 – March 2016
- Bonnetmakers Project, August 2016 – May 2017
- Pop-Up Museum in a Book, August 2016 – ongoing
- Scottish Design Relay, August 2017 – February 2019 (exhibition finished)
- Roxburghe House Project, September 2017 – December 2017

The majority of the projects listed are covered in more detail in Section 4 on Outcomes.

During this time period The McManus: Dundee's Art Gallery & Museum featured a number of smaller-scale V&A exhibitions:

- V&A touring exhibition *A World to Win: Posters of Protest and Revolution*, November 2014 – January 2015
- The McManus was the first location to host the V&A's exhibition of portraits of Her Majesty The Queen by photographer Cecil Beaton, September 2011 – January 2012
- V&A touring exhibition *Selling Dreams: One Hundred Years of Fashion Photography*, September 2012 – January 2013
- V&A touring exhibition *Modern Masters in Print*, August 2013 – November 2013

### LIVING ROOM FOR THE CITY

Based on Kengo Kuma's description of his vision of the museum being a 'living room for the city', V&A Dundee's first community engagement project in 2014 encouraged people to think about the design they owned, what their 'living room' meant to them, to share ideas and to learn new skills.

The project had two strands: digital engagement by encouraging people to share photos of their living spaces on social media, and creative design workshops.

The project also included photoshoots of local people and groups in their 'living rooms', which included local community centres, rooms designed by interior designers, and young people in the music room at the Hot Chocolate Trust – a living room they designed themselves.

Designers and community-led project Skill Share Dundee supported community groups in designing and making their own personalised lights and showcasing them in a Living Room for the City exhibition at Abertay University's Hannah Maclure Centre.

Living Room for the City was the first V&A Dundee project to receive funding from players of People's Postcode Lottery.

### SCHOOLS

In March 2015, the National Schools Partnership reviewed the role of design in secondary schools in Scotland in consultation with teachers, pupils, and their parents and carers. The review helped to set a baseline and suggested how V&A Dundee could engage best with schools locally and nationally, which was subsequently incorporated in V&A Dundee's schools strategy.<sup>11</sup>

To help support the development and delivery of V&A Dundee's Schools programme, two school teachers joined the V&A Dundee Learning team for a period of two years each, as part of a ten-year secondment scheme set up with Dundee City Council. The initial secondment was a secondary school art and design teacher, and the other a primary school teacher. The project is a way for local teachers to share current education practice with V&A Dundee, and to bring back to the classroom their learning from the museum.

The teacher secondees have been instrumental in the development of the Schools programme in response to the Scottish Design Galleries and in developing the museum as a school resource for teaching design.

The schools projects that have taken place have been closely linked to the school curriculum and have incorporated continual professional development (CPD) opportunities for teachers.

As part of the Time Capsule project, for example, V&A Dundee worked in partnership with the Scottish Qualifications Authority (SQA) to create a design challenge that would form an accredited module, which counted towards pupils' Design and Manufacture Higher qualification. A Teacher Focus group was also set up for the Schools Design Challenge project and to inform the wider programme, which resulted in a new design resource for use across the curriculum to support the teaching of design in schools.

The Schools programme was tested by trialling workshops with different schools from across the local region. The team also worked with designers on the content for workshops and schools tours.





Hot Chocolate Trust's Living Room for the City. Credit: Ross Fraser McLean

## COMMUNITIES

V&A Dundee's Communities programme has engaged with non-traditional museum audiences and harder-to-reach groups, including a comprehensive range of talks to community groups and a range of design-led projects.

Consultation with local community groups began as early as 2014 with the first community engagement project, Living Room for the City, which encouraged groups to be actively involved in the programmes being developed for them.

The Communities Producer met and consulted regularly with groups across the city, as well as delivering a programme of testing the different design workshops and the interactives in the Scottish Design Galleries to get feedback. This has included engagement with care services (such as sheltered housing and care homes for older people), ethnic minority groups, and disabled people and their carers.

The Roxburghe House project, Community Garden project, Amina Muslim Women's Resource Centre tour guide training and the museum's dementia programmes are covered in further detail in the Outcomes section of this report.

## FAMILIES

A large-scale paper-cut 'Pop-Up Museum in a Book' was designed as a resource to engage with children and families and was launched on 25 August 2016 as part of the Edinburgh International Book Festival.

V&A Dundee produced a pop-up museum kit for children and their families to design the museum space, allowing them to curate their own museum in a book and then take it away with them. The kit included objects that were set to feature in the Scottish Design Galleries.

Designer for a Day was developed as another family activity and was taken out to communities across Dundee.

The activities were taken out to pre-school settings, community gala days, festivals and other events. This included taking part in a session at Castle Huntly Open Prison with prisoners and their families, where 76 people took part in a range of activities including the time capsule and pop-up museum activities.

## YOUNG PEOPLE

V&A Dundee's Young People's Collective is a group of 16 to 24-year-old volunteers who help inform how the museum and the programme addresses the needs of young people. Set-up in 2017, the core group consists of around 15 members who live in Dundee and the surrounding areas.

The collective offers an opportunity for its members to develop their skills and experience, influence museum programming, and co-design and curate their own events. Further detail about how the Young People's Collective has helped inform V&A Dundee's Young People and Creative Industries programmes can be found in the Outcomes section of this report.

## CREATIVE INDUSTRIES

Building on the success of previous talks and events aimed at the creative industries pre-opening, the programme covers a variety of design disciplines, including fashion and textiles, heritage restoration, marketing and branding, design history and encourages connection with the museum's galleries and exhibitions.

The Creative Industries programme has been informed through engagement and focus groups with students from colleges and universities in the surrounding area – across a variety of courses, ranging from dance to textile design, from tourism to videogame students.

V&A Dundee has been working in close collaboration with creative network Creative Dundee to co-design activities for people working in the creative industries sector, including the potential to use technology installed in the museum to connect with other UNESCO Cities of Design across the world.

Now that the Learning team has its own spaces in the museum, it is delivering an extensive programme of activities across different groups. Details of these programmed activities can be found in Appendix 2 and Appendix 5 (it should be noted that the programme continues to be developed based on feedback from visitors, staff and designers).





Pop-up Museum in a Book launch at Edinburgh International Book Festival. Credit: Robert Perry



### THE INCHES CARR TRUST RESOURCE CENTRE

The Inches Carr Trust Resource Centre is a dedicated reading area where visitors to the museum can take inspiration from some of the many books available. The reading area includes books on the history, theory and practice of design, as well as beautifully designed children's books.

### THOMSON LEARNING CENTRE

Now that the museum is open, the Learning team has a dedicated space to deliver activities in the museum.

The Thomson Learning Centre, based on the upper floor of the museum near the gallery spaces, is the creative hub for the museum's day-to-day activities.

It features two learning studios to deliver practical design workshops, an auditorium space that can accommodate more than 150 people, and a design residency studio. The activities on offer are inspired and influenced by the Scottish Design Galleries and the wider Exhibitions programme, as well as the architecture of V&A Dundee.

It is also the home of the museum's Schools programme, co-designed by teachers and delivered by practising designers. The programme aims to support career choices in the creative sector, with themes ranging from graphic design and illustration to fashion and architecture.

The studios host regular weekend and holiday activities to encourage families to learn and create together, as well as hosting workshops and activities for visitors of all ages.

Between May and June 2018, 22 freelancers were successfully recruited to support the museum's Learning programme, with a freelancer familiarisation session held to brief them on the programme and galleries.



Wee Design + Play. Credit: V&A Dundee

## 3.6 Philanthropy campaigns

### CAPITAL CAMPAIGN

V&A Dundee ran the largest private fundraising campaign for a cultural project in Scotland, setting an ambitious target of £15m, which was successfully completed in 2018. Dundee Museums Foundation, a charitable organisation, was established to focus on securing donations to the private fundraising campaign for V&A Dundee.

Compared with Edinburgh and Glasgow, Dundee had limited experience of a fundraising project of this scale or significance before, including the challenge of encouraging philanthropic fundraising for arts and culture in the city.

The Director of Development worked closely with V&A Dundee Director Philip Long and the Campaign Board, which was established to help support large-scale philanthropic donations and included representation from prominent members of the business community.

Early support from large-scale companies within the city set a strong precedent and helped generate confidence in the project.

The capital campaign was a record in Scotland for a cultural project and a huge success. Strong connections had been developed during the campaign and one of the big successes was that just over £6m of funding came from Dundee and its surrounding area.<sup>12</sup>

### REVENUE FUNDRAISING

In the early stages of the project development funding from the Scottish Government and from trusts was crucial to the delivery of the pre-opening programme, allowing the museum to run learning activities and develop its audiences – proving the value of the V&A Dundee project in advance of the museum's construction. Support from organisations such as players of People's Postcode Lottery are viewed as particularly valuable, as the funding is unrestricted and can be allocated freely across organisational budgets.

During the capital campaign, the case for revenue funding was made simultaneously. As a result, a significant number of commitments were made pre-opening to contribute to future revenue costs.

In early 2017, there was a new drive to secure gifts at a lower level (£10,000–£50,000) and encouraging people to make donations of over £1,000 to be named on the museum's donor boards.

A Fundraising Strategy for post-opening was created at the end of 2017 and is being reviewed in the first year of operation.

The business model aims to broadly raise a third of V&A Dundee's operating costs from revenue and income from the museum, a third through fundraising and the remaining third through the public sector. In-kind support for the operation of V&A Dundee from the founding partners is also an important part of the museum's operating model. In addition, the museum is operated rent-free from Dundee City Council representing further value.

### SPONSORSHIP

The role of corporate, private and charitable sponsorship has been vital to support the development of the project. The following areas of the museum are sponsored: Michelin Design Gallery; The Inches Carr Trust Resource Centre; The Thomson Learning Centre; Locke Hall; Robertson Trust Learning Studio; Weston Studio; Juniper Auditorium; Alliance Trust Staircase; Allan Terrace; the Lesley and Brian Knox Terrace; DM Brown Gallery (Scottish Design Galleries); Edmundson Gallery (exhibition galleries); Moira Gemmill Gallery; and the Leng Charitable Trust Visitor Desk.

Private and public sponsorship was also secured for the opening 3D Festival and opening exhibition.



## INDIVIDUAL GIVING AND MEMBERSHIP SCHEMES

Now that the museum is open, there is a focus on individual giving as part of a number of other revenue streams that will support fundraising. These include schemes for corporate membership, patrons and membership as well as legacies and gifts in wills, and sponsorship opportunities. There is revenue from Gift Aid on tickets and donation boxes around the museum.

A number of fundraising events to attract Patrons were held pre-opening. Those who gave a donation of more than £1,000 were recognised as Founding Patrons and were featured on the donor boards within the museum. There are a number of Patron levels available to give people the opportunity to support the museum at a level of commitment that suits them.

A key success has been the introduction of a Membership Scheme, with over 7,500 memberships purchased since the museum opened.<sup>13</sup>

The Membership Scheme offers Individual Membership for £30, Plus One Membership for £40, and Family and Friends Membership (up to four people) for £65. The membership incentives include free entry into V&A Dundee exhibitions and discounts in the museum's café/restaurant and shop, and a 25% discount on tickets for V&A South Kensington exhibitions.

There will also continue to be ongoing engagement with trusts and foundations, alongside identifying sponsorship opportunities to secure additional revenue funding.

The concept of V&A Dundee as a fundraising organisation is actively cultivated amongst all staff, all of whom have a role in this.

## 3.7 Finance and sustainability

### FINANCIAL FORECASTING

Counterculture Partnership LLP were appointed in 2016, supported by a former financial director at the V&A, to review Design Dundee Ltd's operating budgets for 17/18 onwards and to develop a five-year financial forecast.

A review of the operational budget from 2017-18 to 2021-22 combined data provided by the individual departments with relevant comparators and assumptions reflecting Design Dundee Ltd and Counterculture's wide experience of similar operations.

### OPERATIONAL PLANNING AND READINESS

Counterculture supported operational readiness and business planning for the museum, with a Senior Partner from Counterculture acting as Interim Financial Director until the recruitment of the Chief Operating Officer in January 2018.

The Operational Readiness programme was developed to deliver the required systems, structure and operating model for Design Dundee Ltd. It identified and monitored the key milestones and risks inherent within the sub-project areas which made up the delivery programme.

The programme developed by Counterculture was based on the delivery structure recommended and used by the UK Government on major infrastructure projects through the Major Projects Authority, now part of the Infrastructure and Projects Authority.

### BUSINESS PLAN

Counterculture also began work in 2017 on a new Business Plan, working with the Design Dundee Ltd team to set out the organisation's plans for the period up to opening in 2018 and for the first five years of public operation to 2023.

The Business Plan described the project's ambition and overarching objectives, governance structure, planning for operational readiness, audiences and public programme, commercial operation and fundraising, market and revenue activities, evaluation framework, communications planning, operational management sensitivity analyses and financial planning.

The business plan was presented to the Board and approved later in 2017. In addition, a document was created to highlight the cashflow month by month for the financial year 2018-19.

The business model is based on the continued support of founders and funders, alongside private fundraising and commercial activities such as exhibition ticketing, retail, catering and events.

### VISITOR FORECASTING

The Audiences and Media team commissioned independent, in-depth research to establish detailed visitor forecasts for the first five years of operations and inform the business plan.<sup>14</sup>

Based on audience research, market data and the competitive environment in which V&A Dundee operates, the research also provided a forecast of visitors to free and paid exhibition spaces, alongside retail and catering areas.

**The work was also informed by a comparator of seven UK attractions with similar characteristics and positioning to V&A Dundee. These included:**

- Falkirk Wheel
- Helix Park/The Kelpies
- Riverside Museum, Glasgow
- Hepworth Wakefield
- Tate St Ives
- Titanic Belfast
- Turner Contemporary, Margate

This research provided comparators on pricing, facilities, membership schemes, and events and exhibition programming that has helped to inform the development of V&A Dundee as an operating museum.

## 3.8 Communications and marketing

### STRATEGIC COMMUNICATIONS AND MEDIA RELATIONS

A communications strategy was finalised towards the end of 2015 and remained in place to the museum's opening, supported by month-by-month planning documents. This included the project's Core Story, a key messaging document that supported all communications activity.

An audience framework was developed in 2016-17 aimed at creating high levels of awareness amongst potential audiences, building a community of followers and advocates, generating mass engagement with the museum and ultimately upon opening, driving significant visits.

V&A Dundee and Dundee City Council press teams worked closely together during the construction period to develop public engagement with the project. V&A Dundee and the V&A press teams worked closely over the development of the galleries and exhibitions. The two universities gave press support on issues at key points. This was supported by the Communications Group representing all the founders and funders.

Media opportunities were organised around key project milestones, including the construction's first anniversary; topping out; cofferdam removal; completion of the galleries floor; and announcements about the Scottish Design Galleries and the museum's first exhibition. Time-lapse cameras were also installed to chart the progression of the construction.

V&A Dundee appointed PR agency Bolton & Quinn in 2017 to extend communications reach nationally and internationally in the run up to opening, while photography and videos were commissioned to share V&A Dundee's pre-opening journey with the wider public and the media.

V&A Dundee's films of its remarkable architecture, museum objects and community projects have been watched online over one million times. These include the films *Introducing V&A Dundee* and *Building V&A Dundee*, which were released in 2016 to develop early enthusiasm for and understanding of the project. More recently, there has been drone footage giving a unique view of the museum and a film of the Scottish Parliament official bagpiper, Stuart McMillan MSP, playing on the museum's roof to mark St Andrew's Day.

A London media briefing and lunch was held during Kengo Kuma's visit to the UK in October 2017, helping establish key relationships as part of the team's positioning strategy for the opening, particularly with architecture press.

As part of the communications strategy, there was a clear focus on positioning V&A Dundee strongly and engaging audiences in its story, highlighting the positive work being undertaken as part of pre-opening activities. A cornerstone of its strategy was taking a 'hide-to-reveal' approach (see further details in Section 3.10, Opening of the museum) that restricted all photography and filming of the inside of the museum. This generated significant anticipation among media, audiences and stakeholders ahead of opening.

#### During the pre-opening and launch periods, V&A Dundee coverage included:

Broadcast coverage has included: BBC One's *The One Show*, BBC Radio 4's *Front Row*, BBC Radio 4's *PM*, BBC One *Breakfast*, STV *News*, BBC Radio Scotland's *Janice Forsyth Show*

Newspaper and online coverage has included: *The Architects' Journal*, *Urban Realm*, *designboom*, *Wallpaper\** magazine, *Dezeen*, *Design Week*, *Monocle*, *Museums Journal*, *Wired* magazine, *Vogue* magazine, *The Economist*, *The Times*, *The Guardian*, *The Financial Times*, *The Daily Telegraph*, *The Scotsman*, *The Herald*.

International coverage: CNN, Bloomberg, LA Times, *Travel Weekly Australia*, *Forbes*, *The New Zealand Herald*, *Xinhua News*, *GQ India*

The museum's media coverage has developed substantially from 2015-16 when it began its own tracking and evaluation, which is done by two separate monitoring companies: *PressData* for print and broadcast coverage, and *Meltwater* for online coverage.

In the following four financial years the number of items of coverage has increased from 297 for print and broadcast and 1,481 online in 2015/16, to 3,110 for print and broadcast and 17,764 online in 2017/18. Over this time period the tone of the coverage has improved significantly in print and broadcast coverage, from 83.5% positive in 2015/16 to 89.0% positive in 2018/19. In September 2018 the tone of print and broadcast coverage was 90% positive, 8% neutral and only 2% negative, compared to 8.8% negative in 2015/16.





Kengo Kuma at the opening press preview. Credit: Alan Richardson

A significant achievement was developing a long-term relationship with the BBC, and a range of major broadcasts were secured including a 90-minute BBC Two Scotland programme on the museum opening and 3D Festival, broadcast as live to mark the opening.

Other broadcast highlights delivered by the Audience and Media team included: a Radio Scotland documentary on opening the museum, a Radio 4 documentary on AL Kennedy and Dundee, and a BBC Radio Scotland Culture Show live broadcast just after the museum opening. A Sky Arts architecture documentary was also filmed around opening that will be broadcast in 2019.

### STAKEHOLDER ADVOCACY

The Audiences and Media team has communicated with advocates and opinion formers to inform them of the key achievements of the project. This has included a programme of construction site tours and briefings, events at the Scottish Parliament and a briefing session with the Scottish Affairs Select Committee.

In 2016, V&A Dundee also worked closely with the Scottish Government as a partner on its landmark Baby Boxes initiative, designed to give every single baby in Scotland an equal start in life. A design competition run by V&A Dundee to design the surface of the box was open to college and university students, supported by some of Scotland's most successful contemporary designers. A total of 70 applications were received.

### DEVELOPING THE DESTINATION AND TOURISM OFFER

Throughout the project, Audiences and Media have worked closely with city and regional tourism and event groups, neighbouring local authorities as part of the East of Scotland Tourism Partnership and the UNESCO City of Design team to identify opportunities around collaborative destination marketing.

In 2016, V&A Dundee worked with the East of Scotland Tourism Partnership to create a joint campaign, Scotland's Tay Country, focusing on the area as a tourism destination and to use the opening of the museum and events like The Open to encourage visitors to stay longer and explore the region.

Audiences and Media have worked closely with VisitScotland during the project, annually attending the VisitScotland Expo to build awareness of the museum development and its relevance to visitor markets. Hundreds of industry and travel media trips were facilitated with city partners and VisitScotland in the years leading up to opening.

In June 2017, destination consultancy Blue Sail were commissioned to run a workshop involving V&A Dundee, VisitScotland, Scottish Enterprise, Scottish Development International, the British Council and the Scottish Government to identify opportunities for international promotion and activity. The workshop informed the development of V&A Dundee's tourism strategy.

At the start of 2018, Audiences and Media and VisitScotland ran a joint industry event for the Tay Cities region at Discovery Point. The event booked out in 48 hours, with over 100 businesses represented on the day. The event provided an overview of the new museum and its offer, followed by a product development workshop led by Open Change.

Ahead of opening, Audiences and Media met with hoteliers and attractions in and around the city to discuss packages and sales opportunities. A dedicated reception for these stakeholders was held in the opening period so that they could familiarise themselves with the offer in the early months of operation. V&A Dundee has continued to distribute its tourism toolkit to national agencies, key industry contacts, as well as gateway groups and individual tourism and hospitality businesses.

It was also involved in city digital campaigns including the #MyDundee blogger/influencer event with Apex Hotels and Dundee, One City Many Discoveries, which resulted in high engagement and excitement on social media.





Winning baby box with designer Leanne Young. Credit: Scottish Government



*Adventures in Design* comic strip at XXI Milan Design Triennale. Credit: Julie Howden





Attendee at the Blues Skies Festival using mobile virtuality headset to view Dundee's future Waterfront. Credit: Ross Fraser McLean

## MARKETING AND BRAND DEVELOPMENT

V&A Dundee's partnership with the V&A includes a 25-year agreement to use the V&A brand, with regular consultation on effective brand management and approval processes in place. In 2017, the V&A refreshed its branding to better reflect its growing family of museums.

A number of projects were developed to build brand awareness and engagement with V&A Dundee in its pre-opening period. The Audiences and Media team commissioned a giant comic strip in 2015 to feature on the hoardings surrounding the construction site. Designed by comic illustrator Will Morris and graphic designer David Mackenzie, the 150-metre *Adventures in Design* comic strip celebrated Scottish design, including the Falkirk Wheel, Lemmings and Dundee being designated the UK's first UNESCO City of Design.

For the XXI Milan Design Triennale in 2016, V&A Dundee worked with Nomad Exhibitions to turn the comic strip into an exhibition featuring the full strip and selected Scottish design objects including Harris Tweed jackets by Vivienne Westwood and a scale model of a Jaguar F-TYPE S Coupé. Between 2 April and 19 September 2016, an estimated 50,000 visitors saw the exhibition in Milan.

A new display about the development of V&A Dundee was launched at V&A South Kensington as part of the London Design Festival in September 2015. *Architecture Now: V&A Museum of Design Dundee* incorporated film and visualisations, allowing visitors to experience and explore the developing Dundee waterfront and interior of V&A Dundee. Part of the V&A + RIBA Architecture Partnership, the display ran until spring 2016.

A pre-opening engagement campaign, My V&A Dundee, was launched to demonstrate that design is not just high-end luxury. The social media campaign was headed by celebrities explaining their favourite designed object, and encouraged the public to post pictures and share their design stories. Locally, the museum participated in a number of partner engagement projects, including the Dundee Design Festival, Design Month, Ignite Dundee, NEoN, the Oor Wullie Bucket Trail and Maggie's Penguin Parade.

The team also proactively positioned V&A Dundee as part of the Scottish Government's themed years, particularly the Year of Architecture, Innovation and Design (2016) and the Year of Young People (2018).

## IT, DIGITAL AND SOCIAL MEDIA

### Key digital stages of the project included:

- In 2014, a Design Scotland app was developed to support the Design in Motion tour
- In 2015, Audiences and Media worked in collaboration with Dundee Waterfront to develop an app that could be used with a mobile virtual reality headset that allowed users to experience the museum and the surrounding Waterfront development in 2018
- Identification of an internet connectivity supplier for the new museum, alongside wifi and cellular service requirements
- Installation of a digital asset management system
- Development of customer relationship management (CRM) phase 1c and box office system
- Development of visitor counting system
- Development of a collections management system
- Appointment of new IT support provider
- Joint development of digital interactives for the Scottish Design Galleries
- Development and implementation of a social media engagement plan, which includes Twitter, Facebook, Instagram and YouTube
- Project website refresh at different phases with developers MTC Media
- Full operating venue website developed from 2017 for 2018 launch with developers Your Majesty (see below).

## IT AND TICKETING

Having been launched successfully for the early sale of *Ocean Liners* tickets in May 2018, the new online ticketing system was used in July 2018 to distribute museum entry tickets over the opening weekend. It was agreed that there was considerable public demand for tickets and that the fairest way to provide access was by ticketing entry. The huge public demand for these tickets resulted in some users having issues with the booking process. To help address this, a decision was made to offer the remaining tickets via a ballot, helping to better manage customer expectations within the limited resources available.

## V&A DUNDEE WEBSITE

In late 2017 / early 2018, a number of options were assessed as to the development, hosting and content of the V&A Dundee website. It was agreed that the site for the operating venue would be hosted on V&A infrastructure, becoming part of the V&A digital estate and being represented as part of the V&A family.

Your Majesty were appointed to develop the V&A Dundee website following a tender process, with Scottish Enterprise contributing 30% towards development costs.

The website went live in July 2018 (phase 1). Pre-opening, the focus was on delivering the final functionality required to support the operational venue, including transactional processes to support fundraising and membership, the new What's On section detailing the museum's programme and new multilingual visitor pages. Post-opening, further iterated phases of development have focused on improving the user experience and access to content to support the programme.

The website has performed significantly better than anticipated, supporting wide public awareness and engagement with the museum. In the period April 2018 to January 2019, there has been 1.8m website unique views, ten times greater than forecast, and 2.2m website page views, five times greater than forecast.

Social media engagement has been developed incrementally in line with the communication and content strategies, building anticipation and buzz in the run up to launch. During the first two weeks of opening, V&A Dundee increased its followers by 19% to over 80,000 over the main three channels. Social media impressions were 6.8m – seven times the normal average fortnight, while social engagements were 169,397, ten times more than in a usual period.



## 3.9 Planning for operation

### HERITAGE PORTFOLIO

Heritage Portfolio was appointed in September 2016 to run the café, restaurant and events for V&A Dundee.

The catering operation is an essential part of the visitor experience, featuring a café in the main hall, a restaurant with outdoor terrace overlooking the River Tay, and a range of unique spaces throughout the museum that are able to host events and dinners through into the evening.

The Edinburgh-based company runs cafés, restaurants and events at a range of visitor attractions, including the Scottish National Gallery of Modern Art, the Scottish Portrait Gallery, the Palace of Holyroodhouse, and the Signet Library.

Heritage Portfolio is also the only catering company in Scotland to have been awarded a Royal Warrant as an official supplier of catering services to Her Majesty the Queen.

Seventeen companies applied for the contract through an open tender process on the Public Contracts Scotland service.

### RETAIL

An external retail consultant, who previously worked for the V&A, was appointed for an 18-month period to develop V&A Dundee's retail offer. By October 2017, the retail range had been fully developed for the main shop.

The shop includes products by designers featured in the Scottish Design Galleries, new and exclusive collaborations with contemporary Scottish makers and manufacturers, and items featuring sketches of the building by Kengo Kuma.

The museum's opening publication *Living Room for the City*, published by the V&A and edited by Director of Programme Sophie McKinlay, celebrates the opening of a new design institution for Scotland and its inspiring home on Dundee's waterfront. It explores the building, its programme and includes interviews with Kengo Kuma and an essay by award-winning design critic Alice Rawsthorn. It is one of the best sellers in the museum's shop.

A temporary shop selling items to accompany the exhibition gallery is also based on the upper floor of the building.



The museum's Tatha Bar and Kitchen. Credit: Jason Smalley



Designer Donna Wilson with the Selkie created for V&A Dundee's shop. Credit: Garry MacLennan

## RECRUITMENT AND TRAINING

In May 2018 V&A Dundee launched a recruitment drive to employ around 30 visitor assistants for the museum – offering full-time, part-time, permanent and temporary positions.

V&A Dundee was inundated with applications and had to close the applications early. The Visitor Assistants were selected through an assessment centre and then received two weeks of orientation training inside the museum before opening.

A range of training has been delivered to the Visitor Assistant team, including WorldHost customer service training, which is being rolled out across the city as part of Dundee City Council's tourism strategy. They have also received training from disability access charities including Advocating Together and Capability Scotland.

In addition to this, Visitor Assistants have attended a range of in-house training sessions around customer service, selling skills, dealing with conflict, health and safety, General Data Protection Regulation (GDPR), V&A Dundee policies and procedures, and manual handling.

Part of the Visitor Assistant training also involved going to other cultural attractions around Dundee to ensure that the museum could confidently promote the city and act as ambassadors for tourism in the area.

A pool of the Visitor Assistants has also been on a Health and Safety Executive approved three-day first aid at work course. In the future, they are scheduled to receive further first aid training, responsible alcohol retailing training and Association of Scottish Visitor Attractions training on Exceeding Visitor Expectations.

A mini competition tender process was undertaken via Scotland Excel for the provision of security services to V&A Dundee. Following the tender process, Profile Security Services was appointed after demonstrating good sector knowledge, a strong local presence and the resources to deliver the contract requirements.

All of the Profile Security Officers hold Security Industry Authority licences and pre-opening training was conducted for CCTV operators. They also received additional training that included emergency procedures, building familiarisation, gallery and object awareness, first aid and fire marshal training.

The cleaning, washroom services and internal window cleaning provider was selected via a regulated two-stage process on Public Contracts Scotland. Stage 1 was a pre-qualification questionnaire and five were selected for stage 2 full tender submissions. Following the tender process, Spectrum Service Solutions were appointed. All relevant training is supported by Spectrum's central team, with additional training provided on building familiarisation and emergency procedures.

## EXPERIENCE AS AN OPERATING BUILDING/MUSEUM

V&A Dundee is closely monitoring visitor feedback through a number of different channels, which include a daily report from Visitor Assistants, social media channels, exit surveys and focus groups, TripAdvisor reviews, and direct comments made.

Senior management holds a weekly meeting to review feedback received and agree any necessary action. All of the comments received since opening are being analysed to identify trends and how these can be addressed.

Responding to visitor feedback, more interactive activities have been programmed. This resulted in the programming of *A Few Minutes of Design* – an installation that visitors could pick up a pencil and explore design through a series of activities – and the *Rules of Play* exhibition in the Michelin Design Gallery, which encourages visitors of all ages to get involved and build their own constructions using KAPLA planks. The Learning team have been supporting this at peak times, with more drop-in related activity in the learning studios.

## 3.10 Opening of the museum

V&A Dundee opened to the public on 15 September 2018. A range of celebratory events were held throughout the opening week, for local communities, supporters, the media and members of the public.

### 3D FESTIVAL

The opening was marked by the 3D Festival in Slessor Gardens, which was headlined on Friday 14 September by famous Scottish rockers Primal Scream and included performances from BBC Radio 1 Brit List artist Lewis Capaldi and Dundee's Be Charlotte. The evening event was broadcast live as a 90-minute BBC Two Scotland programme presented by Edith Bowman.

The free, ticketed event included a sound and light finale that used the museum building to create an immersive experience. V&A Dundee's Young People's Collective and Dundee-based creatives Biome Collective worked together to create 'Hello World', delivered by award-winning lighting company 21CC.

The Young People's Collective played an integral role in co-designing the 3D Festival, including working with DF Concerts in Glasgow to help organise the event. Its members also worked with Dundee-based design agency Agency of None to inform the final visual language used across the event on-site, online, for official 3D Festival merchandise and marketing campaign materials.

A mass participatory performance that brought together young people, communities and professional dance organisations kicked off the entire festival. It brought together 431 local school pupils, 82 college students and four pupils from Rossie Young People's Trust, led by dance company Shaper/Caper and working alongside partners Scottish Ballet, Scottish Dance Theatre, and the Scottish School of Contemporary Dance to create a unique dance performance.

The Saturday event was free to enter and unticketed. Dundee musical icon Gary Clark was joined by 150 young people from the Sistema choir – bringing together its four Scottish groups, plus an all-star band featuring members of Deacon Blue and Danny Wilson, who sang a special rendition of 'Mary's Prayer'.

The weekend also included videogame, graffiti and comic workshops for families from Abertay University, Open/Close Dundee and Beano Studios, including a successful attempt to achieve a Guinness World Record for the biggest competition to finish a comic strip.

Attendance at the 3D Festival on the Friday was at full capacity, with 10,000 people at the evening event<sup>15</sup>, while 12,600 people attended the festival on the Saturday, with people tending to be in family groups and a fairly even distribution of audience ages.<sup>16</sup> Overall, 22,600 people took part in the 3D Festival over the two days.

The 3D Festival was supported by Brewin Dolphin, DC Thomson, NCR, EventScotland, Year of Young People 2018, and Arts & Business Scotland via Culture & Business Fund Scotland.

### PRESS OPENING EVENTS

V&A Dundee's decision to adopt a 'hide-to-reveal' strategy, developed in 2015, was hugely successful in building anticipation among media, audiences and stakeholders ahead of opening. Two press preview days were attended by around 300 journalists, bloggers and vloggers from across the world. Press coverage from the opening previews included a five-star review from the BBC's Will Gompertz, front page of The Financial Times and a BBC Radio 4 Today programme special feature on V&A Dundee.

The museum's press launch was supported by freelance PR support and a secondment from the Scottish Government. Given the volume of media interest, all founding and funding partners, along with VisitScotland, deployed media staff to support with opening week. V&A Dundee also secured in-kind or cash support from Loganair, Apex Hotel, Hotel Indigo, Dundee City Council and the Scottish Government, with the Council and VisitScotland supporting a programme to extend media visits to experience other elements of the city's cultural offer.

### OPENING PREVIEWS AND DUNDEE DAY

A total of 2,250 people attended preview and celebration events between Wednesday 12 and Thursday 20 September. These evening stakeholder events were supported by 71 Brewing, Alliance Wine, Heritage Portfolio, and Isle of Harris Gin.

The day before public opening, 2,155 community guests visited the museum for a special 'sneak peek' tour on Dundee Day, including those who had previously taken part in V&A Dundee projects, community groups, family groups, nursery and school children, students and youth groups.





Primal Scream performing at the opening 3D Festival night. Credit: Ross Fraser McLean





Hello World light and sound opening finale, 3D Festival. Credit: Ross Fraser McLean

## 4. Outcomes



## 4.1 Activity Plan

As part of the National Lottery Heritage Fund second-round funding application, an Activity Plan was submitted in 2013. The plan was required to help V&A Dundee plan the activities it would offer to the public as part of the project – both pre- and post-opening.

It set out V&A Dundee's programme development since 2010, including pre-opening programmes, audience development, the market testing and audience consultation process, and future activities.

### THE ACTIVITY AIMS SET OUT IN THE PLAN WERE:

V&A Dundee will act as a design hub where people (of all ages and backgrounds) can engage with, learn from and enjoy design creativity of the past, present and future.

#### It will:

- be an international centre for design learning, play, debate, experimentation and innovation for everyone
- engage the widest possible public in an inspiring interdisciplinary learning programme onsite and through outreach programmes across Scotland, linked to Scottish design heritage, international design, contemporary design and innovation
- be innovative and exciting in its interpretation and programming
- explore and respond to design through a range of other disciplines such as dance, drama, music, creative writing, science and technology
- connect and interact with local, national and international visitors through digital engagement and outreach
- be a platform for celebrating, nurturing and launching new talent
- inspire creativity, curiosity and enterprise
- attract a diverse audience and proactively reach out into the community
- help people understand the universal relevance of design, by demonstrating how design has improved our lives and can continue to do so
- support and drive economic growth in Scotland through an innovative programme of design-led business innovation, internships, volunteering, modern apprenticeships, award schemes, courses and training opportunities

- celebrate and showcase designs and responses created by our visitors and inspired by the semi-permanent collections and exhibitions
- empower visitors to share their knowledge, stories and ideas about making and about design and design heritage and help shape our programmes.

Since the creation of the Activity Plan in 2013, the activities delivered by V&A Dundee have evolved – in part due to a longer pre-opening period than originally envisioned, but also as the Scottish Design Galleries, Exhibitions programme and Learning programme have taken shape as key staff have joined the project.

The exhibitions originally anticipated, with the exception of *Ocean Liners*, have changed over this period as discussions have been undertaken around resources, fit with programme objectives, audiences, timing and the availability of travelling exhibitions.

The Scottish Design Galleries have also been shaped over the years as more research has been undertaken, curatorial staff have been recruited, discussions have been undertaken about object loans, and the gallery themes have been independently consulted on.

The majority of the learning activities set out in the original plan are now being delivered in the museum, while the extended lead-in time and development of the Learning team has given more opportunities for community, schools and outreach projects to engage people with design, heritage, and the opening of the museum.

It has also given time for V&A Dundee's Design for Business programme, which helps businesses unlock and implement design-led innovation, to increase its reach among the business community, and test and establish its workshops. Further details about Design for Business can be found in the Outcomes section.

As a result, a revised Activity Plan (see Appendix 2) has been produced to reflect how funding from the National Lottery Heritage Fund and other key funders has been used to create a wider range of projects than originally imagined. These projects have reached a greater number of people across more diverse communities, in turn helping to contribute to improved outcomes for heritage, people and communities.

## EVALUATION

Based on the National Lottery Heritage Fund’s logic model, the following section helps to demonstrate how V&A Dundee has contributed to improved outcomes for heritage, people and communities – featuring case studies and evaluation work undertaken.

It has been informed by an Evaluation Plan that was developed with public funders in spring 2016, with the action plan reviewed and updated by the Senior Management Team in 2017.

**The Evaluation Plan sets out to ensure that there is a user focus in the development of V&A Dundee by:**

- Using audience research and consultation to inform planning.
- Recognising the need for formative evaluation to inform the pre- and post-opening phases.
- Ensuring that audience insight and learning is shared and acted upon across the organisation and with partners.
- Establishing from the start measures to collect visitor data, with visitor research seen as an essential source of management information and funded accordingly.
- Supporting a culture of shared responsibility for evaluation across all teams.

A series of training sessions on evaluating impact were run for V&A Dundee staff between 2016 and 2017 to help support embedding evaluation best practice across the organisation, which was funded by players of People’s Postcode Lottery.

## 4.2 Outcomes for Heritage

Championing past, present and future design in a Scottish and global context is a key strategic objective for V&A Dundee and is encapsulated in the development of the Scottish Design Galleries.

The creation of these galleries has ensured that the story of Scottish design and its place in the world has been shared for the first time, establishing management of Scotland's rich design heritage and carrying out conservation to safeguard this heritage for the future.

As part of programming, the learning activities and projects that have taken place are clearly focused on helping people to understand more about their design heritage and using this learning to inspire their own creativity.



Member of the Exhibitions team with a dress designed by Holly Fulton. Credit: V&A Dundee



## Heritage will be better managed

The creation of the Scottish Design Galleries and the accompanying publication, *The Story of Scottish Design*, has brought to the forefront Scottish design heritage, telling the story of Scottish design and its place in the world for the first time in a permanent display.

In the V&A collection, there are around 12,000 objects that are classified as examples of Scottish design, many of which have not been displayed before.

Drawing on the extensive collections of the V&A and working with museums and private collections from across Scotland, UK-wide and internationally, V&A Dundee has established and developed processes for the better management of Scotland's rich heritage of design.

### ROTATIONS

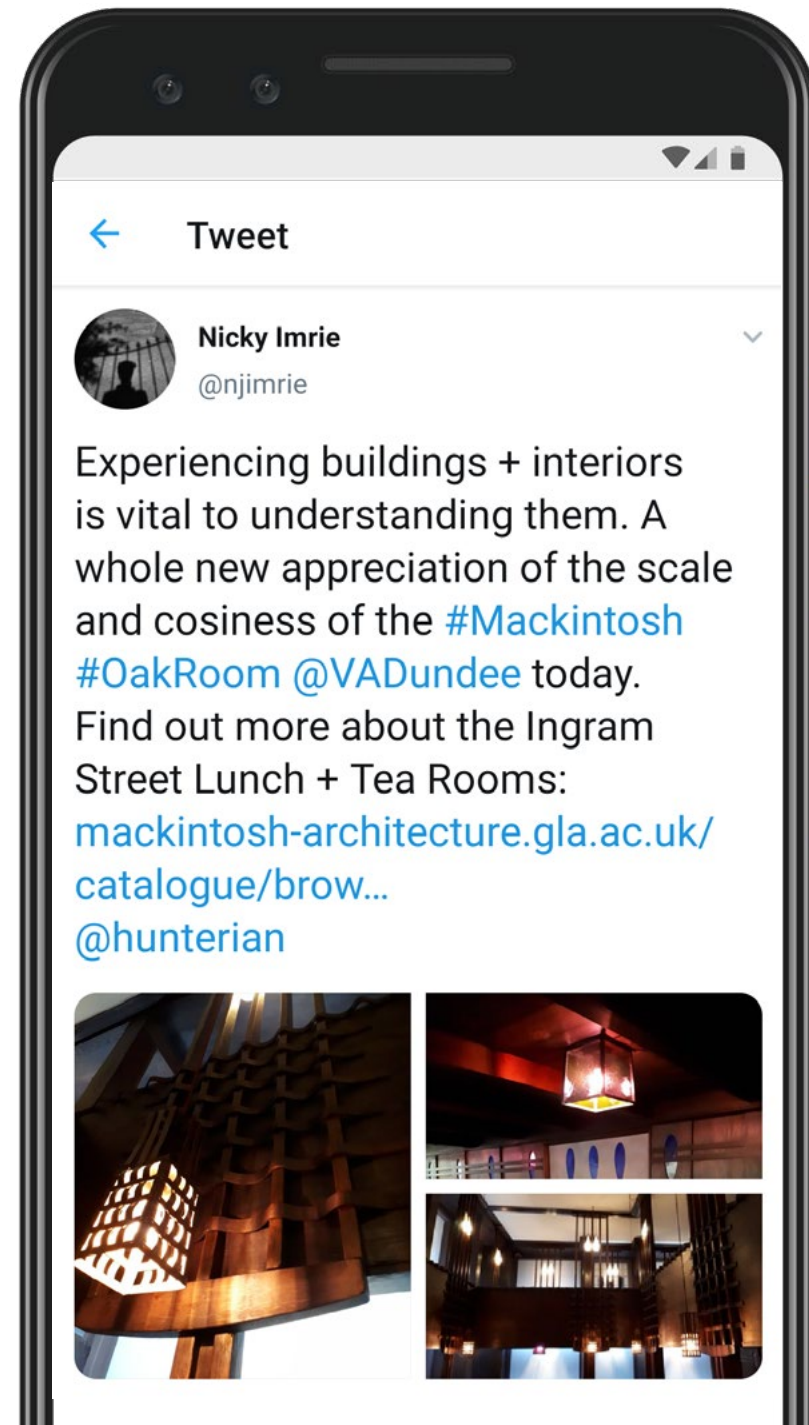
An agreement has been put in place with the V&A's Loans department to an initial loan period of five years, after which the agreement for most objects will be renewed – although some objects have been identified that will need to be rotated for conservation reasons. A rotation plan is in place for a small group of objects that are very light sensitive or are on loan for a short time period.

A rotations schedule is in place to plan replacement objects up to seven months beforehand, alongside identifying any conservation work needed, putting in place insurance cover, packing and transportation for the replacement and return objects, and unpacking, condition checking and installation.

### MANAGEMENT OF THE OAK ROOM

Design Dundee Ltd and Glasgow Life have put in place processes for minimising wear and tear on the Oak Room. Advised by Charles Taylor Woodwork, who oversaw the restoration of the Oak Room, it was agreed:

- Visitor numbers within the Oak Room should be a maximum of 20 at any time
- Specialist cleaning will take place within the Oak Room
- Fixed CCTV cameras are to monitor activity, along with Visitor Assistants
- Specialist tours to the mezzanine level should be limited by numbers and are expected to be out-of-hours
- At the end of the 25-year loan period the room, frame and mounting will be returned to Glasgow Life





L-R: Illustrator Jen Collins and Emily Campbell of Creative Education Trust beside V&A Dundee's installation *A Few Minutes of Design*. Credit: Julie Howden

## REVIEW OF THE SCOTTISH DESIGN GALLERIES INSTALLATION

A review is currently being undertaken of the installation of the Scottish Design Galleries. It will consider how conservation, technicians and freelancers based at V&A South Kensington supported the major installation.

It is being informed by a series of staff interviews that will consider their experience of planning and practically working in the galleries during that period. It will include recommendations for V&A Dundee and the V&A, including how their relationship for maintaining the galleries works on a practical level.

### Training and expertise

Through the support of the V&A, the creation of the galleries has ensured the conservation and restoration of objects of great significance to Scottish design heritage, and of significance worldwide, ensuring that they are not lost forever.

The creation of the galleries benefited from conservation expertise from the V&A, including textiles, ceramics and glass, stained glass, furniture and frames, and books. The V&A's Conservation department was also able to advise on the display of objects and the safe transit of objects when on loan or touring.

A training programme has been agreed with the V&A to ensure that skills are shared across both organisations, with particular emphasis on installation, conservation, object handling, condition reporting, and loans administration.

There is an ongoing ambition to develop conservation skills more broadly, including developing freelance conservators across Scotland to work with the museum and introducing a training programme for technicians.

The Director of Exhibitions was appointed in November 2016, followed by the first Curator in June 2017. Two Assistant Curators and an additional Curator were appointed shortly afterwards, together with a Gallery Manager and Programme Assistant.

Training has been provided by the V&A through their existing course structure and staff have been part of the install/de-install of exhibitions in South Kensington, which has proved critical to the development of skills across the team. Training such as Known Consignor status, which allows objects to travel without being unpacked or inspected at airports, has been arranged in-house.

The V&A and V&A Dundee have been working together on an exhibitions policy document, which pulls together the Exhibitions programme (2018-21); V&A borrowers guide; V&A Loans Out Procedure; V&A Loans Out Touring procedures; V&A Dundee loans out procedure; V&A Dundee damage action checklist; and object handling documents and training.

### Exhibitions changeover

The exhibition changeover periods have been carefully considered, reflecting that the museum is open to the public seven days a week and that the lift used for object handling is shared with the catering operator, Heritage Portfolio.

A schedule is put in place to ensure that Heritage Portfolio deliveries for the morning take place before 8am, with the lift used during the day for exhibitions and deliveries scheduled accordingly. There also late night working for the duration of the changeover period.

During the recent changeover period a hoarding was put in place to separate the de-install of the galleries from the main foyer area, which featured an exciting installation that was developed in consultation with Creative Education Trust and illustrated by Jen Collins. *A Few Minutes of Design* invited the public to embark upon a design adventure – inspired by the Scottish Design Galleries, the building and by Dundee – that encouraged visitors to draw and work through a series of design challenges.



## Heritage will be in better condition

Led by the V&A's conservation experts, many of the objects in the Scottish Design Galleries have been especially conserved due to the creation of the museum, ensuring they are protected from any further deterioration and are conserved for future generations to experience.

Almost all of the V&A objects received some conservation work, around 200 objects, while the conservation of around 20 loaned objects was further undertaken – including the conservation of a model of the Dounreay Fast Reactor, the Paisley pattern sample books, and the Douglas Strachan stained-glass panels.

### KEY CONSERVATION WORK UNDERTAKEN FOR THE SCOTTISH DESIGN GALLERIES INCLUDES:

#### Ayrshire christening robe

A 180-year-old Ayrshire christening robe was cleaned and conserved, featuring beautiful, intricate needlework. It provides an important example of the needlework heritage created by Ayrshire's all-female workforce in the 19th century.

It had been in storage for over 50 years and underwent careful cleaning by the V&A's Textiles Conservation studio in London. The process included vacuuming the robe to remove dust and loose dirt, checking for weak areas in the fabric, washing the robe in a shallow bath using deionised water and specially tailored detergents, rinsing for four hours, followed by blotting it dry and stuffing with soft nylon netting to reshape, and finally drying it with cold air from hairdryers.

#### Northumberland House Glass Drawing Room

One of the most important architects in the second half of the 18th Century, Robert Adam's Glass Drawing Room elevation is one of the surviving elements of the Glass Drawing Room from Northumberland House, the London residence of the Duke and Duchess of Northumberland, before it was demolished.

The chimneypiece elevation was conserved for display in the Scottish Design Galleries. The elevation consisted of around 20 pieces that had been stored across multiple crates in the V&A's stores, so significant detective work was required to piece back together this complex puzzle.

Once assembled in a layout, curators and conservators with different specialisms met to discuss how to realise its display. The large mirror and the individual pieces of gilding had been conserved, some of which had to be remade. The chimneypiece was assembled first on site in Dundee before the mirror, glass panels, gilding and other decorative elements were installed to create the overall effect.

#### Cottier & Co. Chair

The reupholstery of a chair made by Cottier & Co. from 1870-75, who supplied interiors and stained glass in the Aesthetic style – a literary and artistic movement that emphasised visual and sensual qualities – for private and public commissions from across the UK. Following extensive research, new upholstery was woven for the Cottier chair based on the original fabric.



Conservation of the Ayrshire christening robe.  
Credit: © Victoria and Albert Museum, London

## Case Study

### “Extending the preservation of unique historical artefacts”

#### **Rebecca Tabram, Book Conservator employed by the V&A to conserve the Paisley pattern sample books**

Three rare sample books from the 1770s featuring surviving patterns and textile samples dated to the early days of Paisley textile manufacture have been part of a major conservation project for V&A Dundee’s Scottish Design Galleries.

Although originating in Asia, the teardrop design has been associated with Paisley as a world leader in the traditional hand-loom weaving, as the city produced more shawls than anywhere else in the world at that time.

Jane Rutherford, Head Book Conservator at the V&A in London, has led the conservation of the books – loaned by Paisley Museum and Art Gallery – on behalf of V&A Dundee over the period of nearly a year.

Discussing the significance of the conservation project, Rebecca Tabram commented: “The conservation treatment for these three volumes has extended the preservation of unique historical artefacts.

“The samples contained within these volumes embody many aspects of its historical period, such as fashion, production methods, weaving skill level and pattern making.”

The specialist conservation work has included re-sewing and re-backing, repair of edge tears, cleaning, and rebinding the spine with new leather. A bespoke archival phase box has been created for transport and to protect the books.

Due to this important conservation project, visitors to V&A Dundee can see the intricate weaved Paisley designs that were fashionable during that time and learn more about the techniques used to create these beautiful samples showcasing pattern and colours.

## The Oak Room

A partnership between V&A Dundee, Dundee City Council and Glasgow Museums led to the £1.3m conservation, restoration and reconstruction of Charles Rennie Mackintosh's Oak Room, which had been lost from public view for nearly 50 years. The complex project involved architects, curators, conservators and craftsmen to bring this hugely significant part of Scottish design heritage back to life.

V&A Dundee's Director commented that the Oak Room has placed the work of its internationally-renowned architect and designer at the centre of the Scottish design story, providing a masterpiece at the heart of the museum that would generate interest around the world.

The Oak Room also has a profound relationship with the building for V&A Dundee, as Mackintosh was inspired by Japanese design in the development of his design approach and Kengo Kuma visited Mackintosh's works in Scotland early in his career. Mr Kuma has cited the influence of the Scottish designer in the development of his own architecture.

A team at Charles Taylor Woodwork, supported by Smith & Garratt project management, re-assembled the wooden panels and mezzanine floor in their workshop in Dalkeith near Edinburgh for assessment. Using photographs of the original tearoom, drawings from the 1970s and an archive code painted on the back of the panels, the team worked to fit back together the interiors and identify the best method to assemble and display the room.

Taking 16 months, a total of 2,000 individual parts were arranged, including all the hidden supports replicating the building walls, floor and ceiling of its original location. As a result of this work, the final installation at V&A Dundee did not involve the need for any modern structural interventions.

Some of the key challenges faced during the project included that the original panelling had been painted over with an imitation wood-grain finish during one of the tearoom's alterations. The only original oak staining used by Mackintosh was found under a 1950s' light switch, which was successfully recreated by a local Glasgow company after detailed analysis of the original wood and chemical composition.

Some of the glass inserts were damaged or missing, although remarkably 80% of the original square and teardrop glass inserts in the wall panels were retained.

Specialist glass conservation undertaken by Rainbow Glass Studio in Ayrshire was able to identify the eight different types of glass used by Mackintosh in his design, including a pink/purple glass that also used gold to manufacture its effect. Using an original fragment from the room, experts in Germany at Lamberts Glass were able to replicate the original mouth-blown, pink/purple glass.

Only one original leaded-glass box-lantern partially survived, but from it the team was able to accurately recreate replica lampshades to use in the display. Three different lampshade designs had been used in the original – each to be specifically placed to provide a specific quality of light and effect.

The display in V&A Dundee includes a combination of original and skilfully reproduced glass shades and brass lanterns to help recreate the lighting effects that Mackintosh intended.

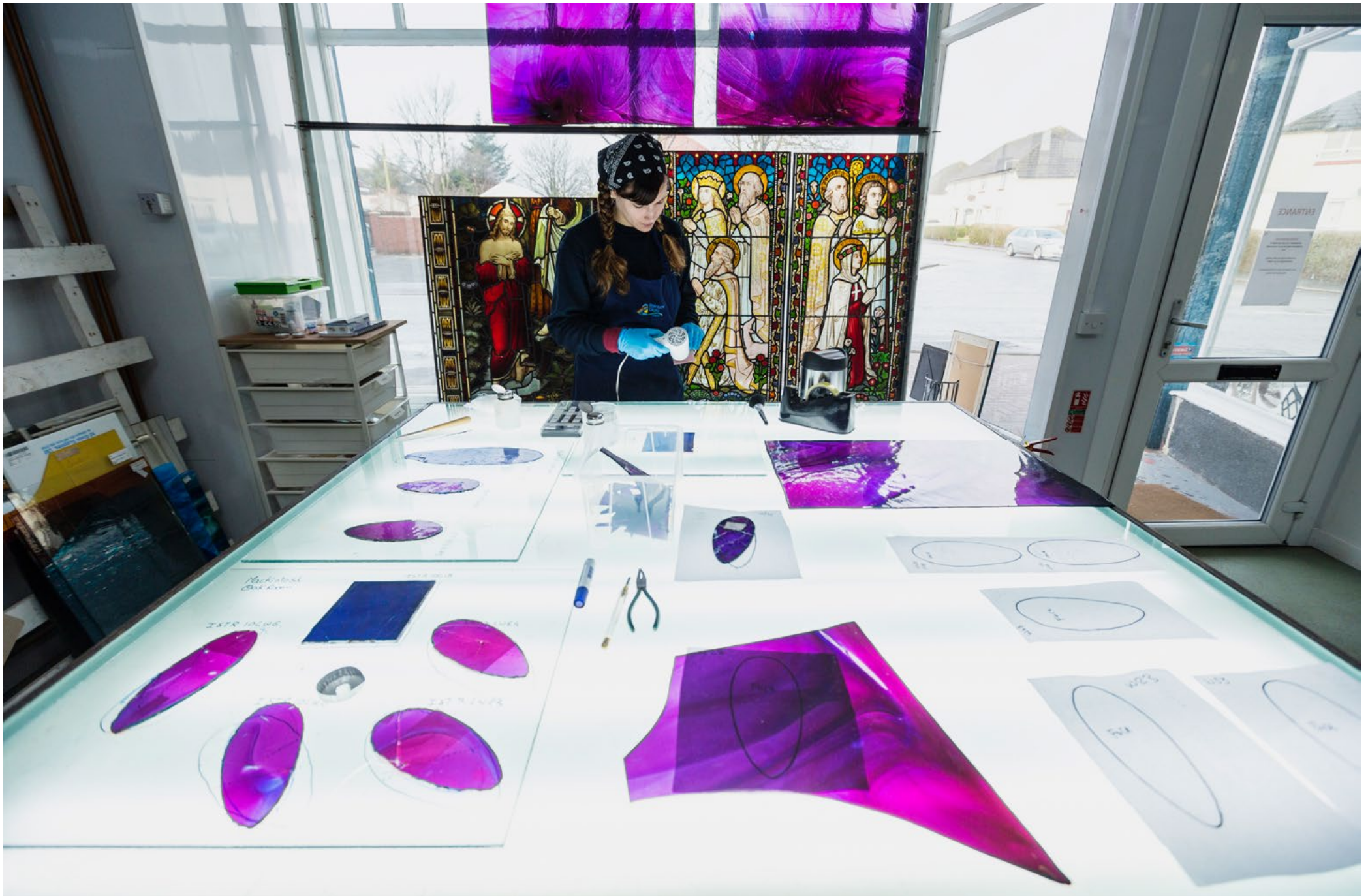
The end result is a stunning example of Charles Rennie Mackintosh's work that visitors to V&A Dundee can experience first-hand.

Describing the end result, Alison Brown, Curator at Glasgow Museums who led the project, said:

**“Visitors will walk into the interior and have a powerful experience of how Mackintosh treats space. He conducts you to look around in a very particular way by using repeated vertical lines to create an orchestrated rhythm.**

“He embraces the potential of the electric light, using pink glass shades and lime-green blown-glass teardrops, while in the centre is the ‘glade’ where stylised oak trees seemingly support the room from floor to ceiling.”<sup>17</sup>





Oak Room glass conservation and restoration being undertaken by Rainbow Glass Studios. Credit: Ross Fraser McLean



## Case Study

### “Leading Scottish designer of his time”

#### Conservation of Douglas Strachan glass panels, Scottish Design Galleries

One of the most significant loans to the Scottish Design Galleries is a group of three stained-glass panels by leading Scottish designer Douglas Strachan, originally made for Marischal College Library in Aberdeen in 1906.

The three panels are of great significance to Scottish heritage as part of a much larger scheme called the Cruickshank Memorial Window. The window was inspired by the academic areas within the library, and depicted interpretations of the sciences, referencing scientific tradition from Aristotle to Darwin, alongside the sacred and poetic aspects of Creation.

The window was dismantled in the 1960s during a major reconfiguration of the university buildings and in error was lost for several years. Sections of the window were found to be in urgent need of intense repair and refurbishment, and are not all currently fit for display. Considerable restoration would be needed before they could be presented once again in their entirety.

V&A Dundee worked in partnership with the University of Aberdeen Museum to arrange and fund the conservation of three panels by York Glaziers Trust. These panels are now on display in the Scottish Design Galleries rather than in storage, enabling them to be enjoyed by a much wider audience. They represent physics, mathematics and astronomy contemplating the heavens and the earth.

York Glaziers Trust is one of the oldest and largest specialist stained glass conservation studios in the UK, with three ICON-accredited conservators amongst its staff. They carefully cleaned, repaired and reframed the panels in their studio.

Discussing the significance of Douglas Strachan’s work, V&A Dundee Curator Meredith More described him as “amongst the most important Scottish designers of the Arts and Crafts Movement.

“In his lifetime, he was the leading practitioner in stained glass, and even considered an heir to William Morris in the medium.”

The panels on display in the galleries highlight Strachan’s distinctive use of materials and techniques, being known to work with different types and thicknesses of glass, and for etching and painting on the surface.



One of the stained-glass panels featured in the Scottish Design Galleries. Credit: University of Aberdeen

## Heritage will be better interpreted and explained

### THE STORY OF SCOTTISH DESIGN

The Scottish Design Galleries and an accompanying publication, *The Story of Scottish Design*, have for the first time told the special and unique story of Scottish design heritage and its significance worldwide from around 1480 to the present day.

The story of Scottish design is told across three thematic chapters in the galleries. The first and largest section of the galleries, *The Story of Scottish Design*, is made up of a series of displays that explore how, why and where particular design industries and craft traditions in Scotland have developed. The objects exhibited include a section of Robert Adam's Glass Drawing Room and one of the first Speedo swimsuits, as the Australian company was founded by Scottish entrepreneur Alexander MacRae.

It also tells the story of how Scotland's design reflects its history, politics and geography, and explores how trade, fashion and migration have helped it achieve international impact.

Visitors also have the opportunity to engage directly with objects, materials and design processes through physical and digital interactives.

The second section of the Scottish Design Galleries, *Design and Society*, explores the ways that design can impact on the way we live, including how designers can create solutions to problems and how design can transform communities, organisations, businesses and services. The objects featured include the design of housing and town planning, healthcare, power generation and engineering.

This section includes models of Frank Gehry's Dundee Maggie's Centre and the Falkirk Wheel by RMJM Architects, and snap40, designed by Christopher McCann and Stewart Whiting as a wearable device that uses artificial intelligence to monitor a hospital patient's vital signs

The third and final section, *Design and the Imagination*, explores how design can be used to tell stories and spark the imagination through videogames, performance and entertainment. One of the standout objects on display is a giant pop-up book designed and painted by Scottish artist John Byrne for the staging of the influential play *The Cheviot, the Stag and the Black, Black Oil* about the history and exploitation of the Highlands.

Objects have included a costume from *Star Wars Episode II: Attack of the Clones* that was inspired by a vintage piece of Paisley pattern, which was recently on loan from the Lucas Museum of Narrative Art in Los Angeles, and the BAFTA award-winning videogame *Beckett*, designed by *The Secret Experiment*.

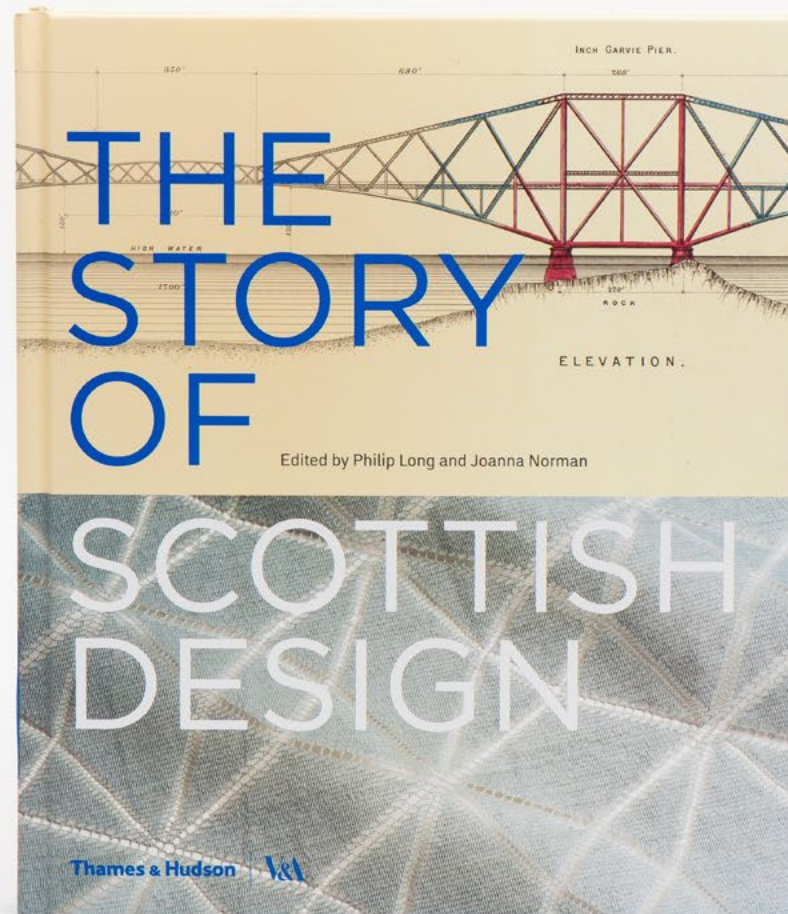
The galleries aim to engage children with objects on display by providing an object trail, digital interactives and a bridge-building challenge.

Since the museum opened, the Scottish Design Galleries have already attracted around 380,000 visitors.<sup>18</sup>

*The Story of Scottish Design* – edited by V&A Dundee Director Philip Long and Joanna Norman, Director of the V&A Research Institute and Lead Curator of the Scottish Design Galleries – features over 60 essays by a range of specialists and experts that give an unprecedented insight into Scotland's rich design heritage and its significance.

The V&A online archives provides information on all of the Scottish Design Galleries objects that have come from its collections, although objects acquired from other museums and private collections are not part of the database.





The Story of Scottish Design publication. Credit: Garry MacLennan



## TOURS AND TALKS

The museum regularly offers tours of the Scottish Design Galleries and the exhibition gallery, as well as talks about the objects in the galleries and Scottish design.

Recent talks have included a curator-led talk exploring the Glasgow Style, one of Scotland's most influential contributions to design history, which highlighted relevant objects in the Scottish Design Galleries, including the Oak Room.

The Scottish Design Galleries have regularly been filled with school children and their teachers during visits to the museum, alongside attending workshops on videogame design, engineering, fashion and textiles, and comics.

The museum has also been running curator-led Educator Familiarisation talks – for teachers, lecturers, youth workers, family learning and family support workers – that highlight how the content and themes within the Scottish Design Galleries can be used to inspire learning.

There are tours for community groups and also tours led by V&A Dundee's Young People's Collective that takes young people on a tour of the Scottish Design Galleries, where they share their thoughts about their favourite objects.

There are tours for disability access, health and wellbeing groups, including ones featuring British Sign Language interpreters and audio described tours specifically catering for blind and partially-sighted visitors. The museum is developing a series of tours for black, Asian, and minority ethnic (BAME) communities in their native languages, in partnership with the Amina Muslim Women's Resource Centre.

V&A Dundee also offers four handling boxes – one architecture and design box, and three boxes related to the Scottish Design Galleries.

The boxes have been created to use in interactive sessions in the museum with groups, including multi-sensory handling boxes for people with dementia. They can also be taken out into the community into places like care homes for older people, sheltered accommodation and schools. There are also plans to take them to external events and festivals.

## INTERACTIVES

The Scottish Design Galleries features Design Unwrapped, two interactive tables designed by ZMMA that gives visitors the chance to unwrap the design and manufacturing process of a number of key objects through physical and digital interaction.

The physical interaction table features materials such as a sample of lace and Jacquard cards used to make intricate lace patterns, a piece of Fair Isle knitting, a cable from a suspension bridge, a Scott & Fyfe sample of Alphashield pipe, and a silicon glove made by cycling performance clothing company Endura.

The digital table created by digital media and software studio ISO includes augmented animations to illustrate the production processes of Lynne MacLachlan's statement Phase necklace, a touch interactive that lets visitors assemble a Hunter Boot from the pattern cutter's components, and prototypes and a film on the S'up Spoon co-designed between Grant Douglas and 4c Design.

In the early stages of the Scottish Design Galleries development, a range of ambitious ideas for digital interactives were proposed. These were refined in a series of workshops after ZMMA and partners ISO and why not associates were appointed, and priorities were set within the gallery budget. Additional resources for a freelance interactive co-ordinator were agreed in 2017, which helped ensure focused delivery of the interactive elements of the gallery.

The galleries feature an I Spy Design family trail to encourage younger visitors to explore the galleries and learn more about Scottish design by following design-themed clues to collect embossed stamps featuring items from the galleries. There is also a Bridge Engineer area made by design, fabrication and installation company Old School Fabrications that allows visitors to use wooden blocks to test their own engineering skills.

Audience testing of the digital interactives in the Scottish Design Galleries was led and documented by ISO. Two panels, each with groups of six to eight people, were consulted at three different phases during the development of the interactives. The panels included hard-to-reach audiences, such as people with physical disabilities, sensory loss or cognitive disability, young people and older people. Testing was carried out through observation and usability questionnaires to gauge pre-interaction expectations and post-interaction evaluation.

Further user testing of the interactives was carried out with groups of nursery and primary school children testing the Bridge Engineer table.



## EXIT SURVEY, SEPT-DEC 2018 – SCOTTISH DESIGN GALLERIES

ScotInform has been commissioned by V&A Dundee to conduct an Exit Survey of visitors to evaluate visitor experience during its first year of opening, including their visit to the Scottish Design Galleries, *Ocean Liners* and the Michelin Design Gallery.

The Exit Survey for the first quarter of opening (mid-September-December 2018) received 518 responses, representing 1,551 visitors. The survey was initially carried out by professional fieldworkers, with trained V&A Dundee Visitor Assistants conducting surveys from December 2018 onwards.

The Exit Survey helps to demonstrate people's experience of the Scottish Design Galleries and how visitors have come away with a better understanding of Scottish design and its significance in an international context.

### Asked to rate their experience of the Scottish Design Galleries:

- 94% rated their overall visitor experience to the Scottish Design Galleries as very good or good
- 93% rated the number of objects/exhibits as very good or good
- 91% rated the information about the objects/exhibits as very good or good
- 89% positively rated the galleries as providing an understanding of Scottish design
- 86% positively rated the galleries for providing an understanding of Scotland's place in the world of design

The Exit Survey strongly indicates that visitors to the Scottish Design Galleries have come away from the experience with a better understanding of Scottish design and its role in the world.

### Comments made by respondents about the Scottish Design Galleries included:

- "Some really interesting things in there. You don't realise that so many things have to be designed."
- "All interesting and quite a mix of genres and style – from the past and present and a glimpse into the future."
- "Breadth of areas and genres of design in Scotland."
- "Interesting and informative."
- "Getting a better understanding of Scottish design and designers."
- "The exhibits are marvellous and show the breath of Scotland's involvement in design."
- "Level of exhibits and diversity of design techniques is great. Lot of people think design is all about fashion and jewellery and forget that everything has to be designed in some shape or form."
- "We Scots are an innovative bunch and it's marvellous it is being showcased in this way."

The Exit Survey also reported that 41% of those surveyed visited the Michelin Design Gallery and 33% paid to visit the *Ocean Liners* exhibition during the survey period. Final footfall data for *Ocean Liners* shows that there were nearly 100,000 paid admissions to the opening exhibition between 15 September 2018 and 24 February 2019.



Part of the Northumberland House Glass Drawing Room conserved for display in the Scottish Design Galleries. Credit: Ruth Clark



Second section of the Scottish Design Galleries, Design and Society. Credit: Ruth Clark

## SUMMATIVE RESEARCH

ScotInform was further commissioned to undertake summative evaluation<sup>19</sup> to capture feedback on the gallery and exhibition spaces within the museum and identify the extent to which they contribute to V&A Dundee's overall vision. This took place over two periods – stage one during the *Ocean Liners* exhibition, and stage two when there was no major exhibition.

110 participants took part in discussion groups to inform the research. The majority of people were visiting the museum for the first time (94 participants) and came from elsewhere in Scotland or the UK (93 participants), with 30 visitors staying overnight and visiting the city specifically to see V&A Dundee. Just three participants had a background in design, but most participants said they had a general interest in design and an appreciation that 'design is all around us'.

Discussing the Scottish Design Galleries, participants said they were impressed and surprised at Scotland's role in design, particularly its global reach, while some mentioned how they had been unaware of Dundee's role in videogame design. Comments made included: "The layout makes you look at things you normally wouldn't and that's really clever" and "I was really surprised to see the range of content in there. I didn't expect to see furniture and interiors".

They also welcomed the varied interpretation on offer in the Scottish Design Galleries, with children and some adults visiting without children enjoying the I Spy Trail. Visitors to the Scottish Design Galleries and *Ocean Liners* were also positive about the films available to watch, commenting that they were ideal in length and welcoming that subtitles helped ensure that multiple visitors could watch the films at the same time.

Participants who visited the *Ocean Liners* exhibition said they had a positive experience and commented on the range of content, with some surprised at the scale of some of the objects, which helped to communicate the size of the ships.

Asked what they had learnt from their visit to the Scottish Design Galleries and *Ocean Liners* exhibition during stage one, learning outcomes included<sup>20</sup>:

- 88% said they had learnt how Scottish design has been shaped by history, education, politics and the economy; how design fuels the imagination and evokes emotions; and how design makes the world more beautiful and fun.
- 80% said they had learnt about how Scotland's design traditions and design industries have developed as a result of the natural environment, geographical location and available resources.
- 70% had learnt about how as a result of trade, networks, migration, cultural exchange and ambition, Scottish design has absorbed international influences and has itself had an international impact.

Unprompted, individual comments about what visitors had learnt from their visit included reigniting an interest in engineering; the role of Scots in design; how Scottish designers have had an impact internationally; and the diversity of design in which Scotland has played a role, from medical design to fashion.

Reviewing the *Rules of Play* exhibition in the Michelin Design Gallery and *A Few Minutes of Design* installation, the research found they appealed to visitors of all ages and have provided a fun environment, encouraging people to engage with design and creating a different, accessible museum environment.



## COMMISSIONS

V&A Dundee has commissioned a number of artists and designers to find new, innovative and creative ways to explore design with visitors to the museum.

One of the principles of commissions at V&A Dundee is to ask contemporary practitioners to explore the displays to give further insight into design, as well as generate discussion on its continued impact.

Former Turner Prize nominee Ciara Phillips was commissioned to produce an installation inspired by an unseen aspect of the V&A's collections in South Kensington.

She focused on the textile and ceramic collection objects that were used for testing out ideas and methods, such as ceramic colour charts, fabric swatches, and embroidered samplers.

*This, looped* captures the often-unseen process of making by evoking a moment suspended in time where vital decisions about materials and their composition are made. The site-specific installation is featured on the upper floor of the museum, before entering the galleries.

## DESIGNER IN RESIDENCY PROGRAMME

V&A Dundee will host designers in residence working across a range of practices, supporting designers to develop new work within an atmosphere of collaboration. A dedicated studio space is available to allow the designers in residence to carry out research, plan their work and create a new piece of work in response to the museum's collections and to the building.

V&A Dundee's first designer in residence has been Simon Meek, founder of the Glasgow-based games studio The Secret Experiment. His most recent work, a surreal noir videogame called Beckett, also features in the Scottish Design Galleries.



## Case Study

### “Opening up Scottish Design Galleries to a wider audience”

Asked to use an object in the Scottish Design Galleries for inspiration, graphic designer and typographer Maeve based her design on a 19th century trade catalogue by cast iron manufacturers Walter MacFarlane & Co.

The ornamental cast iron featured in the galleries was exported from Glasgow around the world in the late 19th and early 20th centuries, and was used to create elaborate bandstands, fountains and balconies in places including Canada, Brazil, India and Australia.

Discussing the commission, Maeve said she was “eager to engage the expertise of the curators of the Scottish Design Galleries, I wanted to see which stories were missing from their overview. The content they were unable to practically include in the gallery was mostly large-scale architectural works.”

Carrying out extensive research to inform the project, Maeve commented: “When I began this research, cast iron and its history was entirely new to me. It was a privilege to access the V&A’s collection and investigate a new subject through the medium of graphic design.

“I am conscious that I am not a historian, nor a museum curator. Rather, I organise information through visual means.”



The final result is a remarkable installation that displays the material that would usually be confined to a book and allows visitors to walk up to it and investigate its connections.

“My hope is that the work opens-up the contextual themes of the Scottish Design Galleries to a wider audience,” Maeve said.

*Plain and Ornamental of Every Description* by Maeve Redmond.  
Credit Ruth Clark

## Case Study

“Merging the design disciplines of exhibition, installation and theatre”

**Simon Meek, V&A Dundee’s first Designer in Residence, mixed-media storyteller and founder of Glasgow-based games studio The Secret Experiment**

Simon said it was a “huge privilege” to be appointed V&A Dundee’s first Designer in Residence, supported by the National Theatre of Scotland’s Citizen of Nowhere project.

Discussing at the start of the project his hopes and ambitions for the residency, he commented: “The residency is giving me time and space to explore a new project without the commercial pressures that often cause more experimental work to be curtailed. The environment is also inspirational and – importantly – it moves me outside of my day-to-day working space (even moving me to a new city) to allow these ideas to emerge.

“My hopes within the six-month residency are to bring together the foundations of an exciting new work of physical fiction – something that merges the design disciplines of exhibition, installation and theatre.”

As part of the residency, he developed a project called *Fragments of a Fictional Place*, which is “a new work of ‘physical fiction’, which brings together a series of character vignettes set in a non-existent town in the east of Scotland”. Simon uses a combination of text, narrative artifacts and theatrical constructions to tell these stories.



He said the Michelin Design Gallery – “the jewel-in-the-crown of the museum” – had been a particular inspiration for the project, explaining: “I’ve always had in the back of my mind the Michelin Design Gallery and spaces that afford that seamless intrusion of the visitor flow, such that people find themselves drawn to and woven into the space almost without thinking.”

Describing the importance of experimentation in making heritage more accessible to different audiences, Simon explained: “For me, experimentation is the single most important aspect of design. And now, more so than ever, experimentation should be a cross-disciplinary thought process – exploring the space between design practices and creative industries.

“The notion of trying new things and not being afraid of failure is also vital here. But also not regarding design as a purist discipline – it should be seen as something that is open to everyone and also isn’t

restricted to one particular skillset. The way V&A Dundee exhibits in the Scottish Design Galleries puts this across perfectly and is inspirational because of it.

“Design should be inspirational, but design should also be inclusive. Making good design accessible to audiences of all ages, class and cultural backgrounds is such an important thing.”

Above: *Fragments of a Fictional Place* by V&A Dundee’s first Designer in Residence Simon Meek. Credit: V&A Dundee





*This, looped* by Ciara Phillips. Credit: Ruth Clark

## Heritage will be identified/recorded

### RESEARCH

The creation of the galleries and the associated publication has led to in-depth research into Scotland's design heritage, documenting in the one place a record of 300 objects that tell the story of Scottish design. This has included the photographing of around 200 objects for the first time and newly photographing many of the objects to capture an updated record of the collection.

The research was an extensive process undertaken by the Lead Curator and Assistant Curator for the Scottish Design Galleries. They travelled the length and breadth of Scotland, visiting public and private collections to ensure that the very best of Scottish design was displayed. The results of this are found in the Scottish Design Galleries and the accompanying publication, which demonstrates the number of academics and professionals that were consulted with.

The objects in the Scottish Design Galleries and the complementing book tell the fascinating story of the unique traditions and designs of different communities across Scotland, linking many of the objects to specific parts of Scotland and bringing to the forefront the design heritage of these areas.

**The galleries include the following objects that showcase the creativity, inspiration and craft legacy from across different parts of Scotland:**

- A set of rare sample books from the 1770s featuring surviving Paisley patterns and textile samples dated to the early days of Paisley textile manufacture.
- A Fair Isle jumper worn by the Commander-in-Chief of the British Home Forces during the Second World War.
- A hooded Orkney Chair likely designed by David Kirkness at the start of the 20th century.
- A ski suit designed by Pringle of Scotland and a knitted wool combinations with lace (a type of traditional undergarment) made by Elliot of Hawick that showcase the heritage of the Borders knitwear industry.
- A Lochshiel vase, Morven decanter and Stroma decanter all designed by Domhnall O'Broin for Caithness Glass Ltd.
- A shawl knitted with Shetland wool from the early 20th century.
- A Harris Tweed suit designed by Vivienne Westwood.

### 3D SCANNING OF THE CHEVIOT, THE STAG AND THE BLACK, BLACK OIL STAGE SET

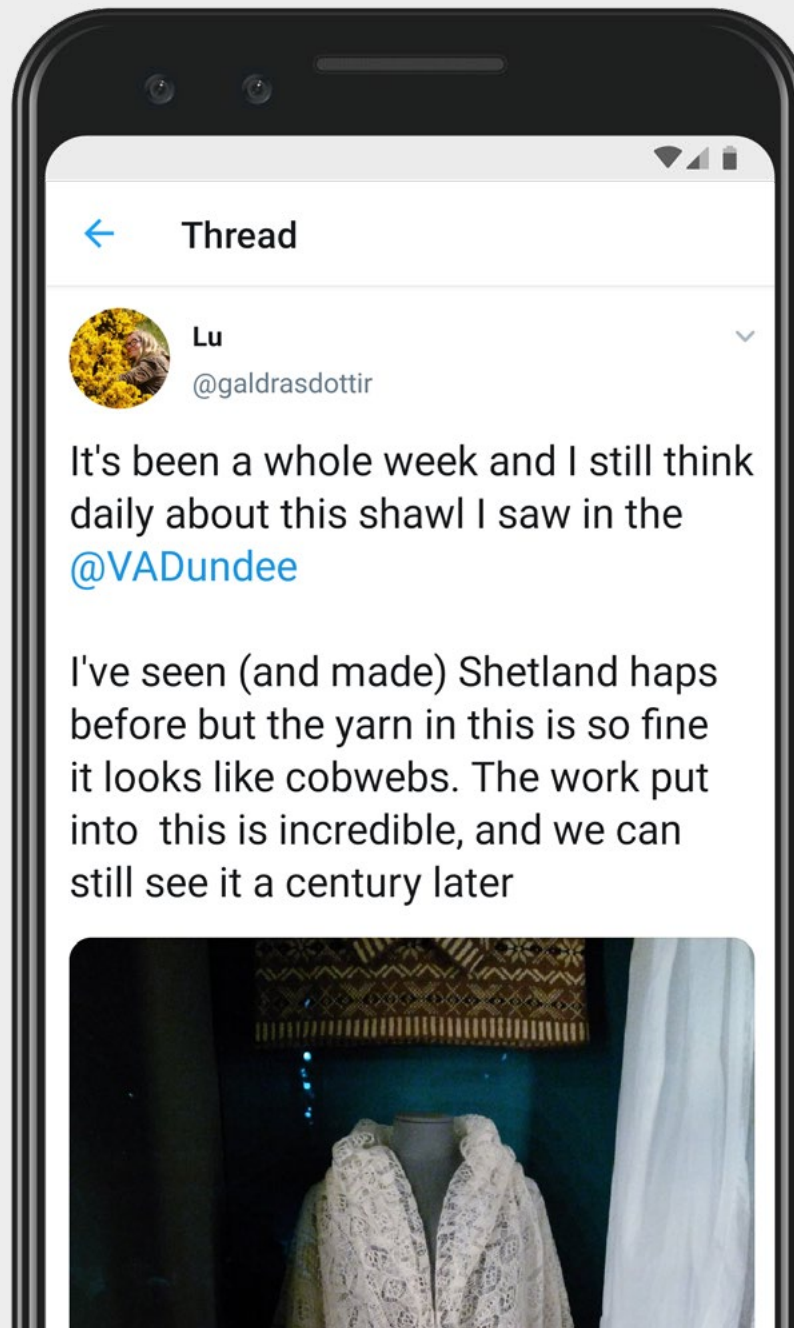
One of the centrepieces of the Scottish Design Galleries is the giant pop-up book designed and painted by Scottish artist John Byrne for the original 1973 stage set for *The Cheviot, the Stag and the Black, Black Oil*, John McGrath's influential play about the history and exploitation of the Highlands.

V&A Dundee and the National Library of Scotland, who has loaned the book to the museum, have worked together on a project to digitally record the pop-up book so anyone can access it from across the world.

A virtual 3D model of the stage set has been created by photographing each page from thousands of different angles, which can now be viewed on the National Library of Scotland website.



John Byrne with the original stage set for *The Cheviot, the Stag and the Black, Black Oil*.  
Credit: Michael McGurk





## FILM DOCUMENTATION

A series of films were created and are featured in the Scottish Design Galleries to begin documenting for audiences, now and in the future, Scotland's design heritage.

### The films document:

- The important story of the conservation, restoration and reconstruction of Charles Rennie Mackintosh's Oak Room.
- Dumfries-born Ian Callum, Director of Design at Jaguar, discussing the design of I-PACE, the company's first electric car.
- The story of Maggie's Centres and how design can improve lives. The film focuses on the Maggie's Centre in Dundee designed by Frank Gehry and includes an interview with Maggie's Centre Chief Executive Laura Lee, who was a former Clinical Nurse Specialist to the founder Maggie Keswick Jencks.
- Contemporary architecture on the Isle of Skye, highlighting the design of affordable and sustainable housing that is sensitive to its environment.
- The skills and complexity involved in creating jewellery. The film features Vanilla Ink, a Glasgow-based jewellery studio and incubator programme.
- The story of the design of the videogame Killbox, an online game and interactive installation that critically explores the nature of drone warfare, its complexities and consequences.
- The design and development of new renewable energy solutions in Scotland, including wind, tidal and wave energy.

## SCOTTISH DESIGN RELAY

The Scottish Design Relay was V&A Dundee's second national outreach project, beginning in Dundee in August 2017 and ending in Aberdeen in March 2018. The project was aimed at engaging young people not in education, employment or training and with no design background. It was supported by players of People's Postcode Lottery and the Mathew Trust.

The project worked with a small number of young people aged 16-24 in six different areas across Scotland – Dundee, Orkney, Shetland, Govan, Caithness and Aberdeen – engaging them with their design heritage, design skills and the development of new product ideas over the course of a month.

A workshop led by icecream architecture helped to develop the co-design process for the project and partnerships were agreed with cultural organisations in each area. This included Shetland Arts, the Pier Arts Centre in Orkney, Caithness Horizons, North East Scotland College, and GalGael Trust.

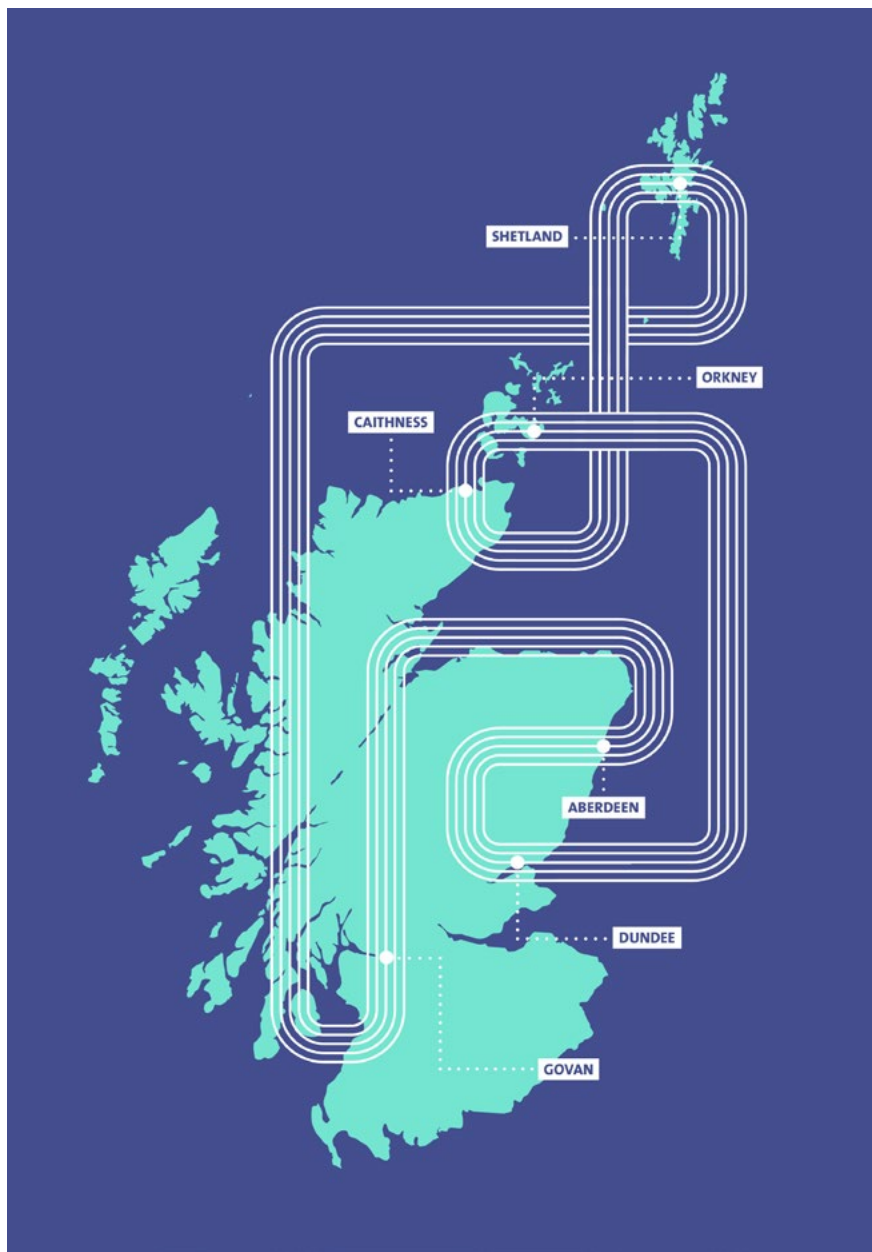
A series of designers were then selected to lead each regional co-design team and the young people were introduced to an object that had a link to their community. Using the exhibition objects as an inspiration, the groups then developed new designs and created prototypes.

32 workshops were held in six locations over seven months. Based on a scale of 1 to 5, the evaluation measured over the course of the project: awareness of local design stories; relevancy of design to participants and their communities; confidence working as part of a team; working with materials to share ideas; and understanding and beginning to use some design processes.

### The findings found that there was an increase across all the evaluation areas by the end of the project:

- 49% increase in awareness of local design among the young people taking part
- 28% increase in participant's understanding and use of some design processes
- 22% rise in participants using materials to share ideas

The significance of local heritage to particular areas of Scotland, its relevancy to design today and the design process of research, sketches and prototypes created during the Scottish Design Relay were captured in V&A Dundee's first exhibition in the Michelin Design Gallery.



Visitors to the exhibition were also able to watch the creative journey of the teams and hear interviews with the teams and designers, which was documented on film and will in future be shared online.

#### The groups of young people designed the following prototypes:

- The Govan group worked with design agency 4c Design to design hand-carved wooden handles for disposable ballpoint pens made from boat building offcuts – an idea inspired by a Clutha vase designed by Christopher Dresser.
- In Caithness, the young people learnt about a detailed model of the Dounreay Fast Reactor as inspiration. They were passionate about staying in the local area and engaging with the employment issues around the forthcoming decommissioning of Dounreay. They teamed up with design group icecream architecture to use graphic design to better promote their local area.
- Textile designer Niela Nell Kalra worked with young people in Shetland to design a knitted scarf about community and individuality in the isles, using a Fair Isle jumper once worn by the Commander-in-Chief of the British Home Forces as inspiration.
- Inspired by Dundee's RRS Discovery, apprentices at Michelin in Dundee worked with polar explorer Craig Mathieson and LAT\_56 travel luggage designer Kevin Fox to create a polar bear alarm system to protect explorers from deadly attacks.
- In Orkney, young people worked with furniture maker Kevin Gauld to tackle raising awareness of beach waste – known locally as 'bruck' – by using recycled materials to create a new piece of furniture inspired by the Orkney Chair.
- Using an enamelled plaque by Aberdonian James Cromar Watt as inspiration, jewellery designer Naomi McIntosh worked with young people at Robert Gordon University's Gray's School of Art and North East Scotland College to create a sculptural paper installation consisting of 20 unique cylinders in tribute to the huge 'dandy rolls' used in local paper factories.





Shetland Scottish Design Relay Team. Credit: Julie Howden



## Case Study

### “Making ‘bruck’ beautiful”

#### Orkney design team, Scottish Design Relay

Challenged to create a new prototype design inspired by Orkney’s unique design and using locally available materials, a group of five young people worked with Orkney furniture designer Kevin Gauld and V&A Dundee to develop their prototype over a series of six workshops.

Inspired to raise awareness of marine waste pollution – known locally as ‘bruck’ – the team decided to create a new piece of furniture incorporating traditional straw-work and waste plastic from their local beaches.

“We get a lot of tourism here in the summer and the first thing that they see when they come off the boats is the shore. And if it’s covered in rubbish then it’s not really setting a good example for the rest of the island,” team member Andrew Harvey explained.

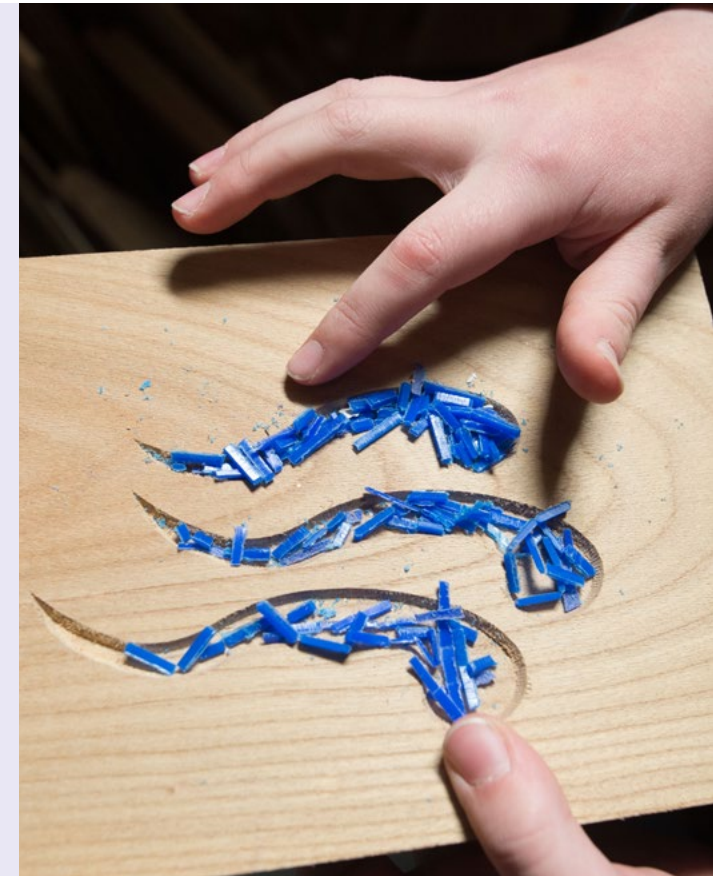
Discussing learning about Orkney’s local design heritage as part of the project, participant Lara Hales commented: “I always wanted to know how the chairs were made, and it was actually really cool to be able to handle everything and it’s great how we’ve been able to now make it real.”

The end result was a prototype oak and straw cabinet, decorated with a wave design created from small pieces of plastic being ground down and mixed with resin, while a quote from local poet George Mackay Brown about beachcombing was carved inside the cabinet.

Commenting on the project, furniture maker Kevin Gauld said: “I have really enjoyed taking part and found it a rewarding experience. I know it was mainly about the participants, but this project has benefited me as well. The cabinet design and the story behind it are a credit to everyone’s involvement.

“It was great to see how the participants worked together as a team to design the cabinet. It was challenging to incorporate something as ugly as bruck into something functional and beautiful that people would want in their homes.”

The team said that they hoped the cabinet would find a place on show in someone’s home one day.



Part of the design process using bruck. Credit: Julie Howden

## 4.3 Outcomes for People

Building on V&A Dundee’s mission statement of “Enriching lives through design” and its vision “To create an international centre for design, inspiring people and promoting the understanding of design”, there has been a clear focus throughout the project on engaging people with the importance of heritage and design in their daily lives.

V&A Dundee’s ambitious pre-opening engagement activities have included a number of projects that have helped to raise awareness of local heritage and equip people with the skills, knowledge and confidence to use design in their daily lives.

These projects have reached both local and national communities, schools, young people and families, and engaged with creative industries.

This has included the development of Design for Business’s practical and accessible programme of design-led workshops to help support individuals and Scottish businesses to utilise design innovation and use design thinking in their work.

Through these V&A Dundee projects and programmes there is evaluation evidence that people have been given the opportunity to develop new skills, gain knowledge about their local heritage, and adopt a new attitude to the role of design in their lives.



## People will have learnt about heritage

### BONNETMAKERS SCHOOL PROJECT

The Bonnetmakers project was supported by the Nine Incorporated Trades of Dundee and was aimed at teaching school children about Dundee's local heritage of bonnet-making and supporting them in designing their very own hats.

V&A Dundee and Scottish milliners Sally-Ann Provan and Pea Cooper worked with two primary schools in the city that were soon to merge, Rosebank Primary School and Our Lady's RC Primary School. The schools were both based in the Hilltown area of Dundee, also known as Bonnet-Hill, where the majority of the city's bonnetmakers were historically based.

The school pupils were supported in researching their local heritage of bonnet-making and during a series of workshops and a design jam were helped to design and create their own contemporary 'bonnets'.

Speaking during the project, milliner Sally-Ann Provan said: "I always think that creativity and design projects are really good for boosting self-confidence, helping communication skills as well. I'm already seeing amazing, fantastic ideas coming from the children."

**"Design projects, anything involving creative thinking, are really good for children because it teaches them about decision-making, creative learning, problem-solving. These are all really important life skills which are not just important in a design or an art project, but really important in life as well," she added.<sup>21</sup>**

The hats made by the children were then modelled by their families at a special fashion show in the Wellgate Shopping Centre.

#### Feedback from the pupils, teachers and parents included:

- "I loved this project. The hats were phenomenal." Pupil, aged 8
- "I learned that anything you can think of can come to life." Pupil, aged 8
- "It has changed my teaching." Teacher
- "V&A museum put a lot of work into it. It was very good. The kids enjoyed it, the adults enjoyed it, everybody enjoyed it... I just knew about the big building that was being built, that's all... I hope they continue to do these things for the kids." Parent

Members of the V&A Dundee Learning team returned to the schools in the following term to evaluate how pupils were now using design. Pupils were asked to score themselves retrospectively out of ten on their ability to "use exploration and imagination to solve design problems related to real-life situations."

They were then set a timed design challenge to assess how the pupils were applying the skills they developed during the Bonnetmakers project in a different situation. Once completed, the pupils were asked to score themselves again using the same scale.

All of the children who recorded the same before and after scores (34% of pupils) had already given themselves ten out of ten, while 40% gave themselves a higher score after completing the new design challenge and showed renewed confidence in solving design problems.

Most of the children were found to demonstrate confidence in their abilities and approached the task enthusiastically, although some pupils found the challenge harder to complete because of the limited timescales.





Bonnetmakers project. Credit: Julie Howden

## DESIGN IN MOTION

V&A Dundee embarked on its first national touring exhibition in 2015, which took the designs of seven of Scotland's most exciting contemporary designers across Scotland on the Travelling Gallery, including rural locations such as Harris and Skye. It was aimed at significantly raising the profile of V&A Dundee and Scottish-based design.

The travelling gallery, a specially designed vehicle, combined digital technology and design heritage to appeal to both 'traditional' museum visitors and engage with new and younger audiences. Focused on the role of digital technology to enable designers to experiment, play and innovate, it also underlined the rich design heritage that has helped to create the foundations for contemporary innovation.

It included interactive lace by textile innovators Sara Robertson, the Strawberry Thief iPad game created by former V&A Game Designer in Residence Sophia George, haptic (virtual touch) 3D modelling by Anarkik3D, and 3D printed jewellery by Lynne MacLachlan.

The project included development of the museum's first app, Design Scotland, created by Dundee-based tech developers eeGeo. It used a 3D mapping platform to allow members of the public to create a design map of Scotland by sharing their design stories, icons and photos.

Design in Motion was evaluated using a comments book, a visitors' questionnaire and a formal review with Travelling Gallery staff and exhibition designers. Surveying around 800 people, the evaluation found that there was engagement from a wide range of audiences, successfully raising visitors' awareness and understanding of design and V&A Dundee.

## The project evaluation of Design in Motion reported: <sup>28</sup>

- Nearly 12,000 people visited Design in Motion
- 85 locations were visited – across Scotland and the V&A in London
- The tour visited over 40 schools and colleges
- 97% of visitors surveyed said that the exhibition would encourage them to visit the museum when it opened
- 70% of visitors surveyed spent more than 15 minutes in the exhibition
- 5,279 people took part in the Learning programme
- All of the teachers interviewed felt the exhibition had increased pupils' knowledge and understanding of V&A Dundee and Scottish design, and was relevant to the Curriculum for Excellence

**“The exhibition was fantastic! I loved the traditional/modern connection.”**

**“Fantastic exhibition, great informative staff, brilliant that it's here in Kintyre.”**

The evaluation concluded that Design in Motion had created greater awareness of V&A Dundee and Scottish design, increased national audiences and had helped to develop relationships and create new networks with designers, museums and manufacturers.

The outreach project was developed in partnership with the Travelling Gallery and supported by players of People's Postcode Lottery, The Mathew Trust, National Lottery Heritage Fund, Creative Scotland, the Scottish Government, and City of Edinburgh Council.





Design in Motion exhibition. Credit: V&A Dundee



## Case Study

“Encouraging children and adults in learning more about Scottish design and architecture”

**Sheila Roussel, freelance arts practitioner for V&A Dundee and jewellery designer**

After visiting the exhibition showcasing the architectural design entries for the V&A Dundee building, Sheila decided that was where she wanted to work when she graduated from DJCAD.

She feels that the freelance position with V&A Dundee has given her the flexibility to develop her jewellery design business, alongside her work as an arts tutor for adults with additional support needs and working with community groups such as the Women’s Rape and Sexual Abuse Centre running creative workshops.

Talking about her experience working at V&A Dundee, she said: “I feel that I am part of something bigger and part of something important for the future development of Dundee and Scotland.

“It is a new experience for me to work in a museum and I have gained in confidence taking group tours around V&A Dundee and the galleries. I like the fact that I am involved in encouraging children and adults in learning more about Scottish design and architecture.”

Her highlights so far have included “being part of the Learning team at the beginning of something exciting and new, and also being valued within the team”, alongside how “rewarding and enjoyable” delivering workshops, tours and family drop-in sessions has been.



“I think the workshops for schools especially encourage children to engage with the museum and its collections. The children are taken on a tour and encouraged to observe, take notes, question, discuss, draw and enjoy the experience. Their notes and drawings are then the starting point for the creative workshop that follows.”

As for her own learning from the museum, she said: “I now feel that I have expanded my knowledge and awareness of other areas such as product design and architecture.”

Sheila hopes in the future to develop jewellery design workshops and drop-in sessions as part of V&A Dundee’s Learning programme.

Credit: V&A Dundee

## People will have developed skills

### SCHOOLS DESIGN CHALLENGE

Schools Design Challenge was V&A Dundee's first major schools project, launched in October 2015. The challenge was open to all S1 pupils across all subjects in both Dundee and Angus, who were asked to work in teams to develop exciting and creative design solutions to real problems relevant to them.

The challenge was developed with V&A Dundee's Teacher Focus Group and asked pupils 'How could you use design to improve your school, or school life?'.

A toolkit was developed to accompany the challenge that was shared with schools in Dundee and Angus. A Continuing Professional Development session was further offered to all teachers, delivered by V&A Dundee staff and Mike Press, then Professor of Design Policy at Duncan of Jordanstone College of Art & Design. The sessions attracted 28 teachers and gave an introduction to service design, its methods and scope, and involved some practical hands-on work exploring the use of service design tools in a practical context.

All 18 secondary schools in Dundee and Angus participated, engaging over 1,000 pupils. 250 teams submitted an idea and the judging panel had the difficult task of selecting just ten groups to attend a design jam – an all-day event where each team worked with a professional designer, using the design process and a range of materials to develop their idea and create a prototype.

#### At the design jam:

- The Baldrion Academy team worked with textiles designer Rachel Lees to create a friendship club to help pupils starting school to make new friends.
- Braeview Academy teamed up with graphic designer Roma McCook to design a school pride wall.
- The Brechin High School team worked with electronic artist and game designer Tom deMajo to design a musical relaxation garden.
- Morgan Academy worked alongside product designer Andrew Tibbles to develop their idea of a worry box to collect pupils' thoughts.
- The Castlepark Educational Centre team worked with interior designer Sooz Gordon to design furniture that was comfortable to sit on for long periods of time.
- The Craigie High School teamed up with architect Kirsty Maguire to design a new outdoor space to promote health and wellbeing.
- Webster's High School worked with game designer and artist Malath Abbas to create a desk that powers a learning device through fidgeting.
- The Arbroath Academy team paired up with interior designer Sooz Gordon to develop a design solution to keep their schools grounds clean.
- Grove Academy worked with interior designer Linsey McIntosh to develop the idea of a social enterprise cyber cafe to raise money for good causes.
- The St Paul's RC Academy team worked with digital interaction designer and academic Graham Pullin to design an anti-bullying robot to listen to pupils' concerns anonymously.

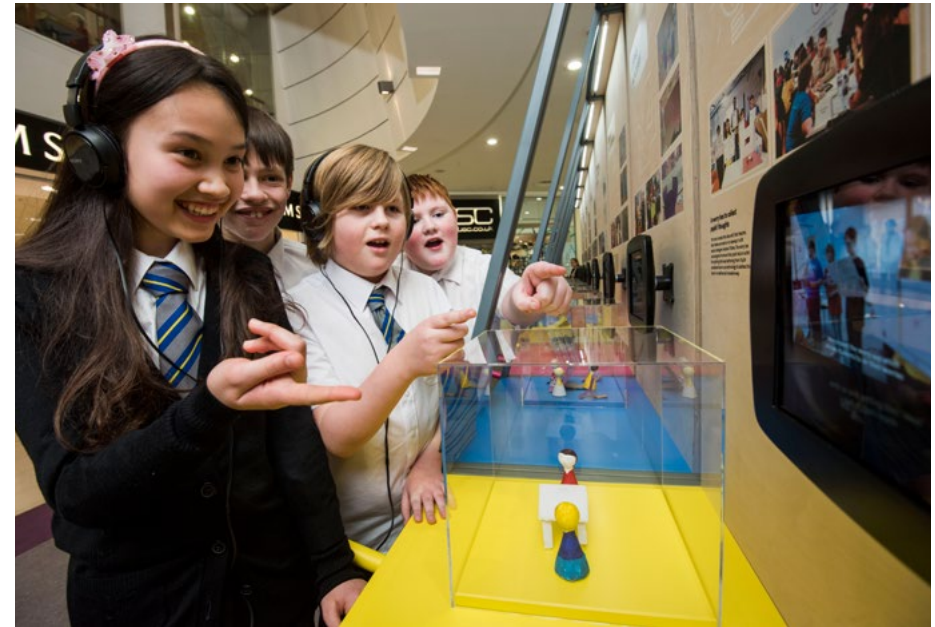
Each team was invited into the 'Design Diary Room' to chat about their ideas, how they came up with it, what it was like working with a designer and how they were finding the day. At the end of the day all of the teams presented a pitch to everyone in attendance, discussing the process, solutions and designs they created.

The work of the ten teams was documented on film by Rapid Visual Media and turned into an exhibition showcased at events including Dundee Design Festival, a Scottish Parliament exhibition, and Dundee's Overgate Shopping Centre. The Overgate Shopping Centre exhibition attracted an estimated 6,500 visitors during its two-week run.

All ten films were also made available on V&A Dundee's website and YouTube channel and on Glow, Education Scotland's digital environment for learning. As of 1 March 2019, the films have been viewed 55,372 times via Facebook, YouTube and Vimeo.

**Feedback gathered during and after the Schools Design Challenge included:**

- “In school we have to sit down and do a lot of paperwork and boring things, but in here we’re learning quite interactively and artistically.” Morgan Academy pupil
- “It was just really interesting to see what you could achieve when you work together. It was really good and you felt really involved.” Baldragon Academy pupil
- “The idea of them actually getting up and speaking in front of all those people... there was just such a lovely sense of collaboration and creativity. This just gives them this little glimpse of what they could do if they let their imaginations run free. That’s something that’s really been brought home to them after that experience.” Webster’s High School teacher
- “At the end, I felt that it was easy and there was nothing to be scared of.” Arbroath Academy pupil
- “The kids really, really enjoyed the day. They had the opportunity to use their talent and to put it into practice in a real-life context as well. To actually understand how design and how their creativity can be used is really important.” St Paul’s RC Academy teacher
- “It’s definitely given me an option of art because there was people there using sketch pads. It just fascinated me how they can take a piece of paper and turn it into a masterpiece.” Grove Academy pupil
- “My experience of design and its interaction with schools has been pleasantly surprised and invigorated by V&A Dundee’s involvement. I am sure the pupils feel the same. It was really great to see their ideas being valued and brought to the fore and what this did for their confidence, which is sometimes squashed in the school factory setting.” Baldragon Academy teacher



Schools Design Challenge. Credit: Alan Richardson





## ENGAGEMENT WITH CHILDREN AND THEIR FAMILIES

Since the opening of the museum, 11,552 people<sup>22</sup> have taken part in special family workshops led by a freelance team of artists, designers and educators. These sessions take their inspiration from the museum, its galleries and exhibitions, providing materials and professional support during each workshop.

During the school summer holidays, the museum will host Studio DISRUPT! every day, giving families the chance to design and create videogame characters and stories, then bring them to life using green screen technology.

Between September 2018 and March 2019, there were over 2,500 engagements with schools through workshops and tours.<sup>23</sup> This has included 177 tours and 69 workshops for schools, while V&A Dundee's first Educators Familiarisation session of the Scottish Design Galleries was attended by 58 teachers, youth workers, family learning and family support workers.

The pupils have attended workshops led by freelance designers on topics such as videogames, fashion and textiles, architecture, illustration, and product design.

All classes at Grange Primary School in Monifieth, Angus have now visited the museum and taken part in workshops and tours. In the pre-opening period, the primary school had approached V&A Dundee about advice and support in developing a whole school design project.

V&A Dundee's Learning team recommended freelance designers and arranged for resources and staff for a workshop at the school. As part of this young design leaders learned new skills that they then shared with their peers. This led to a further project, V&A at Grange, where follow-up workshops were arranged for every class in the school, once the museum had opened.

In total, 348 pupils visited V&A Dundee from Grange Primary, taking part in 13 separate architecture workshops. Pupils were asked for feedback about the workshops and museum after each session, while V&A Dundee then followed this up back at school through questionnaires completed by class teachers who had visited and a 1:1 interview was held with the Principal Teacher.

### Positive feedback included:

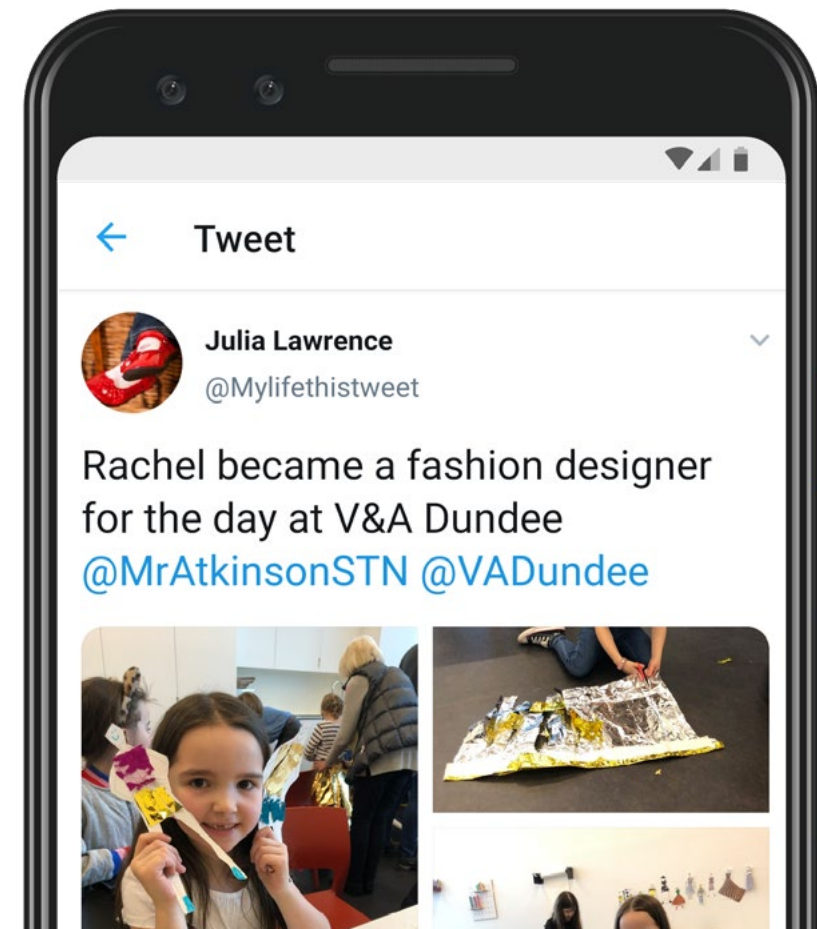
"I feel more confident in having discussions with the children about design. I was inspired – the children have recently designed and built Santa's sleigh from boxes." Teacher

"I enjoyed making the structure and being an architect. I will try doing it at home." Pupil

"It has enabled me to think more creatively about projects for my class." Teacher

"I liked how we went through the gallery and sketched it and created it." Pupil

The evaluation has also helped to gather initial feedback about how the museum's workshops work.



## Case Study

### “Opening doors to new opportunities”

**Nicole Sangster, former V&A Dundee Assistant Digital Producer (Internship) and recent Abertay University graduate**

Nicole joined V&A Dundee as part of an internship initiative with Abertay University. Her role involved supporting V&A Dundee’s website and social media platforms, including during the 3D Festival and opening weekend.

The skills that Nicole has gained include social media management, design skills and brand awareness, and digital marketing.

Nicole was also previously part of the Abertay student team that developed a game called *Spinnacle* to help V&A Dundee create “a fun and accessible way to learn about design and design objects” by transforming some of Scotland’s most iconic designs into playable digital puzzles.

“The internship has been a fantastic opportunity for me to learn more about the professional working environment. I have gained so much from getting to work with the brilliant V&A team,” she commented.

“The highlight of my time at V&A would have to be during opening weekend when everything was going at a hundred miles an hour, and getting to share all of the events and what was happening on the social media channels for everybody to enjoy.”

Discussing how her knowledge and appreciation of design and heritage has developed, Nicole said: “It’s really important to understand and know the collections in the museum to be able to share the correct facts and tell stories on social media. I’ve developed a much greater appreciation for the time and effort it takes to acquire and look after the objects that are lent.”

Looking to the future, Nicole said she was confident that the experience she gained “opens the door to many future opportunities”, while the internship has helped her to develop a professional portfolio of digital art. She has been recruited to the position of Digital Content Producer at Simworx upon completion of the internship, a leading film simulation company.

Right: Detail from V&A Dundee’s first Christmas card designed by Nicole. Credit: V&A Dundee





## DESIGN FOR BUSINESS

V&A Dundee's Design for Business programme seeks to engage and contribute to the innovation ambitions of Scottish businesses, the Scottish economy and overall national business landscape. It takes V&A Dundee's strategic aim of "Enriching lives through design" and translates this into a practical and accessible programme of design-led innovation workshops to help Scottish businesses innovate and prosper.

The delivery of this programme is supported by the Scottish Government's funding of the overall V&A Dundee project, while founders Scottish Enterprise and the University of Dundee are leading partners in V&A Dundee's Design for Business programme. It is supported by Alliance Trust.

Design for Business's main purpose is to engage and contribute to the innovation ambitions of Scottish businesses, the economy and the national business landscape – alongside supporting the ongoing work and activities of V&A Dundee.

The programme is aimed at Scotland's small to medium sized businesses, as well as supporting public sector organisations and the third sector, including social enterprises.

It offers a practical and accessible programme of design-led workshops to help support individuals and Scottish businesses to utilise design innovation and use design thinking in their work. The programme was developed with leading design practitioner Catherine Doherty and Jonathan Ball of the Design Council and draws on a range of tried and tested design processes and methodologies, such as EDIPT (Hasso Plattner Institute School of Design Thinking) and Double Diamond (Design Council).

The 59-minute Design Challenge is based on workshops from leading design thinking institute d.school that gives people an introduction to design thinking and the opportunity to gain first-hand experience in using design-led approaches and tools that can be applied to tackle business challenges – all in less than an hour.

This is followed by the Half-day Introduction to Design Thinking that gives participants a deeper understanding of how design thinking can be applied to business and promote innovation, while the Three-day Design Accelerator gives attendees hands-on experience of applying design thinking to their existing product or service design challenge through undertaking design research and prototyping.

The Design for Business programme is supported in its development by an advisory group, which provides a sounding board, advice and links across the sector. It is chaired by Colin Burns, Chief Design Officer for the BBC, and includes representation from NCR, W.L. Gore, Design Council and Scott & Fyfe.

To evaluate the workshops delivered, Design for Business uses Net Promoter Score (NPS) – an index ranging from -100 to 100 that measures the willingness of customers to recommend a company's products or services to others. According to NPS, any score above 70 is defined as 'world class' – although it should be noted these scores have not been verified using an independent evaluation process.

Workshop	Number of Workshops / Iterations	Number of Businesses	Number of Participants	NPS Score
Level 1: 59 Minute Design Challenge	26	106	318	+76
Level 2: Introduction to Design Thinking	6	192	222	+75
Level 3: Design Thinking Accelerator	4	32	64	+78

The table above shows that Design for Business has exceeded the original three-year objectives set for the programme of delivering 16 workshops to 166 companies. An estimated 330 businesses and 604 individuals have taken part in the Design for Business programme between 2016 and 2018.

As the Design for Business programme develops, it will also be reviewing revenue generation opportunities.



Design for Business workshop. Credit: Ross Fraser McLean

## Case Study

“Clarity we needed to drive the business forward”

**Rebecca Flory and Andrew Vincent, owners of Nu Blvck and attendees at Design for Business’s Three-day Design Accelerator**

Launched by Rebecca and Andrew in 2016, Nu Blvck works with emerging designers and ethical makers from around the world to sell unique, quality fashion accessories online that are made ethically and sustainability.

They took part in Design for Business’s Three-day Design Accelerator as a way of identifying how to grow their business and influence their industry.

During the programme, they were introduced to a number of different design thinking tools and methods. They found it particularly valuable learning about how the Customer Impact Matrix could help them make smarter decisions about which products align with their brand.

They were also introduced to using Research Protocol to identify a short set of questions that could be used to gather customer feedback, which they then put into practice with their customers.

Andrew and Rebecca commented: “We’ve always been hugely ambitious, with a big vision, but we perhaps didn’t have some of the tools we needed to get there. The design thinking accelerator offered practical ways to help us design how we grow a sustainable business, without losing sight of the ultimate goal.



“The whole experience was massively impactful for us. It’s given us the clarity we need to drive the business forward. We’ve now got the ability to break down what is a massive challenge into more manageable activities.”

The business has used the customer knowledge gained during the programme to launch a new website, and continue to develop their face-to-face customer relationships. They report there has been a significant increase in sales since attending the programme and they plan to continue using design thinking to grow their business.

Design for Business workshop. Credit: Ross Fraser McLean



## Case Study

### “Rediscovered my passion for design and my city”

**Stephen McGowan, Creative Design Lead for Glasgow City Council and participant in Design for Business’s Three-day Design Accelerator**

At the start of Design for Business’s Three-day Design Accelerator, Stephen felt like he had fallen out of love with design.

As part of the workshops, Stephen was encouraged to consider different design-led thinking tools and models to come up with creative approaches to delivering Glasgow City Council services.

Following his involvement in the Three-day Design Accelerator, he shared his learning with his team and encouraged them to adopt a design thinking approach to how they work that places “people at the heart of what we’re doing.”

He explained: “Design thinking is the new mantra; it’s now just part of how we work. We have a proper framework that includes project kick-offs, checklists, idea framing and pitching to help us solve big problems in a collaborative way.”

His team now designs workshops based on the principles learnt from Design for Business and Stephen has reported that they have gained confidence, communication skills and have a growing reputation at a senior level.

“The programme was just amazing – off the charts. Wish I could do it every week. Being part of it and having the opportunity to visit V&A Dundee gave me a whole new lease of life... I rediscovered my passion for design and my city,” he said.

He explained that his team is developing plans about “how we use design, data and innovation to basically change the city.”

Since attending the business programme, Stephen said that he continued to learn from collaborating with V&A Dundee, academics and businesses “but the thing that’s really exciting out of this is we’re actually co-designing with citizens on real projects and that is a huge part of our plan going forward.”



Design for Business workshop. Credit: Ross Fraser McLean

## People will have changed their attitudes and/or behaviour

### SCOTTISH DESIGN RELAY SKILLSHARE SESSION

An interactive skillshare session was held in Dundee in September 2018 to celebrate the completion of the Scottish Design Relay, to further evaluate the project and to give the opportunity for teams to mix, collaborate and explore ideas together.

The first evaluation undertaken found that there was an increased understanding among participants about how design and materials can be used to share ideas.

#### Feedback included:

- “I’ve realised design is in everything, no matter how simple, and that sometimes simple designs work best.”
- “When I started, I thought you drew something and that was it. Now I know there is a lot more thought process in it.”
- “I have a better understanding of the entire design process, from initial brief through to finished prototype.”
- “I understand that design is much more vast and open to interpretation. Also that everyone has their own unique style and design process.”
- “I think the fashion and textiles students have made me think about use of colour more. I was inspired by all the repeating patterns we saw and created and how the design I made would be scaled up or down and applied to jewellery or ceramics.”
- “I now know that design can come from anywhere and it doesn’t have to be intimidating. I love the feeling, physically and mentality of the rapid prototyping process.”
- “By learning how to use new tools such as Rhino software for use with the laser cutter, I have been able to consider design ideas that are constructed in a completely different way from what I’m used to.”
- “I am probably more confident at experimenting, which I usually don’t like because it feels chaotic. As the environment was relaxed, I didn’t get stressed over the final design and that made playing with the materials easier.”

Hosted by icecream architecture, a ‘design lottery’ took place that involved participants using the skills they gained during the Scottish Design Relay to complete fast-paced design challenges, including the need to consider budgets, audience needs, sustainability, innovation and feasibility.

The original teams were mixed up to ensure collaboration and sharing of skills took place, while friends and family were also able to join in and learn more about the design process. The teams had 90 minutes to complete their prototype design before presenting ideas to the entire group to be judged.

The winning team designed a digital app to help 12-years-olds to engage with their school peers safely.

Asked about what skills they had learnt during the Scottish Design Relay, the young people mentioned prototyping, researching online, building a circuit and laser cutting.<sup>24</sup>

Participants also highlighted how the project had made them more aware of their local design history and how it has impacted on the world around them. “It has opened my eyes up to industries I had never known before,” one of the participants said. Participants also welcomed the opportunity to work with local design professionals, with one person commenting: “I never knew people like that were here.”

The most valued thing that participants in the Scottish Design Relay took away from the project was the transferable skills they developed. Someone suggested “working with others was the best thing and everybody had a different background which meant we could all bring a different skill”, while another said that teamwork was the most enjoyable thing about the project as “sharing ideas made our design better and changed it.”

Overall, all of the young people interviewed said they had a new understanding and appreciation of the design, helping some participants to see things differently both during the project and in their daily lives. “I think about where something has come from or if it could be better,” one person said.



Scottish Design Relay skillshare session. Credit: Julie Howden





## People will have had an enjoyable experience

### VISITOR EXPERIENCE

The most recent Exit Survey for V&A Dundee (September to December 2018)<sup>25</sup> suggests that the majority of visitors to V&A Dundee have enjoyed their visitor experience, positively rating both their overall visit to the museum and the Scottish Design Galleries.

- 85% of visitors rated their visit to V&A Dundee as very good or good – a rise of 5% since the opening month
- 94% rated their visitor experience to the Scottish Design Galleries as very good or good
- 87% of respondents who visited the Scottish Design Galleries positively rated the galleries as providing something for everyone
- 82% rated the ability to see objects/exhibits in the Scottish Design Galleries as very good or good
- 94% found it easy to find their way around the museum

The majority of those surveyed were visiting the museum for the first time (87%), with nearly half of visitors staying in the museum for 1-2 hours (44%) and a third of people visiting for 2-3 hours (32%).

Across the quarter, half of those surveyed visited the museum because they were curious to see inside or excited about the opening. This percentage has naturally dropped the longer the museum has been open, decreasing from 63% in September to 31% in December.

Indicating a positive visitor experience, 13% of respondents were repeat visitors during the first three months of opening, with most repeat visitors mainly from Dundee (46%) and the local region (29%).

Three-quarters of those surveyed said that they were very or quite likely to come back to V&A Dundee in the future (75%), while 86% said they would likely recommend to people to visit.

Visiting the building remained a significant motivation for visiting during the period, particularly for UK respondents from outside Scotland (20%) and overseas visitors (29%).

The percentage of people visiting the museum to see exhibitions has notably risen, increasing from 7% of visits in September to 25% in December.

Pre-opening research indicated that expectations about the museum were very high<sup>26</sup> and encouragingly 26% of respondents said that their visit actually exceeded their expectations, rising to 35% for people living in Dundee.

#### Positive comments made by visitors surveyed included:

- “4th visit and still finding new things to see.”
- “Exhibition more detailed than I thought. Kids really enjoyed it.”
- “Overall experience was good. The design of building and portholes. Everything.”
- “Amazing inside and out. Amazing exhibits.”
- “Brought my grandchildren who did not want to go. They loved it.”
- “It has more content of interest than I expected, especially [*Ocean Liners*]. It is good and appeals to all.”
- “Amazing. We have come up for a couple of days and coming back tomorrow to do it all again and to see *Ocean Liners*.”
- “Can spend a good half day here.”

The survey responses also highlighted the impact on the overall visitor experience due to queues and how busy the museum was when it first opened. As part of the survey, comments were also gathered from visitors on improvements including on the range in the retail shop and the layout of the café, which have helped inform adjustments to the operation.

Senior managers meet on a weekly basis to address visitor feedback. The museum is continuing to review how the venue works now that it is open and what changes are needed to improve visitor experience. An agreed set of triggers has been developed to decide at what point action needs to be taken.

Feedback that has been addressed in the first few months of opening has included the introduction of a simple map to show visitors what they could experience in the Scottish Design Galleries and the exhibition gallery. The map has been

distributed by Front of House staff on arrival in the museum and they have had good feedback.

There has also been improved signage introduced for the picnic room, as the route to the room was not clear, and improved signage on the Designer in Residence Studio to invite visitors to come in.

Feedback has also led to new tours being developed by Operations and Learning, for during weekends and peak times, to cover the highlights and architecture of the museum.





## Case Study

### “Facing new challenges and opportunities as a close-knit team”

#### V&A Dundee Visitor Assistant, James Wylie

James started as a Visitor Assistant with V&A Dundee in October 2018, which he combines with studying for an MLitt in Museum and Gallery Studies at the University of St Andrews.

James said he had followed the development of the V&A Dundee project closely and the excitement it has generated. He knew he “wanted to be part of Dundee’s own slice of the ‘Bilbao effect’.”

Since starting at V&A Dundee, he has had the opportunity to gain hands-on practical experience in working in a museum environment, offering “invaluable experience which has significantly benefited my studies.”

He has also had the opportunity to receive formal exit survey training to help evaluate the new visitor attraction, alongside developing “a renewed confidence in my ability to engage with people from all walks of life, to provide for them the best experience they can have when visiting.”

Discussing what it is like working in a new major visitor attraction for the city, James said it was “an incredible experience being part of something with historic implications for my home city.”

“Though many staff have been working tirelessly for years to make V&A Dundee the success it is, I feel like we are all operating at the same level. We are in a new one-of-a-kind building, as representatives of a new institution ready to face new challenges and opportunities as a close-knit team.”

Some of his highlights have included the “expression of awe” on the faces of visitors entering Charles Rennie Mackintosh’s Oak Room for the first time, and seeing visitors to *Ocean Liners* dancing around to the music played in the exhibition and reminiscing about their own sea voyages.

His own favourite object in the museum is the S’up Spoon alongside its prototypes in the Scottish Design Galleries. “To me this object is synonymous with V&A Dundee’s mission statement in which people’s lives are enriched through design.”

“I have learnt that design in Scotland has been a rich tapestry of innovation throughout the centuries and has never merely been about tartan, tweed and Charles Rennie Mackintosh.”

Looking to the future, James hopes to continue a career in heritage, specifically with V&A Dundee, and is considering focusing on visitor studies for his forthcoming university dissertation.

## Case Study

### “Very welcoming, vibrant and exciting atmosphere to work in”

#### Jen Glass, V&A Dundee Duty Manager

Jen was recruited as a full-time Visitor Assistant with V&A Dundee in August 2018, bringing experience from her time as Front of House Supervisor for Dundee Heritage Trust based at local visitor attractions Discovery Point and Verdant Works. She has already progressed to being made a Duty Manager for the museum.

Discussing her experience of working at V&A Dundee, she commented: “Working for a new major visitor attraction certainly hasn’t come without its challenges, but I would say the entire experience has been an excellent learning opportunity, both personally and for the museum as a whole.

“We could never have predicted to receive the number of visitors that we have had pass through our doors, particularly when we first opened to the public, where we were having up to 7,000 people visit in just one day.

“Given that the whole experience was brand new to everyone involved in the project, it created a very welcoming, vibrant and exciting atmosphere to work in... Through working at special events for the museum, meeting visitors from across the world and sharing the experience with an amazing group of Visitor Assistants, I feel that I am extremely lucky to have been granted the opportunity to work for V&A Dundee, especially from when it first opened.”

One of Jen’s highlights has been “the opportunity to meet visitors who have personal connections with some the objects in the Scottish Design Galleries. For example, I was fortunate to have met a gentleman in the Oak Room, who had met his wife in the tearoom during the 1940s and was lucky enough to hear a first-hand account of their story and what the tearoom was like in its prime.

“Encounters with visitors such as this I think are so important to enhancing your own knowledge about parts of the galleries and provide us with information that we wouldn’t necessarily be able to find in any books or online, so creates a far more personal and unique experience for visitors who hear stories such as this.”

Her other highlight was being promoted to the position of Duty Manager in the museum and she welcomed the opportunities for progression in the organisation.

“I very much wish to be working for V&A Dundee for the foreseeable future, so hope the skills and experience that I have gained over the last six months can contribute to making sure the museum’s success continues for many years to come,” Jen concluded.

## People will have volunteered time

### YOUNG PEOPLE'S COLLECTIVE

Meeting weekly in the run up to the museum opening, Young People's Collective members have been central to developing V&A Dundee's strategy for young people's engagement – co-designing the Young People's programme and collaborating with professional designers and event planners.

The museum's Young People's programme was co-designed by V&A Dundee's Young People's Collective to offer opportunities to develop new design-related skills and interests. Young people's events in the museum include Designer Date, which is a monthly series that gives people the chance to chat with a practising designer, and New Skills Workshop offering monthly practical workshops led by a designer.

#### **Opportunities that Young People's Collective members have had include:**

- Co-designing with V&A Dundee the opening 3D Festival, including working with DF Concerts
- Working with Creative Dundee to co-design the Year of Young People's Pecha Kucha, with an audience of over 400 people attending during Dundee Design Week 2018.
- Working with the UNESCO City of Design team to co-design the look and feel of city's Design Parade in May 2018.
- Supporting the Philanthropy & Partnerships team to deliver an event focused on attracting Founding Patrons to donate funding to the museum.
- Piloting V&A Dundee's comic design workshop with a group of young people from Barnardo's Fit 4 Work programme.
- Attending the Year of Young People Scottish Parliament reception.
- Taking part in the Scotland Re-designed Fashion Breakfast in Glasgow.
- Visiting The McManus after hours and a backstage tour of Dundee Rep Theatre.
- Regularly 'taking over' the V&A Dundee Twitter feed in the run-up to opening.

#### **Young People's Collective members have also had the chance to attend the following training:**

- A 'movie making on a mobile device' workshop with a professional film-maker.
- Media training with an experienced trainer and producer.
- CV session and interview skills from Search Consultancy.

Young People's Collective played a particularly important role in co-designing V&A Dundee's opening 3D Festival, including three members taking part in work experience with DF Concerts in Glasgow to help organise the event. The collective members were involved at every stage of decision-making concerning the opening event, working collaboratively and taking on lead roles based on their skills, areas of interest and their personal development.

Their involvement included contributing to a creative session on the digital aspects of the two-day festival and being involved in the announcement of the 3D Festival, including helping organise a photoshoot and press release to promote the event and being interviewed live by both press and radio.

All of the members who took part in the 3D Festival have the opportunity to apply for Saltire Awards and the YouthLink Scotland Participative Democracy Certificate for the major contribution they made to the opening weekend.

Young People's Collective continues to play an important role in the museum, hosting regular tours for young people around the museum and the Scottish Design Galleries. Following their involvement with the collective, three of the members have now been recruited to work for V&A Dundee. This includes a collective member who is now a Learning Coordinator Intern with V&A Dundee, helping develop the museum's volunteer programme.





V&A Dundee's Young People's Collective. Credit: Julie Howden



## Case Study

“I have had experiences and opportunities I would never have imagined”

**Ailsa Purdie, former member of V&A Dundee’s Young People’s Collective and now a full-time member of the Philanthropy & Partnerships team**

Ailsa joined V&A Dundee’s Young People’s Collective in May 2017 while she was in her third year studying Textile Design at Duncan of Jordanstone College of Art and Design.

She decided to join the collective to gain more experience and new skills, and was excited about the opportunity to be a part of the museum in her hometown.

Discussing being part of collective, Ailsa commented: “I have had experiences and opportunities I would never have imagined... I was invited twice to attend events at the Scottish Parliament and to talk to attendees about the work Young People’s Collective and V&A Dundee were doing.

“This was such an amazing opportunity and allowed me to develop skills in communicating with a range of different people and speaking confidently about our work.

“Another stand out time at the Young People’s Collective was having the opportunity to work for a week with DF Concerts in Glasgow... I learnt so much during my time there and gained experience in working within a team in an office and was able to see and understand the process of organising and running large-scale events.”

As well as gaining new skills and experience, she took away from her time with the programme that “design doesn’t begin and end with the objects in the galleries. Design is so much more than a product or a building or a piece of clothing, and being in the Young People’s Collective helped me realise that.

“One of our main focuses when we started Young People’s Collective was to make a museum that felt accessible to everybody, and in order to do this we had to break down people’s perceptions of conventional ‘museums’ as being old, quiet buildings full of ancient objects.

“V&A Dundee is much more than objects in a gallery. It is families going to story time, live jazz bands, lectures, debates, learning to sequin your old denim jacket. It is a place to hang out, catch up and learn. It’s young people meeting up to change the world.”

During her time with the collective, Ailsa attended a number of fundraising events and developed an interest in this area. Shortly before opening, Ailsa was delighted to be offered a full-time position within V&A Dundee’s Philanthropy & Partnerships team.

“I could not be happier in my job and the Young People’s Collective provided me with the opportunity to get here,” she said.



Ailsa Purdie in the museum. Credit: Michael McGurk

## COMMUNITY GARDEN PROJECT

V&A Dundee's Community Garden project is a key example of how people can be engaged with the relevance of design to their daily lives, as well as showing how outdoor spaces and taking part in group activities can benefit overall health and wellbeing.

The museum's first targeted co-design project, taking place across two years, brought together a team of volunteers and designers to create a brand new public space on Dundee's redeveloping waterfront, opposite the V&A Dundee building.

V&A Dundee, in collaboration with arts advocacy project Art Angel, worked in partnership with around 20 volunteers who were actively seeking to improve their overall health and wellbeing.

Participants were given the chance to become involved in the design process through workshops, visits, creative sessions and presentations led by design studio kennedytwaddle, professional designer Linsey McIntosh and landscape architect Glen Macfarlane. The workshops took place over two months and included creating miniature gardens, visiting allotments to learn how people use gardens to rest and relax, and sketching two- and three-dimensional designs.

As well as taking part in design workshops, the volunteers had the opportunity to meet the Queen at the official opening of Slessor Gardens in 2016, attend a celebration for the opening of the V&A Dundee garden, and were invited to the opening of the museum itself.

The project not only supported the individuals who took part but has raised awareness of the benefits of co-design to a wider audience. The project involved communities throughout the design process – including an interactive design-based workshop called 'My Garden' run across four days for visitors to Dundee Design Festival 2016 and a public showcase of the project at Dundee Botanic Gardens.

Discussing the project, V&A Dundee Communities Producer Peter Nurick commented: "Over the course of the project, I've seen people gain a tremendous amount of confidence in their own abilities by contributing ideas, sharing their ideas and their experiences.

"This project has shown that design is an incredibly inclusive subject. Everyone can be a designer, everyone can be creative, and it's through those first steps that people can start to shape – and ultimately change – their own environment."<sup>27</sup>

### The Community Garden evaluation reported:<sup>29</sup>

- 18 unique events were delivered
- There was a 82% retention rate of participants during the co-design process
- A total of 78 unique attendances over the series of workshops
- Half of participants attended all or all but one of the seven workshops
- 'My Garden' workshop ran for four days at the first Dundee Design Festival, reaching a potential audience of 7,005 people who attended the festival<sup>30</sup>

### Feedback from project participants included:

- "I'm really happy to have become so relaxed and comfortable in this group – it's been great to meet and work with such a knowledgeable and lovely bunch of people. I'm looking forward to continuing these relationships as we build, plant, nurture and enjoy the garden."
- "The group activities started to make me get creative again – getting out the pens and pencils so long forgotten about. All in all it was a very positive experience combining two areas I love – design and gardens, plants, flowers, etc. Being part of the group has helped re-energise me – meeting new people, undertaking activities. Thank you."
- "I learned a lot of ideas for working in the garden. I felt encouraged to do things. I learned about spacing plants and where to put them in the right places. I achieved a great experience. Being part of a team makes me feel important and occupied."

Opened in September 2017, the garden has now become an inspiring outdoor space for the community and a place for V&A Dundee to host events, workshops and other community-focused activities. Former volunteers from the co-design process and a new cohort of volunteers continue to play a role in the maintenance of the garden space.





The co-design team and Peter Nurick, V&A Dundee Communities Producer, cut the ribbon at the official opening of the V&A Dundee Community Garden. Credit: Alan Richardson



## MICHELIN VOLUNTEERS

As part of engagement with Michelin PLC and support from the Michelin Foundation, 23 volunteers from Michelin Dundee were the museum's first volunteers during its opening week.

The volunteers all attended two training sessions ahead of the museum opening, which included a private tour of the building and galleries, invitations to a private celebration event before opening, tickets to the opening weekend and opportunities to be part of the opening celebrations.

As well as being a huge help to V&A Dundee during its opening week, a number of Michelin employees got back in touch to say how much they appreciated the opportunity to be involved in such a momentous moment for the city.

"Thank you for giving me the opportunity to take part in the opening weekend of the V&A. It was wonderful to see the expressions on people's faces as they came through the door. I will be retiring at the end of December and if I can be of any help in the new year just drop me an email."

"Thank you very much for your warm welcome, and all the information about the museum. It's such a G-R-E-A-T and AmAzInG and ... masterpiece of architecture... I'm interested in a volunteer role as 'visitor assistant'... I'm a native German speaker, I also speak fluent French. Maybe you have some groups who would be happy to get some information in their native language."

The museum is now working on opening up volunteer opportunities to all members of the public from this year and developing its volunteer strategy, supported by a Volunteer Coordinator Intern who was originally part of V&A Dundee's Young People's Collective.



## 4.4 Outcomes for Communities

The ‘V&A effect’ is a term often used across the media, in the same way that the ‘Bilbao effect’ has been used over the years to describe the impact of Frank Gehry’s Guggenheim Museum in the Spanish city.

Although it is early days to claim that the museum has changed the fortunes of Dundee and the Tay Cities area, it is undeniable that the establishment and opening of the first V&A museum outside of London and the creation of a landmark building designed by renowned architect Kengo Kuma has already boosted the confidence and profile of the city.

Before V&A Dundee even had a chance to open its doors, the city had been featured as a must-visit global destination. As well as increasing the city’s profile as a visitor destination and being a cornerstone of Dundee’s Waterfront regeneration, the development of V&A Dundee was also a contributing factor in Dundee being successfully awarded the title of UNESCO Creative City of Design in 2014.

The forecasted economic impact of V&A Dundee<sup>31</sup> is expected to provide a considerable uplift for the local economy, while it is currently anticipated that there will continue to be indirect benefits in terms of business investment in the city and increased footfall for other local visitor attractions.

As well as an expected boost to local economy, there are early signs that the creation of V&A Dundee will help make Dundee a better place to live, work, study, visit, and invest in.

Ahead of the opening of V&A Dundee, the Cabinet Secretary for Culture, Tourism and External Affairs, Fiona Hyslop, commented:

**“V&A Dundee is a powerful symbol of Dundee’s new confidence and a major addition to Scotland’s world-class collection of museums and visitor attractions. As the flagship of Dundee’s waterfront development, the museum will act as a magnet for the city’s regeneration, attracting inward investment and tourism, and creating new jobs and opportunities beyond the construction phase.”<sup>32</sup>**

## With our investment environmental impacts will be reduced

### ENVIRONMENTAL COMMITMENT

During the construction of the building, there has been a clear commitment to ensuring that it was delivered in an environmentally sensitive way.

After a Low and Zero Carbon Technologies study was undertaken in 2011 as part of the project’s BREEAM (Building Research Established Environmental Assessment Method) obligation to identify the most appropriate form of renewable energy for the building, geothermal energy was identified as the solution.

BREEAM is an international scheme that provides independent third party certification of the assessment of the sustainability performance of individual buildings, communities and infrastructure projects. Achievement of BREEAM Excellent certification was set out as a condition of Creative Scotland’s funding award for the capital project.

Geothermal energy, a sustainable energy that uses heat from the earth, is used in the building. 30 geothermal bore holes, each of which is 200-feet deep, form part of this system for the heating and cooling of the building, supplemented by air source heat pumps on the roof. These provide direct renewable energy for the museum, with 800,000 kWh/annum of heating and 500,000 kWh/annum of cooling.

The innovative design and installation of a 100% low-carbon heating and cooling system at V&A Dundee is a first in the UK.

V&A Dundee recently won the Carbon Reduction Award at the Scottish Green Energy Awards for its cutting-edge use of green energy technology, including heatpumps and geothermal energy.

Post-construction evidence has been compiled and submitted to the Building Research Establishment (BRE). Final post-construction evidence will be submitted once Waterfront Place is completed. Site 9, next to the museum, was used for the compound area for building V&A Dundee and needs to be included in the area measured for ecology credits and cannot be signed off until the landscape works are completed.



In the museum's café, run by Heritage Portfolio, Vegware catering disposables – such as plates and cups – is made from renewable, lower carbon or recycled materials. These are all commercially composted and there are separate Vegware bins for these to return back to the food recycling system.

### SUSTAINABLE TRANSPORT

There have also been efforts made in other parts of the city to adopt more environmentally-friendly approaches. There are plans to develop an active travel and low carbon transport hub on Dundee's Waterfront. Aimed at supporting Dundee City Council's ambition to encourage both locals and visitors to engage in active travel including walking and cycling, Dundee Travel Hub will offer bike hire and storage, host community outreach activities and work to promote sustainable modes of travel in Dundee – including promotion of car clubs and electric vehicles.



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## More people and a wider range of people will have engaged with heritage

### AMINA MUSLIM WOMEN'S RESOURCE CENTRE TRAINING PROGRAMME

V&A Dundee, funded by the Rank Foundation, has been working with Amina Muslim Women's Resource Centre to develop a two-year training programme to support local women to deliver inclusive tours for BAME communities in their native languages.

Amina is a national organisation which works with Muslim and minority ethnic women to give them opportunities to have their voices heard, to improve their skills and to become more confident in participating in their own communities and at a wider level.

Ahead of the museum opening, some of the Amina participants took part in a community consultation session that gave them the opportunity to give detailed feedback on V&A Dundee's programming and activities as part of planning for local audiences.

Previously taking part in a walking tour of Dundee's Waterfront, some of the women commented on how the building reminded them of the architecture of their native countries, while others were impressed by what the building meant for the city.

V&A Dundee and Amina have already begun to work together to familiarise participants with the museum's collections and receive tour guide training, alongside taking part in workshops to develop confidence and self-esteem. Amina also supports the women through access to English language classes and dedicated staff to help them achieve personal development goals.

Once trained, there are plans to develop a programme of tours of the permanent galleries to be advertised to local black, Asian, and minority ethnic groups. The project hopes to recruit approximately ten women in the first year, before engaging at least 200 people through tours, with tour guides each earning the national living wage.

The project hopes that as the Amina participants develop their skills and confidence they will also deliver tours in English, enabling them to become official V&A Dundee volunteers and have the opportunity to further develop their experience.

V&A Dundee hopes to use this model in the future to offer similar opportunities for adults on the autistic spectrum, helping to challenge stereotypes about disability and minority groups.

### ROXBURGHE HOUSE PROJECT

V&A Dundee was part of a project helping palliative care patients redesign their communal space as part of the museum's Communities programme between 2017 and 2018.

Patients and staff at NHS Tayside's Macmillan Day Centre in Roxburghe House, Dundee worked together with professional designers and V&A Dundee staff in a series of workshops to co-design the refurbishment of a communal space, which was outdated and no longer fit for purpose.

As a result, Macmillan Cancer Support used the work carried out over eight months of the project to make a case for funding to NHS Tayside's endowment fund to make the changes happen.

A participant in the project commented on how it was "so refreshing to get the chance to have an influence on the design of this area. So often, wheelchair users like myself still have trouble with buildings that meet the legal requirements for accessibility.

**"It's my biggest bugbear so to be able to design something much better has been fantastic. For the staff here, who have helped me to get going again after a very difficult time, getting an input has been so important too."**<sup>33</sup>

Originally designed to be a pilot programme, it developed into a series of workshops. The project will be used to help create a co-design toolkit to enable communities to develop creative solutions to challenges they face.



Amina participants with the Duchess of Cambridge during the official Royal opening. Credit: Michael McGurk



Roxburghe House project. Credit: Julie Howden



## Case Study

### “Anyone can be a great designer”

#### Colin McFawns, co-designer of V&A Dundee’s Community Garden

The V&A Dundee Community Garden was an innovative project that helped demonstrate how co-design can have a positive impact on health and wellbeing.

Local people living with – and recovering from – a range of health and wellbeing issues worked closely with professional designers to co-design and create a unique public garden space in Slessor Gardens, part of Dundee’s Waterfront regeneration.

Talking about his experience of co-designing the garden, Colin said: “At the beginning there was some trepidation since I wasn’t that long out of hospital and hadn’t been involved in design for quite some time.”

He said that the V&A Dundee Learning team and professional designers helped to reassure him and “really made me feel ‘seen’ and appreciated throughout.”

“A lot of the members had been through similar health challenges, so there was a real feeling of togetherness during the project – we all wanted everyone to succeed,” he added.

Following the opening of the garden to the public, Colin said it was wonderful seeing their concepts come to life and proving “that anyone can be a great designer”. For him personally, he felt that taking part in garden design had really improved his mood levels.



Following his involvement in the project, Colin plans to use the confidence and design skills he has gained in returning to the workplace.

Community Garden workshop. Credit: Dylan Drummond

## DEMENTIA PROGRAMMES

V&A Dundee has recently received a funding award from Life Changes Trust “to create a welcoming environment for people affected by dementia visiting V&A Dundee, to enable them to benefit from its programmes and to enable them to play an active role in shaping the museum’s visitor experience.”<sup>34</sup>

The funding will be used to support the development and strengthening of networks with community groups and experts in dementia to help V&A Dundee to ensure that it is a “truly dementia friendly environment”.

V&A Dundee is developing a series of programmes aimed at people with dementia and their carers, which will support increased opportunities for people with dementia to engage in cultural and creative activities, alongside helping to address social isolation and loneliness.

### **The programmes will include:**

- Dementia-friendly training for the museum’s Learning team, contracted designers and all front of house staff, volunteers and interns.
- Handling boxes that give people with dementia the opportunity to have a multi-sensory experience of handling a range of objects related to the museum’s Scottish Design Galleries. These will be used in the museum’s reminiscence workshops and can be brought out to care homes, sheltered housing complexes and hospital wards.
- Design process workshops that will encourage participants with a diagnosis of dementia to work together on creative tasks that take them through the design process.
- Tours co-designed and led by people affected by dementia, enabling them to develop a sense of ownership and influence of the museum.
- V&A Dundee has commissioned four ‘interactives’ that will offer people with dementia the chance to experience the museum through visual, auditory, and tactile engagement such as sensory materials like different textures, film, music, and smell.
- Feedback gathered on the visitor experience of people with dementia, including changes to this dementia programme.

## ACCESSIBILITY OF THE MUSEUM

The museum has been designed to be an inclusive and accessible building, with a range of access provisions.

Guide dogs, hearing dogs and other recognised assistance dogs are welcome in V&A Dundee, and there are dog drinking bowls available at the information desk.

There are accessible toilets available on all floors and a Changing Places toilet on Level 1 of the building.

Grace's Sign is featured as part of the accessible bathroom facilities for visitors at V&A Dundee. Designed by school pupil Grace Warnock for people with invisible conditions like her own, Crohn's disease, her campaign led to the first sign for invisible disabilities being displayed in the Scottish Parliament. Her work has been recognised when she was awarded a British Citizen Youth Award, a Young Scot Award and she was made a V&A Dundee Design Champion.

Lifts are available to all floors, mobility scooters are welcome in the museum and there is wheelchair access to all spaces, as well as a limited number of wheelchairs available for loan free of charge by contacting V&A Dundee in advance. Portable stools are also available to borrow for use in the gallery spaces. Induction loops are available at all service points in the museum, as well as throughout the learning suites.

V&A Dundee will also be regularly offering tours of the Scottish Design Galleries, exhibitions and the building led by trained guides with the support of interpreters and handling resources, including British Sign Language tours and visually impaired tours.

The museum also regularly offers sensory-friendly mornings, providing a quieter environment for people visiting the museum who may have autism spectrum conditions or sensory processing differences, such as dementia. Visitors to the events are able to experience the museum with no queues or planned tannoy announcements, while ear defenders and additional staff are available.

A group of ambassadors from Euan's Guide were invited to visit the museum ahead of opening. Euan's Guide is a website used by disabled people to review, share and discover accessible places to visit.

Euan's Guide Ambassador Claire D'All, who is a disability activist who writes about her experiences of living with a disability on her blog A Journey In My Wheels,





gave V&A Dundee a five-star review on Euan's Guide for transport and parking, access, toilets and staff.<sup>35</sup> She also provided useful visitor feedback for V&A Dundee to consider how to make the museum even more accessible and welcoming for wheelchair users.

During pre-opening, there was engagement with a number of different communities through talks, events and activities. This included giving talks and running events in local community centres, and visiting care homes for older people and sheltered accommodation for people who find it hard to travel.

**Local community groups engaged with during pre-opening include:**

Allsorts (LGBT Youth Scotland)  
 Hot Chocolate Trust  
 Scottish Autism  
 Dundee Carers Centre  
 RockSolid  
 Young Parents Network  
 The Attic Community  
 One Parent Families Scotland  
 Tayside Deaf Hub  
 Dundee Blind and Partially Sighted Society  
 Amina Muslim Women Resource Centre  
 Scottish Veterans Residences  
 Scottish Council of Jewish Communities  
 Nae Limits 60+ Association



Grace's Sign. Credit: Ross Fraser McLean



## Your local economy will be boosted

### ECONOMIC IMPACT ASSESSMENT (PRE-OPENING FORECAST)

An Economic Impact Assessment (EIA) was commissioned by V&A Dundee to assess the newly opened museum's economic impact at local, regional and national levels. In 2018, Ekosgen and Reference Economics were appointed to review the economic impact of the construction of the museum and to forecast V&A Dundee's economic impact as an operating museum.

They will carry out another EIA later this year based on the museum's actual impact following 12 months of operation.

The EIA was based on the original estimate that the museum would attract 500,000 visitors in its first 12 months from opening.<sup>36</sup> In just over six months since opening, half a million people have already visited – greatly exceeding this estimate and likely resulting in a much greater economic impact than predicted.

#### Based on the original visitor forecast:

- In V&A Dundee's first year of operation, the gross value added (GVA) contribution is expected to be £10.3m for the Dundee economy alone, supporting the equivalent of 178 FTE jobs.
- At a national level, this rises to £23m GVA in the Scottish economy and 604 FTE jobs.
- V&A Dundee is expected to generate additional impacts of 175 FTE jobs and almost £5.8m GVA for the Dundee economy. These are net impacts that would not have otherwise occurred without V&A Dundee.

#### Economic impact of construction

The EIA reported that construction of V&A Dundee has generated total employment of 501 job years and £35.8m GVA in Dundee.

At the Scotland level, impacts were much higher, demonstrating the extent of activity and the supply chain in the museum's build. Across the Scottish economy, 981 job years and £70.4m GVA were generated.

These are in excess of previous estimates and demonstrate the scale of the boost in employment and economic activity in the city over the life of the construction phase.

### 3D FESTIVAL AND OPENING WEEKEND – AUDIENCE RESEARCH

Audience feedback during the 3D Festival and opening weekend was gathered through an online questionnaire<sup>37</sup>, sent out the week following the event and offering a prize draw incentive.

V&A Dundee emailed the survey to their database of 2,412 individuals who attended the ticketed event on the Friday night and 1,521 who attended the museum in a timed ticket slot over the first weekend. In addition, Scotinform fieldworkers collected 316 email addresses from attendees at the unticketed 3D Festival on the Saturday. A total of 1,019 survey responses were received.

Interviews were also carried out with Shaper/Caper and Sistema Scotland to evaluate the impact of the two main participatory performances at the festival.

The audience research showed that the majority of attendees across the full opening weekend were from Dundee (66%) or the Tayside area (27% from Angus, Fife or Perth and Kinross), which can be partly attributed to V&A Dundee's decision that the 3D Festival ticket ballot be weighted towards local audiences.

The research found that 7% of Friday 3D Festival ticketholders came from outside Scotland, with people travelling from England, Europe, North and South America and Canada.

As part of the Audience Research, a series of questions were asked to inform V&A Dundee's wider Economic Impact Assessment.

Ahead of the opening weekend, V&A Dundee's Tourism Officer met with local businesses (including DD One business group, local taxi drivers, hotels and accommodation) to discuss opening plans to help support them to benefit from the volume of visitors in the city during the opening and in the future. As a result, there is anecdotal evidence that some businesses scaled up their operation and developed linked promotions.

The total net impact of the 3D Festival, based on 3D Festival expenditure and net visitor spend, was estimated to be £950,000 at the Scotland level, representing 11.4 job years and approximately £360,000 GVA.<sup>38</sup>

Around half of these impacts benefitted the local economy, due to the majority of visitor spend occurring in Dundee and a significant proportion of the festival contractors being based in the city.





Visitors at the 3D Festival weekend. Credit: Ross Fraser McLean



## Case Study

“Prestigious project that comes along perhaps only once or twice in your lifetime”

**Paul McFarlane, BAM Project Surveyor for V&A Dundee construction**

Paul was responsible for the financial management of a number of work packages including the excavations and earthworks, concrete sub-structure and superstructure, external hard landscaping and internal fit-out. He worked closely with the client and design team to ensure the project was delivered on time and on budget.

Paul’s previous employer went into administration and it was his attendance at a meeting organised by the Scottish Government’s Partnership Action for Continuing Employment team that gave him the opportunity to gain permanent employment with BAM and start work on V&A Dundee’s construction. He said it “helped turn my career around at a difficult time.”

Talking about the project, Paul observed: “I have relished being a part of the project team who successfully completed the construction of V&A Dundee, and have gained some valuable skills and experience working with some of the UK’s best consultants and contractors on such a large complex project.”

“A prestigious project such as this comes along perhaps only once or twice in your lifetime and I feel extremely privileged and proud to have been involved in the construction of such an iconic new building in my home city.”



He described V&A Dundee as “one of the most unique construction projects that BAM have been involved in. The skills and experience gained working on such a complex project will be invaluable in successfully delivering other large projects in the future.”

Paul’s next project will be another museum, where he plans to implement the skills and experience he gained from being part V&A Dundee’s construction, particularly the internal fit-out works.

V&A Dundee during construction, March 2016.  
Credit: Ross Fraser McLean

## Case Study

### “Invaluable in development as a construction professional”

**Annie Davis, BAM Trainee Site Manager for V&A Dundee construction**

Annie’s first major project for BAM was the building of V&A Dundee, where she was primarily involved in the internal fit-out of the building.

Talking about her experience of the project, Annie commented: “I’ve been exposed to elements of construction most people my age haven’t had the opportunity to experience.

“I was challenged to understand complex drawings which detail specially designed movement joints, required due to the distinct nature of the building structure. I also had the opportunity to work with new, innovative materials and many bespoke components that make the project so unique.”

She added: “I feel a great deal of pride and achievement having had the opportunity to be a part of such a prestigious project, not only for the city of Dundee or Scotland, but the whole of the UK and perhaps even the world. Seeing the completed building now featuring in the news, online and even in adverts is very humbling.”

Annie described the skills and experience she has gained from working on V&A Dundee as “invaluable in my development as a construction professional”.



Museum interiors during construction, September 2017.

Credit: Ross Fraser McLean



## NEW VISITORS

As part of the V&A Dundee Exit Survey, visitors surveyed in its first quarter were asked where they had come from, whether they had previously visited Dundee and whether V&A Dundee was the main reason for their visit.

The survey found that 21% of respondents had not previously visited Dundee, with 71% of visitors saying that V&A Dundee was either the sole or main reason for coming to the city.

This indicates that V&A Dundee has already been a significant driver in attracting new people to visit the city, increasing the potential benefits for other visitor attractions, local retailers and the hospitality sector.

Concerning the number of visitors surveyed that travelled from outside Dundee and the surrounding area, 36% came from elsewhere in Scotland, 17% from elsewhere in the UK and 9% travelled from overseas. Overseas visitors generate higher levels of economic impact because they on average have a greater visitor spend.

In correlation, 44% of respondents said they had stayed away from home during their visit. 38% stayed away from home overnight (non-business), 1% stayed away from home overnight (on business) and 5% stayed away from home overnight (other).

Positively, 20% of visitors said they would have stayed fewer nights if they had not visited V&A Dundee, which suggests that the local economy will have benefited from people staying longer in the city because of their visit to the museum.

Overall, of the visitors surveyed 70% suggested that if they had not been visiting V&A Dundee then they would have been at work or stayed at home, or instead visited another part of the region, Scotland or the UK.

## TOURISM BOOST

Dundee's Tourism Strategy, launched in March 2015, aims to increase the value of tourism in the city from £155m to £185m by 2020, based on increasing visitor numbers from 826,000 to 1.12m.

The city experienced a £187m tourism boost during 2018 – exceeding the tourism strategy figure for 2020, Dundee City Council has reported. During the year that V&A Dundee opened, the research found the value to the tourism industry was up almost £16m on the previous 12 months.<sup>39</sup>

During the same period, there was significant growth in number of overnight stays and the total number of visitors to Dundee, with a 34% rise in day visitors from 412,520 in 2017 to 558,100 last year, and overnight visitors increasing from 467,900 to 491,900.

Dundee City Council reported that expenditure and activity of visitors in 2018 supported a total of 3,033 Full-Time Equivalent jobs (FTEs) – an increase of 8.6% on the previous year and 19.2% since 2010.

## INCREASED FOOTFALL FOR VISITOR VENUES AND ATTRACTIONS

Cultural organisations across Dundee have experienced an increase in visits since the opening of V&A Dundee, a joint press release from Dundee Contemporary Arts (DCA), Dundee Heritage Trust and The McManus: Dundee's Art Gallery & Museum stated in November 2018.

They said that during the first two months of V&A Dundee opening that had all seen footfall grow significantly.<sup>40</sup>

Beth Bate, Director of the DCA, said:

“We were delighted to see a 15% increase in overall visits to the building and a 23% increase in average gallery attendance throughout the past eight weeks compared to the same period last year, undoubtedly as a result of V&A Dundee opening and the increased attention Dundee has been receiving.

**“It’s a real testament to the quality of the city’s cultural life as a whole that audiences have been enjoying a wide range of experiences during their visits.”**

Dr Paul Jennings, then Executive Director of Dundee Heritage Trust, reported that the café and gift shop at Discovery Point had experienced close to a 70% increase in sales since V&A Dundee opened.

“Both venues [Discovery Point and Verdant Works] have seen an increase of 100% in numbers over 2017 figures since V&A Dundee opened. We have had over 50,000 visitors through the doors at Discovery Point in the last eight weeks which is phenomenal,” he said.

Billy Gartley, Head of Cultural Services at Leisure & Culture Dundee, said:

**“Since V&A Dundee opened, we are experiencing more than double the number of weekend visitors and that is hugely exciting for everyone here. We are also enjoying seeing many, many visitors from outwith the city and can’t wait to welcome even more.”**

The Association of Scottish Visitor Attractions reported in March 2019<sup>41</sup> that its members had recorded a highly successful year in 2018, which it attributed to ‘the V&A effect’. Based on statistics submitted by 232 of the organisation’s member sites for its annual ‘Visitor Trends Report’, it reported that Discovery Point saw visitors rise by 42%, while Verdant Works recorded an increase of 21%.

In the surrounding Angus area, Arbroath Abbey had an 18% rise in visitors, while visitor attractions like the National Trust for Scotland’s House of Dun experienced a 29% increase.

Commenting on the findings, Gordon Morrison, Chief Executive of the Association of Scottish Visitor Attractions, said: “Although full year figures for V&A Dundee will not be available until later in 2019, we already have an idea of the impact this world-class attraction has had in Dundee since opening. The outlook for the attractions sector in the city and surrounding area looks to be extremely rosy going forward.”

## LOCAL BUSINESSES

As well as having a positive impact on visitor footfall for other Dundee visitor attractions, there have been a number of positive media reports about the boost the museum’s opening has given to nearby local businesses.

Business owner Jade Beatson, who launched her clothing business Little Lies on Union Street on the same day as V&A Dundee opened, said that the arrival of V&A Dundee had influenced the decision to relocate to Dundee from Perth.

Around the time of opening, she said: “Tourists have been coming into the shop in recent weeks after visiting the museum. The footfall has been incredible since we arrived, not only to our business but the street as a whole.

“Within the first two weeks we had people coming into the store after visiting the V&A. With visitors coming from all over the world we’ve been able to offer online delivery to our international customers. I think it has rejuvenated retailers in the area.”

In the same article, Adam Morrow, Assistant Manager at The Wine Press, said: “We have noticed a really large increase in footfall and, for us, there have been more diverse groups of people dining. The opening has absolutely benefitted the business, especially during the day.





Dundee Waterfront regeneration. Credit: Frame Focus Capture Photography



“The Waterfront is becoming more of an intriguing area for people and there’s a constant stream likely to pop in. It’s possible that we may get more staff if it continues to be this busy.”

Dave Blair, co-owner of the Quirky Co, said the arrival of businesses such as the Malmaison and V&A Dundee had been contributing factors in moving to the area.

Talking about the museum opening, he said: “We’ve absolutely noticed an increase and things have been really impressive. We’ve heard a lot of different accents from all over.”

The owner of local optical boutique Spex Pistols, Richard Cook, has also reported an increase in people visiting his shop from other parts of Scotland and the UK, as well as from overseas since early summer.

He said: “The V&A seem to have done everything possible to include us and other local businesses. I think the whole city feels the effect.”<sup>42</sup>

## WATERFRONT INVESTMENT

V&A Dundee is a key part of Dundee City Council’s Waterfront regeneration programme that involves a £1bn transformation of the area over a 30-year period (starting from 2001), covering 240 hectares of development land and stretching 8km along the River Tay.

Allan Watt, Dundee Waterfront Development Director for Dundee City Council, said the creation of V&A Dundee had been “crucial” in the case made to the Scottish Futures Trust for Growth Accelerator funding to modernise the railway station concourse, invest in digital infrastructure, create Grade A office space, and make major improvements to civic spaces in the Waterfront area.<sup>43</sup>

Since the Growth Accelerator funding was announced in early 2016 there have been a number of existing and new developments completed within the Waterfront including the newly renovated rail station, which includes a new Sleeperz Hotel.

Allan Watt suggested that without V&A Dundee it would have been very difficult to secure long-term investment from a hotel operator and therefore secure all the finance required to carry out the railway station’s redevelopment.<sup>44</sup>

Javeed Anwar, Head of Marketing & Sales for Sleeperz Hotels, said: “Being part of a development that included V&A Dundee helped to seal the deal and gave us confidence that Dundee is a city going through a big change and that we should be part of it.”<sup>45</sup>

He added that V&A Dundee “is a great talking point on our website and marketing literature, offering guests a very good reason to visit and stay in Dundee.”

During V&A Dundee’s opening weekend, there was a 37% increase in the number of people visiting the city by train, with a 23% increase reported between 15 September and 15 October 2018 compared to the same period the previous year.<sup>46</sup> ScotRail Alliance reported in March 2019 that almost half a million people travelled to Dundee by train since the museum opened – a 14% increase compared to the previous year.<sup>47</sup>

“For half a million people to have travelled to Dundee by train in the last six months shows the impact of the waterfront regeneration project,” ScotRail Alliance’s Regional Customer Operations Manager, Fiona Campbell, commented. “The project has shaped a gateway to the city and is an excellent example of how the industry can work in partnership with public and private sector partners to deliver to wider regeneration goals.”

A large amount of the investment in the Waterfront and wider city has been the creation of more hotels, meeting the growing demand for accommodation as more people are expected to visit the city because of V&A Dundee. This has created hundreds of additional rooms and accompanying jobs in the city.

- Malmaison Hotel opened in 2014 following a multi-million redevelopment of the former Tay Hotel building, providing 91 bedrooms and suites.
- Hilton by Hampton, West Marketgait opened in March 2017 after the empty office block was converted into a 105 bedroom hotel and restaurant.
- Premier Inn on Riverside Drive, next-door to V&A Dundee, opened in November 2017. It replaced the previous 40-bed Premier Inn facility on the same site, adding another 109 bedrooms.
- Sleeperz Hotel, a design-led lifestyle hotel, opened in July 2018 and offers 120 bedrooms.
- Indigo Hotel opened in July 2018, following a £20m development of a vacant and derelict industrial mill. It provides 102 rooms, a restaurant and is developing a further 85 serviced suites (Staybridge suites). Managed by the IHG group, the boutique hotel is themed around the city’s historic linen trade and design heritage.
- The former Robertsons furniture store in Barrack Street is to be developed into a hotel and restaurant development, which plans to provide 215 bedrooms.

Another major development has been the decision of St Andrews Brewing Company to carry out a £1m development of a new pub and restaurant in the basement of the Caird Hall. It has said it will employ up to 50 full and part-time staff and plans to be one of Scotland's largest craft beer bars. It has mentioned how the opening of V&A Dundee and Dundee's Waterfront regeneration were factors in its decision to open in Dundee.<sup>48</sup>

**Other major developments have included:**

- The opening of Foxlake wakeboarding centre in 2017 at City Quay.
- Water's Edge commercial office – a mixed-use redevelopment of a former vacant B-listed dock transit shed, providing 11 independent office spaces to accommodate over 300 workers, as well as co-working space and a restaurant.
- A proposal of application notice was submitted in 2018 for a construction of cinema/café/restaurants/hotel and residential use at a Greenmarket development site.

As part of the Tay Cities Deal, the Scottish Government will invest up to £3m in the development of Studio Dundee, a seven-storey entrepreneurial creative hub on Dundee's Waterfront. It plans to offer flexible co-working spaces and a business incubator to attract entrepreneurial talent to the city.

A report by Dundee City Council suggested the development “will provide a high quality mixed use development to support the role of the V&A and the Central Waterfront.”<sup>49</sup>

The museum has been key in efforts to encourage new companies to move into the new Grade A office across from the museum and attract a significant number of jobs to the city, with views from the office complex of V&A Dundee central to the Council's marketing offer.

V&A Dundee is at the centre of Waterfront marketing materials used to attract investors to the city, while the museum was at the forefront of Scottish Development International's drive for inward investment at international property event MIPIM in Cannes, France in March 2019. Around 240,000 property professionals attend the event annually, including investors and developers.

Over £750m of public and private finance has been committed to the wider Dundee Waterfront area, with Dundee City Council reporting that investors and developers have cited the importance of V&A Dundee in encouraging them to invest in the city.<sup>50</sup>

Speaking to The Financial Times in September 2018, David Martin, Chief Executive of Dundee City Council, commented:

“There are 14 sites around here with commercial interest in them. 10 years ago we were struggling to get anyone interested in anything that didn't involve the Council underwriting the risk.”<sup>51</sup>

## What did you like best about the 3D Festival?





## Local area/community will be a better place to live, work or visit

### CIVIC PRIDE

The Audience Research carried out for the 3D Festival and opening weekend indicates that the weekend of events had a positive impact on people's impressions of Dundee. 84% of respondents who had been to the 3D Festival said that it had affected their impression of Dundee in a positive way, a figure which was marginally higher amongst people attending the Friday evening event.

When questioned why this was, answers from respondents included that the festival provided a positive atmosphere, with some commenting that Dundee is not generally "expected to have these kinds of things". People surveyed from Dundee suggested it was an opportunity to share their pride in their home city.

Out of the small proportion of people who answered that the festival had made no difference or had a negative impact on their perceptions of Dundee, most suggested that it was V&A Dundee, not the 3D Festival, that was having a positive impact on changing perceptions of the city.

#### Overall, the research found that:

- 97% of respondents who visited the 3D Festival on the Friday evening rated the event overall as good or very good.
- 92% of respondents who visited the 3D Festival on the Saturday rated the event overall as good or very good.
- 94% of respondents felt that the 3D Festival was an appropriate way to celebrate the opening of V&A Dundee.

An online poll carried out by the Evening Telegraph, a month after the museum opened, reported more than 80% of those who responded to the survey had already paid a visit to the attraction or planned to do so soon.<sup>52</sup>

A total of 444 people responded to the survey about people's early perceptions of V&A Dundee.

Nearly two-thirds (61%) of those who took part in the poll said they were happy with the public money that had been used to build and run the museum.

Asked to identify the biggest benefit to Dundee of having the museum, over 40% said they felt the indirect jobs the museum would bring to the city, through attracting investment from other companies, was the most significant positive factor.

The survey reported that 22% said they believed V&A Dundee had improved the way the city looked, while 5% felt the biggest benefit would be educating people in design and the arts.

Commenting a month after the opening of the museum, the Leader of Dundee City Council Councillor, John Alexander, said: "We can't underestimate what this one project has already delivered in terms of growing the confidence of the creative sector and of business in the city, of reigniting the fire in the belly of many Dundonians, of stoking a renewed self-belief and pride in our wee city.

**"No other single project has managed to alter the perceptions and opinions of Dundee – within and outwith the city – like V&A Dundee."**<sup>53</sup>

## TOURISM CAMPAIGNS AND CITY PREPAREDNESS

V&A Dundee is at the forefront of both VisitScotland's Scotland Is Now<sup>54</sup> global campaign and included in the UK Government's GREAT Britain campaign<sup>55</sup> which both promote Scotland as a must-visit destination for overseas tourists and an exciting location for business investment.

The Tay Country initiative has involved collaboration between Dundee, Angus, Fife and Perth & Kinross to ensure the regional area capitalises on the opening of V&A Dundee and ensures a visitor ripple effect for the whole area.<sup>56</sup>

Under the city's place brand, Dundee – One City, Many Discoveries, local stakeholders worked closely together to ensure consistent messaging around the city and V&A Dundee.

This partnership included using an agreed set of hashtags (e.g. #loveDundee, #sunnydundee and #Dundee2018) and working together to ensure that the many journalists visiting the city were given a high-quality visitor experience.

The Sunny Dundee tourism campaign, which featured pairs of #SunnyDundee branded sunglasses given to visitors, locals, and businesses, was launched during the build-up to the opening of V&A Dundee and encouraged people to share their photographs of the city using the hashtag on social media.

Dundee City Council and V&A Dundee worked together in partnership with organisations such as Angus Council, Fife Council, Perth & Kinross Council, VisitScotland, Dundee & Angus Chamber of Commerce, and Dundee & Angus Visitor Accommodation Association to ensure that the city and wider area was prepared for the opening of the museum.

### This included:

- The development of an East of Scotland Tourism Action Plan
- Hosting events for local businesses, taxi drivers and others to raise their awareness of the museum and its opening weekend of events
- Undertaking research into signage around the city to encourage people to visit other attractions
- Participating in a wide range of media and tourism familiarisation trips
- Hosting bloggers and vloggers to promote the city and its offerings
- Supporting the development and distribution of the crowd-sourced 99 Things to See and Do in Dundee guide, created by Creative Dundee
- WorldHost training for a range of visitor-facing industries
- Installing new visitor information boards at Dundee Railway Station and specially-designed banners to go up on city stanchions

**“Dundee is a city with an eye on the future.”**

Lonely Planet Best in Europe 2018

**“One of Scotland’s most exciting places to be.”**

Vogue, A Guide to Dundee, Scotland— the First City Outside London to Get Its Very Own V&A Museum

**“Up-and-coming cultural hub”**

Bloomberg’s Where to Go in 2018

**“Dundee has emerged as Scotland’s coolest city”**

The Wall Street Journal’s Where to Travel in 2018,  
From Shanghai to Scotland’s Coolest City

**“Dundee’s ascendance as one of the UK’s must-visit cultural destinations continues unabated after the opening of the dramatic waterside V&A last autumn”**

Condé Nast Traveller City Breaks UK: The 10 Best for 2019

**“A place that consistently punches above its weight for creativity, smarts and sheer inventiveness”**

Condé Nast Traveller

**“Britain’s coolest little city”**

GQ

**“Being chosen as the only city outside of London to house a V&A Museum has created a new kind of swagger for Dundonians — and there’s more transformation to come”**

National Geographic’s The Cool List 2019

**“Game on: the new V&A has set the seal on the city’s status as Scotland’s new (and affordable) creative heartland”**

The Sunday Times Best Places to Live 2019





## GROWING PROFILE OF DUNDEE

People's pride in the city and its profile amongst the rest of Scotland, the UK and worldwide has been seen to grow in the run-up to V&A Dundee opening and since it opened its doors.

Dundee has been featured as a must-visit destination by international publications such as Lonely Planet, Vogue, Bloomberg, The Wall Street Journal, Condé Nast Traveller, GQ and National Geographic.

The city has also recently been named as the best place to live in Scotland in the Sunday Times 2019 Best Places to Live in the UK guide.

V&A Dundee's films of its remarkable architecture, museum objects and community projects have been watched online over one million times. These include the films *Introducing V&A Dundee* and *Building V&A Dundee*, which were released in 2016 to develop early enthusiasm for and understanding of the project. There has more recently been unique drone footage of the museum and a film of the Scottish Parliament official bagpiper, Stuart McMillan MSP, playing on the museum's roof on St Andrew's Day.

It has begun to receive awards for its architecture, including winning the Wallpaper\* Design Award for Best New Public Building – beating the Apple Park Visitor Center in California, Qatar National Library, the Guardian Art Center in Beijing, and the National Kaohsiung Center for the Arts in Taiwan to win the title.

V&A Dundee was one of 10 projects that were successful at the Royal Incorporation of Architects in Scotland's (RIAS) 2019 awards. The winners will form the long list for the RIAS Andrew Doolan Best Building in Scotland Award. The RIAS judges said the museum was itself an example of the highest level of architectural ingenuity, suggesting the building “simultaneously stimulates, engages and intrigues visitors.”

V&A Dundee was also recognised on the shortlist for the prestigious title of Art Fund Museum of the Year 2019, the biggest museum prize in the world.

The reach of V&A Dundee's media coverage in 2018/19 increased substantially from the baseline established over the previous three financial years. The potential audience for this media coverage was 802.4 million for print and broadcast and 12.7 billion online, and in September 2018 alone the potential reach – 321 million for print and broadcast and 4.1 billion online – exceeded the totals for the full 2017/18 financial year.

Across the museum's social media platforms, there are 93,331 followers – a 39% increase compared to the same period last year. This has included a 27% and 29% rise in Twitter and Facebook followers and fans respectively, while Instagram followers has significantly increased by 98%, which is the platform predominantly used by those aged 24 to 34.<sup>57</sup>

Since opening, V&A Dundee's website had over 1.5 million unique page views.<sup>58</sup>

As part of the recent group discussions that informed V&A Dundee's summative research<sup>59</sup>, visitors who participated cited the amount of media coverage about the museum, particularly outwith Dundee, as encouraging their visit. As a result of their visit, participants said they would revisit Dundee and wanted to know more about what Dundee had to offer as a visitor experience.

The research also indicated that those who had visited Dundee previously were not frequent visitors to the city, and it was commented that they could see the impact the museum has had both visually and in the changes to the city's Waterfront, such as new hotels and the renovated railway station.

Those who took part in the discussion groups that live in Dundee also mentioned the changes V&A Dundee had brought to the city, commenting on the amount and different type of people they were seeing in the city.

In the short time it has been open, the museum has already been the host venue for the announcement of the nominee shortlist for the National Television Awards, with television celebrity Dermot O'Leary hosting the special event from V&A Dundee, and V&A Dundee and nearby Slessor Gardens was a venue for the BBC's Antiques Roadshow. The museum has also been used as a filming location for HBO television series *Succession*, starring actor Brian Cox.

There was also great excitement when the Duke and Duchess of Cambridge, the first Royal patron of the V&A, officially opened the museum in January 2019.



V&A Dundee. Credit: Julie Howden



## CREATIVE INDUSTRIES

### Northern Lights at the London Design Festival

V&A Dundee's Audiences and Media team partnered with Scottish Enterprise and Creative Dundee to deliver the installation *Northern Lights* at the London Design Festival, as part of the Scottish Government's Year of Innovation, Architecture and Design 2016. Taking place from 17-25 September 2016, over 110,000 visitors saw contemporary design from nine designers based in Scotland. It was named as one of the top things to do during London Design Festival by Design Week.

The designers featured covered a diverse range of design from Scotland's creative industries, from furniture design to watch design, as well as designers at different stages of their careers.

Discussing being featured at one of the world's most important annual design events, Kevin Fox of luxury luggage brand LAT\_56 said: "It represents a significant milestone in my design career to have products exhibited at the globally renowned V&A in London... The *Northern Lights* exhibition is a bold statement V&A Dundee is making in terms of the strength of contemporary Scottish design talent and the role it plays in our economy.

"This is a fantastic opportunity to showcase contemporary Scottish design to a global audience and sets the bar high for what is to come when V&A Dundee opens in 2018."<sup>60</sup>

### Abertay Game Design Project – Time Capsule

As part of V&A Dundee's Time Capsule project, Abertay University videogame students were set a third year project to develop a new game to create a fun and accessible way for people to learn about Scottish design. All of the students involved were studying one of Abertay's Computer Arts, Computer Games Technology, or Games Design and Production Management courses.

A team of Abertay students came up with *Spinnacle* – a digital Rubik's Cube style game where players are challenged to reconstruct iconic Scottish design in as few moves as possible (also see case study from Nicole Sangster). The game featured the Falkirk Wheel, the Jaguar F-TYPE, the Orkney Chair, and the V&A Dundee building itself.

The students gained further experience in testing the prototype among audiences during V&A Dundee family workshops at the Wellgate Centre and Douglas Community Centre.

### V&A Dundee Design Champions

In April 2017, the Audiences and Media team launched Design Champions, a project to celebrate practising Scottish designers and demonstrate the power of design to improve the world. It was done in partnership with architecture and design online magazine Dezeen.

Since its launch, V&A Dundee has announced 50 Design Champions<sup>61</sup>, ranging from celebrating fashion design to how design can be used to provide better care and dignity for people. It has put a spotlight on the significance of Scottish design for wider society, giving a new platform for the promotion of many designers based in Dundee and across Scotland.

These champions remain important ambassadors for V&A Dundee, taking part in events and talks organised by the museum to share design knowledge with the creative industries community and inspire a new generation of designers.

A V&A Dundee in-conversation event held as part of Dundee Women's Festival brought together four of the Design Champions to share stories about their design journey. Held at Menzieshill Community Centre, the event featured international model, curator and philanthropist Eunice Olumide MBE, Hannah Taylor of *She is Fierce* magazine, textile and jewellery designer Kirsty Stevens, and Luisa Geddes, designer of the V&A Dundee time capsule and one of the youngest Design Champions.

## Case Study

“V&A Dundee has helped raise my profile as a designer”

**Kirsty Stevens, textile and jewellery designer and V&A Dundee’s first Design Champion**

Kirsty established her design practice Charcot after being diagnosed with multiple sclerosis (MS) and she uses MRI scans that show the shapes created by harmful lesions on her brain to inspire the patterns in her designs. Her work includes laser-cut acrylic necklaces, silk scarves and cushions.

She has set out to make “this invisible illness visible” and raise awareness of MS through her designs, and has recently become an MS Superstar for the MS Society.

Talking about being made V&A Dundee’s first Design Champion, Kirsty said she was “thrilled and honoured”.

“I couldn’t believe that such an established name in the creative world and the first design museum in Scotland appreciated my design practice, Charcot.”

Since being made a Design Champion, Kirsty has taken part in an all-female panel of Design Champions at Dundee Women’s Festival and she is excited to soon host a V&A Dundee Designer Date session, sharing her story of how and why she got into design.

Discussing the opportunities that have arisen since being made a Design Champion, she commented: “Before I was even announced as a Design Champion, UNESCO Dundee City of Design saw a tweet that V&A Dundee posted about my work which led to them asking if I wanted to represent Dundee at the first ever Design Week in Shenzhen, China!”



“My work was displayed in the main gallery space at the event and I was asked to make a presentation about Design for the Future, which I gave on the day I was being announced as the first V&A Dundee Design Champion back in Scotland. It was an incredible experience as I met remarkable designers from other UNESCO Cities of Design.”

Kirsty said being made a Design Champion “definitely has helped raise my profile as a designer.”

“Especially with media interviews. I was on the Kaye Adams radio show, BBC Radio Scotland. BBC’s The One Show has been in touch about a possible design project this year... I also have a couple of new stockists.”

She said she was hopeful that “V&A Dundee will inspire anyone that visits or follows it online, especially young creatives. It could set them on to new and exciting ideas for their future.”

Above: V&A Dundee’s first Design Champion, Kirsty Stevens, meeting Kengo Kuma. Credit: Ross Fraser McLean





The Duke and Duchess of Cambridge meet the Young People's Collective at the official opening of V&A Dundee. Credit: Michael McGurk





## UNESCO CITY OF DESIGN DUNDEE

V&A Dundee has worked closely with the UNESCO City of Design team, as well as being a key part of the original application which secured the status – the first city in the UK to do so.

V&A Dundee held a number of events as part of the Scottish Government's Year of Innovation, Architecture and Design 2016. This included helping develop the programme for the city's inaugural Dundee Design Festival. The event was held at West Ward Works, where V&A Dundee hosted the Schools Design Challenge exhibition and a design-based workshop for the Community Garden project.

It also collaborated on the opening day of the festival with the Design Revolution: Innovative Cities and Business programme. Two keynote talks on the design economy and design thinking featured speakers from Design Council and Hasso Plattner Institute School of Design Thinking in Germany.

V&A Dundee also held an event in collaboration with Dundee Rep Theatre that featured award-winning Scottish theatre designers Bunny Christie and Finn Ross, who talked about the set and video design of the highly acclaimed production of *The Curious Incident of the Dog in the Night-Time*.

Last year, the museum's Young People's Collective worked with the UNESCO City of Design team to co-design the look and feel of a Design Parade as part of the Scottish Government's Year of Young People. Over 500 young people from 33 different youth groups from across Dundee created artworks, banners, costumes, head-dresses and sculptures to wear during the parade.

V&A Dundee has also linked to other key strategies for the city, including how the museum can contribute to the outcomes of the Dundee Music Strategy 2017–2020 and creating additional opportunities for visitors to V&A Dundee to experience live music, and the Dundee Cultural Strategy 2015–2025.

## FREELANCERS AND CREATIVE INDUSTRIES PROGRAMME

During the very early stages of the project, V&A Dundee collaborated with designers from across Dundee and wider Scotland through its projects and programmes. Freelance designers – ranging from videogame designers to milliners, from interior designers to architects – have been integral in working alongside V&A Dundee staff to promote design education, design-led thinking and open up future career opportunities.

The feedback from freelance designers during evaluation of these projects has been very positive and many have mentioned how working with V&A Dundee on these projects has developed their own work practices and thinking around design.

Over 20 freelance designers now regularly work with V&A Dundee to deliver the museum's Learning programme, helping to develop their knowledge of Scottish design and working with members of the public, including school children, communities and families.

**There is a strong focus on creative industries as part of the Learning programme, with a number of events already held in the museum. The programme includes:**

- Designer Dates – a monthly series that gives people the opportunity to talk with a practicing designer and ask them questions
- New Skills workshops – monthly practical workshops led by practising designers
- Design History talks – a monthly event exploring Scotland's rich design history, looking at historical examples of design, as well as how history influences contemporary designers
- Pattern Cutting and The Stitch Up – workshops on teaching people new sewing skills
- Tay Lates – a themed after hours event of music, performances and hands-on making activities

## DESIGNER IN RESIDENCE AND COMMISSIONS

V&A Dundee has a residency programme in place that supports designers to develop new skills, take risks, undertake research and create exciting, new work influenced by its collection, building and themes. Simon Meek was the museum's first designer in residence, while artist Ciara Phillips and graphic designer and typographer Maeve Redmond have produced creative commissions for the museum (see earlier Maeve Redmond and Simon Meek case studies).

Discussing the impact that V&A Dundee is having among designers and the creative industries, Simon commented: "V&A Dundee has already done a huge amount to raise the profile of design in Scotland – not just in terms of its design community and their standing on an international stage, but also in terms of the everyman's understanding of what design is and the importance of Scottish design as part of that."



“From within the creative industries, V&A Dundee has brought about a real buzz. It has opened up conversations and I honestly believe brought together people who wouldn’t normally have engaged with each other.

“This is because design is a gelling force between industries – it unites industries and practitioners, and also brings everyone onto an equal playing field from a cultural point-of-view. It allows videogames design to sit side-by-side with theatre, architecture, ceramics or fashion. It brings a much-needed levelling to the cultural playing field.”<sup>62</sup>

V&A Dundee has recently commissioned its first videogame, linked to the *Videogames: Design/Play/Disrupt* exhibition. The web-based game, *Plaything*, is aimed at teaching players about empathy and kindness, alongside letting people take on the role of designer and player by creating their own characters.

The game has been created by filmmaker and animator Will Anderson and game maker and generative artist Niall Tessier-Lavigne. Both originally from the Scottish Highlands, they have not previously worked together. As part of the commission, V&A Dundee is running testing sessions for museum visitors to inform the game’s development.

The commission is supported by InGAME: Innovation for Games and Media Enterprise, a fund dedicated to research and development of videogames, organised by the universities of Abertay, Dundee and St Andrews, and contributed to by the Arts and Humanities Research Council and Scottish Funding Council.

Niall and Will have also secured funding from Creative Scotland to create a mobile version of *Plaything*, after the online game is complete.



*Plaything*, V&A Dundee’s first videogame commissioned,  
Credit: Will Anderson and Niall Tessier-Lavigne



## Your organisation will be more resilient

From the start of 2018, Design Dundee Ltd has grown from around 35 to 90 members of staff (office and front of house) and activity has transitioned from a pre-opening project capital phase to a trading museum.

The employment of additional staff has ensured that the necessary teams and skills have been put in place to deliver a visitor attraction of this scale. These teams have been trained up to function with a new building, new systems and the softer skills needed to meet the needs of visitors. This has included the recruitment and training of operations staff (Visitor Assistants, Duty Managers), and security and maintenance staff.

The growth in the workforce has been alongside a growing pool of freelancers and volunteers who deliver significant portions of the programmes, tours and workshops. This has given fresh perspectives, increased capacity and has made possible the up-scaling of activity seasonally and around holiday periods.

The focus of the management structure has moved to the operational delivery. The outlook is focused on a strategic review and financial sustainability. This activity will increase with the scheduled review of the museum operations post-opening, informed by feedback from visitors and key learning.

Now the museum is operational, this increases the museum profile and leads to greater potential for fundraising from new sources of income, such as corporate memberships, sponsorship and corporate partners and legacy fundraising.

This active presence in Dundee has led to increased collaboration with other cultural and visitor attractions – benefiting the overall destination offer from the city (e.g. the DCA film programme to accompany the *Ocean Liners* exhibition). As the museum and exhibitions continue to develop, it is recognised that there will be further potential for joint working and partnership opportunities.





V&A Dundee announces The Thomson Learning Centre at DC Thomson's headquarters in Dundee. Credit: Julie Howden

## 5. Key Learning



As part of this evaluation report, a series of individual interviews and workshops took place to capture the key learning over the course of the V&A Dundee project – helping to provide learning for future National Lottery Heritage Fund projects and the museum as it continues to develop in its early years.

**Based on National Lottery Heritage Fund guidance, the key learning were informed by:**

- Overall what worked well and why?
- Overall what didn't work well and why?
- How much of the difference would have happened anyway, even if no project had been undertaken at all?
- What are the key things that the organisation has learnt?
- What would you do differently next time?

Two workshops were held in January 2018 to discuss the key learning from the project – an internal workshop with V&A Dundee senior management, and an external workshop involving key external project stakeholders (a full list of consultees can be found in Appendix 3).

**A summary of key learning points:**

1. The innovative founder model was highly successful and this shared commitment from partners helped to drive the project and contribute to its success. From construction start, governance focus at the highest level on delivering the museum on time and on budget was fundamental to the success of the project.
2. Dundee City Council provided critical support in leading the construction project and its ongoing commitment to making the project a success.
3. The V&A was integral to supporting the programme for delivery and the development of galleries and exhibitions through curatorial resources, objects, photography, and conservation.
4. Additional funding from the Scottish Government, Dundee City Council and the National Lottery Heritage Fund after costs rose in 2014–15 demonstrated commitment in the value and quality of the project.

5. There is a shared acknowledgment among key partners that at the design competition stage the budget and architectural aspirations for the project should have been better aligned.
6. The McClelland Review provided an objective framework to review the project, its management and governance – giving important reassurance to major funders.
7. The existence of a Delivery Committee with both independent and expert members empowered to take decisions was vital in achieving the successful delivery of the project. Robust project management with integrated planning of construction and fit-out contributed to better design integration, flexibility, efficiency and use of time, and the importance of setting a high contingency level was emphasised.
8. A major success of the capital fundraising campaign was that a case was made at the same time about the need for revenue funding.
9. The importance of high impact communications – locally, nationally and internationally – have been essential in positioning the project, engaging audiences and raising awareness of the importance of design.
10. Investing in a vibrant pre-opening programme to engage communities in the development of the museum and design generated awareness of design heritage and built significant anticipation towards opening. There is a huge social capital impact of the project that should be further evaluated.
11. Now as an open museum, the museum management team are drawing on experience from the capital project – a clear vision and framework for decisions – to develop its operation.
12. It has been widely recognised that the project has helped contribute to wider public perceptions about the city as a place to live, work, visit, study and invest in.

### Learning for similar National Lottery Heritage Fund projects are:

1. Establishing an Advisory Group with experience from the sector is valuable in helping advise and challenge your project.
2. The importance of robust project management with integrated planning of construction and fit-out to ensure better design integration, flexibility, efficiency and use of time.
3. The need to set the right contingency level for your project and consider having separate reserve and working contingency budgets.
4. During the capital fundraising campaign it is important to make a case at the time for revenue funding.
5. Establish a communications strategy and appropriate forums to engage stakeholders from the outset to develop the project's core message, milestones and narrative.
6. Build awareness of your project through content stories, media, digital, site visits and events – none of which are costly areas – and consider investing in visual aspects, such as film and photography.
7. Investing in pre-opening learning activities can be a powerful way to raise awareness of your project, build audiences, inform programming, and help demonstrate the impact of the museum to the media and potential funders.
8. It is important to invest in formative evaluation to inform the pre- and post-opening phases, with a culture of shared responsibility for evaluation across all teams.
9. Consider the power of events to engage audiences around the opening or launch of your project to extend profile and participation.
10. The importance of planning for pivoting from capital project into operating mode, drawing on the clear vision and decision framework established during the capital project phase.

## 6. Conclusion



The journey to create V&A Dundee – Scotland’s first ever design museum and the first V&A in the world outside of London – provides a powerful example of how funding of arts, culture and heritage can have a positive social and economic impact, supporting improved outcomes for heritage, people and communities.

The project has been one of exceptional ambition and would not have been possible without the extraordinary dedication and commitment of the staff and partners involved.

The support and shared dedication of all the founding partners has been crucial in helping bring the museum to life, particularly Dundee City Council in leading the construction project and its ongoing commitment to the project. Dundee has a strong track record in working collaboratively across the city to support culture-led regeneration.

Its realisation was made possible from the combined £80.11m of funding that came from the Scottish Government, the National Lottery Heritage Fund, Dundee City Council, the UK Government, Creative Scotland, Scottish Enterprise, and many trusts, companies and private donors.

Among founders and funders, there was a common recognition of the importance of the project for Dundee and the city’s Waterfront regeneration, along with its significance nationally and internationally. Throughout the museum development, there was a strong commitment from partners about the importance of aligning physical regeneration and culture-led regeneration.

The founder model has continued to evolve throughout the project, playing an integral role in supporting V&A Dundee through funding and in-kind support. It is important for the partnership to continue to evolve and support the future development of V&A Dundee.

The continued commitment and confidence of the Scottish Government throughout the project – including its work with the museum and other public agencies to represent Scotland on an international level – has been particularly key in the project’s success and will continue to be of great importance moving forward.

The key tourism partnerships developed by V&A Dundee with the city, the region, VisitScotland and VisitBritain have been seen as a success. As a smaller city, Dundee is still developing as a visitor destination with ambitions to do more. The city is making remarkable progress with the resources it has as a visitor destination, but this is an area that V&A Dundee and partners need to continue to support.

Alongside its wider place-making objectives, the museum’s mission is to engage people and communities with design, inspiring creativity and learning. As the museum develops, there is a strong desire to grow V&A Dundee’s positioning more widely as an internationally focused design museum.

The creation of the Scottish Design Galleries has ensured that the story of Scottish design from the medieval period up to the present day and its place in the world has been shared for the first time in a permanent display, providing a foundation for the understanding of Scotland’s rich design heritage and carrying out conservation to safeguard this heritage for the future.

V&A Dundee’s partnership with Dundee City Council and Glasgow Museums has meant that visitors to the museum can now experience Charles Rennie Mackintosh’s Oak Room first-hand, through a highly ambitious conservation and restoration project.

At the same time, V&A Dundee’s exciting programme of exhibitions, learning activities in the museum and new commissions are making design accessible, fun and inspiring, and providing new opportunities for the creative industries. Through its pre-opening learning activities and projects, Design for Business programme, visitor destination marketing and media activities, the project team has worked strategically and effectively to raise the profile of V&A Dundee, the city and the importance of design.

V&A Dundee’s pre-opening projects demonstrate clear social benefits for those who have taken part, including improved health and wellbeing; greater confidence and awareness of design-related careers; new skills; a better understanding and appreciation of design and Scottish design heritage; and the importance of creativity as a means of inspiration.

There is clear evidence throughout the report that V&A Dundee values the importance of using evaluation to measure its performance and capture its wider impact, along with the strategic value of aligning its work with the priorities of the Scottish Government, alongside Creative Scotland, Scottish Enterprise, VisitScotland and other national agencies.

This report helps to demonstrate just how much V&A Dundee has already achieved, both in the run-up to opening and in its first six months as an operating museum. The project has met all of its National Lottery Heritage Fund requirements and offers valuable learning for other ambitious cultural projects and for the museum as it continues to develop in its early years.

## Endnotes

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- 20 50 people completed the form regarding learning outcomes
- 21 [https://youtu.be/rSZm\\_oVmYcA](https://youtu.be/rSZm_oVmYcA)
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- 23 ‘First Minister meets families at V&A Dundee’, 14 June 2019  
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- 25 V&A Skillshare Evaluation, icecream architecture, December 2018
- 26 Exit Survey Sept-Dec 2018, ScotInform
- 27 ScotInform, 2017
- 28 <https://youtu.be/bA1oeBa8WnU>
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